

Aspects in Dual-Aspect Monism and Panpsychism: A Rejoinder to Benovsky

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Abstract: Neutral monism aims at solving the hard problem of consciousness by positing entities that are neither mental nor physical. Benovsky has recently argued for the slightly different account that, rather than being neutral, natural entities are both mental and physical by having different aspects, and then argued in favour of an anti-realist interpretation of those aspects. In this essay, operating under the assumption of dual-aspect monism, I argue to the contrary in favour of a realist interpretation of these aspects by showing that the anti-realist interpretation collapses into neutral monism and that the realist interpretation is an interesting alternative. I close with a discussion of the realist interpretation of the aspects and its relation with panpsychism.

Keywords: mind-body problem, neutral monism, dual-aspect monism, panpsychism.

§1

Jiri Benovsky has recently defended *dual-aspect monism* in an essay published in *Philosophical Investigations* (Benovsky 2015), a view similar to *neutral monism* (Russell 1919, Strawson 2006). Neutral monism aims at solving the hard problem of consciousness by positing entities that are neither mental nor physical. According to neutral monism, nothing is physical and nothing is mental. Everything is neutral. In the essay, Benovsky argues for the slightly different view that rather than being neutral, natural entities are both mental and physical, or 'phental', by having different aspects, and then argues in favour of an anti-realist interpretation of these aspects. I will refer to dual-aspect monism as a particular type of neutral monism and then show that it either collapses into neutral monism or requires a substantive interpretation of the aspects, giving rise to a novel and interesting sort of dual-aspect monism. First, I will examine how we should understand the metaphysical profile of these aspects and, in particular, whether they should be understood as properties (§2, §3 and §4). Second, I will discuss the reality of the aspects, arguing in favour of a realist interpretation (§5). As I will show, the anti-realist interpretation of the aspects collapses into neutral monism, whilst the realist interpretation leads to an interesting new kind of dualism. Since neutral monism and dual-aspect monism were developed as alternatives to dualism and physicalism, such a collapse into a form of dualism may sound problematic at first glance. However, as I will show, this form of dualism is very weak and offers an interesting solution to classical puzzles about the mind. I will end the article with a discussion of why this realist interpretation of dual-aspect monism entails a form of reasonable panpsychism, panprotopsyhism—namely, the view that everything in the nat-

ural world is intrinsically mental in a moderate sense (§5).

The place of the mind in the natural world is intriguing. The mind appears as a phenomenon very different from other natural phenomena. Two main approaches aim at integrating the two realms: *dualism* and *physicalism*. According to the first, the world is made of two kinds of ingredients: *physical* and *mental entities*. In contrast, according to the physicalist approach, the apparent gap between the mind and nature does not have an ontological counterpart: the world is wholly made of physical entities. Both views encounter serious difficulties. The dualist has to deal with two main worries: first, how are we to explain situations of the apparent *overdetermination* of some events by mental and physical causes? Second, should we accept the reality of mental causes distinct from physical causes, in violation of the *principle of the causal closure of the physical realm*, namely the principle that everything about the physical world can be explained by referring to physical causes?

The physicalist is not necessarily in a better dialectical position than the dualist. Indeed, they claim that everything is physical by endorsing either the *identity view* that mental entities are identical to physical entities, or the *eliminativist view* that mental entities do not exist. It does not seem to give justice to the phenomenal, qualitative aspect of subjective experiences. This phenomenal aspect seems to ground specific knowledge, as shown by Jackson's famous example of Mary, bred in a colourless room and becoming a colour specialist without ever having had a single experience of colours. The physicalist has to claim that Mary is not really learning anything new about colours the day she leaves the room and discovers what it is actually like to have an experience of red. Physicalists have a few responses to the argument, for instance by endorsing empirical physicalism, the view that the mind is necessarily identical to physical entities, although we may not know this fact *a priori* (see for instance Bealer 1994 and Stoljar 2000).

Also, physicalists owe us an answer to the conceivability argument. Descartes claimed that we can conceive of mental states separated from physical states. During the last century, Kripke (1980) and Chalmers (1996) have famously argued that we can conceive of brain states separated from mental states, resulting in philosophical zombies. Indeed, when considering any pair of entities *x* and *y*, if we may *conceive* of the existence of one of the two in the absence of the other, one may want to argue further that it is *possible* for *x* to exist in the absence of *y*, and *vice versa*. *x* and *y* would then have to be numerically distinct entities since they do not have the same *criteria* of existence. The price is high for the two physicalist views. They imply either that the mental world is a fake (eliminativism) pushing us to commit 'cognitive suicide' (to use an expression of Baker (1988)) or that the mental world is identical to physical entities (identity theory) thereby losing the manifest specificity of phenomenal experience. One may be willing to bite the bullet one way or another. But the situation is delicate enough to justify the search for a third path.

Therefore, an interesting strategy is to reject both dualism and physicalism in order to find a middle way. And by middle way, I mean an *ontologically serious* middle way, unlike non-reductive physicalism¹ or mysterianist approaches². This middle way is *neutral monism*, or *dual-aspect mon-*

- 1 Non-reductive physicalism is the view that the world is entirely physical and that minds are not reducible to the physical realm. I take that position to be inconsistent, or at best, unstable. It collapses either into dualism, along a form of ontological functionalism, by stating that mental entities (as functional or causal roles) are numerically distinct from physical entities (the entities that occupy the functional or causal roles), or into physicalism, along a kind of semantic functionalism, by identifying roles to the linguistic description of physical systems.
- 2 Mysterianism is the view that the mind-body problems (or at least some of these problems) do not have epistemically accessible answers because of the limitations of human minds. I do not have much to say on this

ism, the view that the world is made of only one kind of entities, which are neither purely physical nor purely mental and have both *aspects*. As Chalmers, himself a dualist, puts it:

Overall, [...] monism promises a deeply integrated and elegant view of nature. Few detailed theories in this class have been developed, and it is not yet clear whether such a view can be developed in a way that simultaneously accommodates all the data of physics and phenomenology. But at the same time, there appear to be no strong reasons to reject the view. As such, [...] monism is likely to provide fertile grounds for further investigation, and it may ultimately provide the best integration of the physical and the phenomenal within the natural world. Chalmers (2003, §11)

This kind of monism may come with the further claim that neutral entities are neither mental nor physical, as in Russell's *neutral monism* (see, for instance, Russell 1919), or with the claim that it is both mental and physical as in Strawson's *panpsychism* (2003, 2006) and Benovsky's dual-aspect monism (2015). Within the scope of this article, I will endorse dual-aspect monism and examine how we should understand its aspects. But first, let us have a look at how dual-aspect monism is supposed to help in solving the mind-body problem and how it relates to neutral monism.

Dual-aspect monism addresses the dualist problems in the following way: events are not overdetermined by physical and mental causes. Events only have one metaphysical kind of causes: causes that are both mental and physical or 'phental,' as Benovsky puts it. There are no purely physical causes and there are no purely mental causes. In the same way, there is no pure physical closure of the physical world *per se*, since there is no pure physical world, where 'pure' is introduced to refer to the physical, with the exclusion of the mental. What there is instead is a phental world. Everything occurring in the phental world may be explained by referring to phental causes, which are both mental and physical (neither purely mental nor purely physical). And the closure of the phental natural world is genuine. In both versions of monism, there is no room for mental phenomena interfering with the physical realm. As a result, the natural world is causally closed.

Dual-aspect monism addresses the physicalist issues as follows. It allows for a new answer to the knowledge argument in claiming that what Mary discovers, when she leaves her room and experiences redness, is not a new substance or a new property of the world, but a new aspect of something that is both physical and mental (dual-aspect monism), or neither physical nor mental (neutral monism). Dual-aspect monism accepts that we can conceive of the physical (or mental) aspect of the world without its mental (or physical) counterpart. The two aspects are real, even though one may *experience* or *conceive* of experiencing one aspect in the absence of the other aspect.

It is important to grasp the philosophical principles at the core of these issues. On the one hand, we observe that mental entities and physical entities *co-vary systematically*. To put it bluntly, there are no mental states when there are no brains, and there are no (fully functional) brains when there are no mental states. The best explanation of this fact might be that mental and physical entities are identical. But alternatively, a dualist may endorse the view that this co-variation is best explained by the existence of *psychophysics laws* obtaining in the natural world (Chalmers 1996). Any account of the mind has thus to provide an explanation of why we observe a systematic co-variation between mental and physical entities: let us call this demand the 'co-variation constraint'. As such, identity may be seen as a particular modal explanatory device accounting for the system-

position except that I believe that human rationality should not be discounted too rapidly. Dual-aspect may help to dissipate a great part of the mind-body mystery.

atic co-variation between the two kinds of entities.

On the other hand, mental and physical entities do not look the same. Mental entities (substances, properties, states, events or whatever) exhibit distinctive features: *intentionality* (they target/are about something), *phenomenal character* (what it is like to have such and such experience) and *first-order perspective* (they are experienced from a particular and private perspective). All these features are usually thought to be specific to mental entities. A car, arguably, lacks intentionality, phenomenal character and private first-perspective. The dualist takes these marks at face value: mental entities display specific marks because they are ontologically distinct from physical entities. Physicalists, on the other hand, have to come up with a story for why some parts of the physical world exhibit these specific marks. Any account of the mind has to provide an explanation of why mental and physical entities *look* different. Let us call this demand the 'difference constraint'. Both the knowledge and the conceivability argument exploit the difference constraint, putting the emphasis respectively on epistemic and modal consequences of the difference constraint. The difference constraint also grounds the overdetermination problem, the problem of mental causation and the threat that the physical is not causally closed.

In contrast, the co-variation constraint pushes us towards physicalism, suggesting that the best explanation of a systematic co-variation between two collections of entities is an identity theory (or an eliminativist theory)—where we believe that there are two kinds of entities, there is in fact only one kind of entity.

The dual-aspect strategy aims at satisfying both constraints in positing a kind of entity that is both mental and physical. The neutral properties (or phental properties) have two aspects. Let us call 'Ns' the Neutral entities, 'M' the Mental aspect of Ns and 'P' the Physical aspect of Ns. The monist offers the following explanation of the two constraints. First, P and M are not identical and this is why P and M do not look the same. These are two aspects of the same entities (Ns) but they are not identical either to N, or one to the other, thereby *satisfying the difference constraint*. Second, P and M are aspects of the Ns, meaning that P cannot exist without M, and that M cannot exist without P. At this stage, one may object that, precisely, there are numerous cases in which someone is experiencing P without M, or M without P. But this would be missing the point. *Experiencing* one thing in the absence of the other does not mean that one can *exist* in the absence of the other, since the experiential asymmetry may be grounded in the *subject* of experience, and not in the object of experience. Therefore, it does not follow that P can exist without M, or that M can exist without P.

These aspects offer, thus, an explanation of the observed co-variation between mental and physical entities: P and M are *necessarily connected* (without being identical), thereby *satisfying the difference constraint*. Another way to see the point is that the notion of aspect is designed to offer a *modal middle way*: the notion ensures a *necessary connection* between mental and physical entities (these being reduced to aspects of one single entity), without identifying them.

I will examine two possible interpretations of aspects in the framework of dual-aspect monism and argue in favour of a *realist interpretation of aspects*, contra Benovsky (2015). In the next three sections (§2. §3. and §4.), I will examine the nature of aspects with respect to properties and substances, arguing that the aspects are aspects of neutral first-order properties. In the subsequent sections (§5. and §6.), I will examine how we should understand the aspects regarding experience and the dependency on the existence of an observer. I will argue that the aspects exist in absence of any observer.

§2. First-order properties of neutral substances

How should we understand the metaphysical status of aspects? Benovsky takes the dual-aspect entity to be a *situation* and acknowledges the possibility that situations may be substituted by facts: 'A person exemplifies F (say, 'being in pain'), and the monist's idea is that this situation has two aspects' (Benovsky 2015, §7). Let us assume that a situation is made of an object that instantiates a property³. We have then a few options: aspects are either *aspects of objects*, *aspects of properties* or *specific properties of objects*. However, we may easily rule out the first possibility: objects themselves may not have aspects (operating under the assumption that properties exist, contra nominalist approaches to properties). For when the reality of both objects and properties is granted, one should accept that we merely epistemically access properties of objects and not objects *per se* (at least not directly: we access objects through their properties). Therefore, aspects should apply to properties rather than objects.

Are aspects *first-order properties of neutral substances*⁴? Then *x* would look like A and B because *x* would instantiate *both* property A *and* property B. But this kind of dual-aspect monism–*dual-property monism* hereafter–will not do. Indeed, identifying *distinct aspects* with *distinct properties* turns dual-aspect monism into *property dualism*. Property dualists generally share with physicalists the idea that substances that instantiate properties are *physical substances*⁵. One may then suggest that property dualism is consistent with both physicalism and dual-aspect monism: the two kinds of properties (physical and mental) could be instantiated by *either* physical substances *or* neutral substances. I agree. But the resulting dual-property monist view would then be in a dialectical position worse than classical property dualism. Indeed, classical property dualism has to explain the connection of mental properties with physical substances (two kinds of entities belonging two distinct ontological realms) when the dual-property monist proponent owes us, first, an explanation of the *connection of physical properties with neutral substances*, and second, an explanation of the *connection of mental properties with neutral substances*. Where the proponent of classical property dualism has to deal with only one general worry, the proponent of dual-property monism has to address two general worries. These worries are not necessarily problematic, though. Their existence merely indicates that proponents of property dualism owe us an account of the interactions between various metaphysical categories, and that this explanation will be at least as complex as the one provided by the substance dualist.

In the framework of dual-property monism, causation has to occur either at the level of neutral substances or within properties. However, if causation occurs at the level of neutral substances, mental and physical properties may not be more than *epiphenomenal properties* with no causal strength. Therefore, the other strategy of locating causation not in neutral *substances* but in physical and mental *properties*, thereby committing to the nowadays respectable view that properties are intrinsically causal, seems more promising by avoiding this problematic epiphenomenalism of the

3 I will not consider the possibility that situations may be primitive, not consisting of 'ontological proper parts' such as properties and objects. To be fair, Benovsky was not reifying situations but only using the notion of situation in an ontologically neutral way (private discussion).

4 There is no substantial commitment here to the pluralist idea of multiple substances. Monism about the mind-body problem is orthogonal to the debate between pluralism and monism regarding the number of substances to be found in the natural world.

5 By being, for instance, material substrata, spatio-temporal substrata, bundling relations of properties, or one unique substance. It does not matter for my present purpose in which of these categories the physical substances belong. What matters is whether this category is physical.

aspects.

Unfortunately, the problem is very similar when we regard causation as obtaining in properties. Indeed, we can restrict causation neither to physical properties, since we would end up with an epiphenomenist position about mental properties, nor to mental properties, since we would lose natural causation, namely causal relations occurring between natural events. Therefore, we must regard *both* kinds of properties as being causal. But we then end up with the traditional overdetermination problem: how could it be that an (arguably, neutral) event is caused by both physical properties and distinct mental properties? Also, we encounter the classical threat to the physical closure principle, since causal mental properties break the natural necessity that rules the distribution of physical properties over time and space. In sum, dual-property monism does not help much⁶. Each time a neutral event (together with its associated load of physical properties) is caused by mental properties, we have to acknowledge a conflict with the physical closure principle.

Another problem for dual-property monism is related to the modal status of the relation between the two collections of properties (mental and physical). The attribution of mental and physical properties to an entity relies on the hypothesis of a contingent connection between the two sets of properties: instantiating mental properties without instantiating physical properties (and vice versa) is a genuine possibility. The aspects precisely avoid this contingent connection between physical and mental phenomena. The two phenomena are necessarily connected because the aspects are problem-solvers designed and introduced to ensure a necessary covariation between the mental and the physical data. Allegedly, this kind of necessity belongs to the category of *metaphysical modality* and is not grounded in natural or psychophysical laws. This metaphysical necessity follows from the fact that the aspects of something are necessarily ontologically interdependent. This necessary connection entails that mental and physical aspects must not be regarded as properties: mental and physical properties would not need, as a matter of necessity, to covary systematically as the mental and the physical happen to do in the actual world. In brief, property dualism cannot answer the two causal arguments (the no overdetermination and the physical closure arguments), and it does not help with the two distinction arguments (the knowledge argument and the conceivability argument). From now on, I will assume that this form of dual-property monism is a dead end.

§3. Second-order properties of first-order neutral properties

Let us turn to a second strategy: *second-order dual-property monism*. This is the conjunction of two views. First, neutral substances only instantiate one kind of first-order property, namely neutral properties. These neutral properties instantiate themselves *second-order properties* belonging to two metaphysical categories: *mental second-order properties* and *physical second-order properties*. I will not assess the consistency of the general view that first-order properties could instantiate second-order properties but merely ask whether this metaphysical picture might help dual-aspect monism to make progress in the resolution of the mind-body problem. In order to get a clearer picture of the view, we need to look again at the metaphysical location of causation. By positing two levels of properties, we end up with three possible locations for causation: neutral substances; neutral first-order properties, and mental and physical second-order properties. As stated above, locating causation into neutral substances would entail losing both mental and physical causation, two *desiderata* we want to account for. What about locating causation into *first-order neutral properties*? If

⁶ See Lycan (2013) who argues that substance dualism is even better than property dualism.

we locate causation in first-order neutral properties, we lose, similarly, both the causal efficiency of second-order mental properties (ending up with epiphenomenalism) and the causal efficiency of second-order physical properties (goodbye natural causation).

We are therefore left with second-order physical and mental properties. But if mental and physical properties are distinct and causal, we are back to square one: the existence of two collections of causal properties belonging to distinct metaphysical realms gives rise to the overdetermination and closure problems. Therefore, positing orders of properties is not a solution.

Since aspects should not be identified with first-order or second-order properties, it entails that aspects should not be construed as properties at all. Therefore, the best way to construe aspects is to see them as *metaphysically primitive entities*. Or, to put it differently, properties have a double-aspect *primitively*. This primitiveness means that double aspect is not something that may be explained further. The best interpretation of dual-aspect monism is then, to my mind, that the world instantiates properties, which do have two primitive aspects. Let us consider in more detail this idea.

§4. *Sui generis* primitive aspects

The *sui generis* category of aspect is a *problem-solver* (cf. Benovsky 2010), namely a *primitive* notion introduced and designed to do some explanatory work⁷. In this section, operating under the assumption that aspects are primitive entities not reducible to properties, I shall explore two views of primitive aspects: *anti-realism* and *realism*. Anti-realism states that aspects are *not real entities*. Realism is the view that mental and physical aspects of mental entities are *real mind-independent entities*.

According to *anti-realism*, it is not only that aspects are not mind-independent entities: aspects are nothing at all (even in an observer-dependent way). Properly speaking, there are no aspects. The reference to 'aspects' is only a convenient way of speaking. Anti-realism avoids positing a *sui generis* and primitive kind of entities that are not reducible to more classical ontological creatures (say, properties and substances). A proponent of this view may argue that if we can get the same work done with fewer entities, we should probably select the more economical view (Benovsky 2015).

But anti-realism is not a fully-fledged ontologically account. Indeed, the notion of aspect must ensure both the distinctiveness of mental and physical notions and the necessary covariation occurring between the two apparent kinds of 'entities' as two kinds of aspects of only one kind of entity. The anti-realist suggests that we not take aspects too seriously, though. An aspect would not be a genuine hybrid creature since it would not be a creature at all. The distinctiveness of the mental and the physical should not be interpreted as a difference between *two* kinds of entities and, especially, as a difference between two kinds of aspects, but only as a difference in our construal of *one* kind of thing. Anti-realism about aspects amounts to the claim that there are no aspects and, thereby, no kinds of aspects. What there is instead are two terminologies, two networks of concepts. We lose the specific power of explanation of dual-aspect monism in that it becomes a form of neutral monism: the world is made of a neutral substance, and we sometimes refer to it with mental notions, while at other times we use physical notions. But nothing in the world is, properly speaking, both

⁷ Interestingly enough, the view is similar to the dual-aspect view of properties endorsed by Heil (2003) in a different context. According to him, properties have two aspects: dispositional and qualitative aspects. There, the notion of qualitative should not be understood as being mental, but as being categorical, i.e., not dispositional.

mental and physical.

Realism, in contrast, is *revisionary*: most of the time, mental aspects do exist even when no one is actually looking at mental properties. It thereby locates mental aspects in the *object* of experience, not in the *subject* of experience, meaning that aspects, and especially mental aspects, exist mind-independently. Here are two worries with realism. First, one might object that the very notion of mental aspects existing mind-independently is self-contradictory; indeed, how could it be that mental entities exist independently of a mind? However, the use of the term 'mind' is ambiguous in this context. When referring to mental aspects of mental properties, we are referring to entities belonging to the ontological kind of the mind. And when using the standard expression 'mind-independent', we are in fact referring to the idea of *observer-independence*. An entity is observer-independent if, and only if, it exists, or could exist, in the absence of any observer. This observer is made of mental ingredients: it is a mereological sum of mental parts articulated in such a way that they give rise to an observer. But the two notions are distinct. First, it is possible to construe an observer as being made of physical rather than mental elements. Second, a mental observer is made of parts which are not themselves observers. Therefore, it makes perfect sense to distinguish between observers and mental parts of observers. Keeping in mind this distinction, we may now define realism as the view that mental aspects exist everywhere, even when they do not compose an observer and do not belong to any observed entity (i.e. an object of experience). Since the mental aspect is deeply connected to a subject having the mental experience, one may object that it does not make sense to claim that mental properties look a certain way (i.e. have a certain aspect) when there is nobody to actually look at them. Indeed, the semantics of the term 'aspect' suggest an appearance, an observational character. Still, here again, the distinction between observers and mental parts is important. The intuition that mental entities require the existence of a complex mind is negated through the claim that complex minds (i.e. observers) are required to experience mental aspects, themselves understood as possible parts of complex minds. In the absence of observers, mental aspects are there, everywhere. But these entities need to be associated in a particular way in order to trigger the coming into existence of an observer.

If we accept this apparently strange realist interpretation of aspects, we end up with a clear image of the world that explains a lot. However, and this is the main issue with a realist view of aspects, it implies that mental aspects are everywhere, even when there is no one to experience them. A device or, say, a robot complex enough to produce empirical observations—but not complex enough to be regarded as having an artificial intelligence—will record not only physical, but also mental aspects. Indeed, even in a situation in which there are no conscious observers, mental properties do have mental aspects. This proposal may seem problematic in that it entails panpsychism, namely the view that everything natural is mental.

§5. Panpsychism, Realism about Aspects and the Combination Problem

Panpsychism is the view that minds exist throughout the whole universe, not only in biological entities, but also in rocks, star systems and perhaps even in the vacuum. Quite understandably, this view leads to incredulous stares. But, panpsychism follows directly from the realist interpretation of dual-aspect monism, or so it seems: if any alleged physical property is in fact a neutral property exemplifying both mental and physical aspects, then it blocks the path to the possibility of physical entities that are not mental. It explains, as we saw above, why Benovsky has suggested an anti-real-

ist interpretation of aspects. If aspects are perceptual artefacts rather than genuine creatures then, in the absence of actual perceptions, there are no aspects and, especially, no mental aspects. So, in the framework of dual-aspect monism, the anti-realist interpretation offers a way out regarding the panpsychist worry. In this essay, I will not discuss the pros and cons of panpsychism (for an overview of the field cf. Goff, Seager and Allen-Hermanson 2017), but only propose a reasonable sort of panpsychism consistent with the realist interpretation of dual-aspect monism.

Benovsky's anti-realist interpretation may escape panpsychism in claiming that the mental aspect is not an objective feature of the neutral world, thereby ensuring that the world does not look mental when one is actually looking at it. On the contrary, the realist interpretation of aspects implies biting the panpsychist bullet: any property in the world *has* a mental aspect. How is the realist going to deal with panpsychism then? A rock has properties, which have themselves mental aspects. Does it mean that a rock thinks? Not necessarily. Mentality, as an ontological aspect of properties, does not amount to consciousness or *thinking*, properly speaking. Indeed, following McGinn (1999, 95), we may distinguish between *strong panpsychism* and *weak panpsychism*. Strong panpsychism is the quite radical view that consciousness and thinking are everywhere. Weak panpsychism relies on a distinction between two degrees of mentality: consciousness, thinking or full-blown mentality on the one hand, and a weaker form of mentality on the other, *proto-mentality*. Proto-mentality has the qualitative feeling of mentality, but it lacks an *organisation* giving rise to a conscious entity—or in a similar approach adopted by Coleman (2014, 2016), proto-mentality only gives rise to mentality when there is an observer accessing this proto-mentality.

An interesting issue for the panpsychist is the combination problem, which may be stated as follows. Think for instance about your current experience. Imagine that it is possible to break it down into small proper parts. Will these parts be conscious? As cases of schizophrenia and some drug-induced experiments have shown, it is possible, at least to a point, to break down conscious experiences into smaller experiences. However, the *previous overall conscious experience* will be lost in the process. The crucial point here is that the consciousness of an individual is taken to merely obtain at one mereological level for any instant t : if x is a proper part of y , then if x is conscious then y is not conscious, and if y is conscious then x is not conscious. So it seems that although a conscious process may decompose into conscious parts, it may not do so while remaining conscious. This shows that conscious entities cannot be composed of conscious entities, against panpsychism.

However, this argument merely holds in the case of a radical form of panpsychism and may be answered by appealing to the distinction between proto-mentality and full-blown mentality (see e.g. Goff 2017, chapter 6). Consciousness may be regarded as exhibiting two specific features: its *phenomenal character* and its *subjective character*. The phenomenal character describes the qualitative aspect of experience, the what it is like to experience something. The subjective character describes the fact this experience is the experience of someone or something. I propose to associate the phenomenal character to proto-mentality and to restrict subjectivity to full-blown mentality. I take this move to give a nice and simple answer to the combination problem: phenomenal properties (that displays phenomenal content) sometimes combine and trigger the subjectivity feature of a phenomenal system. There is no reason why composition of consciousness out of proto-consciousness must entail composition of a macroscopic subject out of microscopic subjects. The idea that proto-conscious parts may compose conscious parts requires that some classical features of consciousness are localised in parts of conscious subjects, contrary to classical physicalism. Also, it means that

proto-conscious parts are not fully conscious in another sense—after all, this is why they are called '*proto-conscious*'.

My suggestion is to conceive of full-consciousness as requiring the existence of both conscious and subjective properties instantiated by the phental system. More precisely, since the aspects are aspects of properties, a phental system is phental by instantiating properties that have both mental and physical aspects. What about subjectivity? Should it also be an aspect of phental properties? On the contrary, in this account, we should rather consider subjectivity not as a fundamental aspect of phental properties, but rather as a *compositional phenomenon*. It is worth noticing that this move eases the way for the project of naturalising subjectivity. By disconnecting the phenomenal character from subjectivity, we may develop a qualia-free account of subjectivity, and then relocalise the irreducible 'what it is like' aspect in each of the building blocks composing the phental world.

Let me describe further the implications of my proposal for traditional issues regarding the mind. First, I here remain neutral about where we should localise *intentionality* in this picture, since it will depend on two conceptions: a) the relation between intentionality and subjectivity on the one hand, and b) the relation between intentionality and the phenomenal character on the other hand. Second, interestingly, the approach remains globally neutral with respect to the nature of subjectivity and the phenomenal character. In particular, the approach is consistent with the two most popular conceptions of subjectivity: the *standard primitivist account* that subjectivity is a primitive feature of mental states, and the *second-order account* that subjectivity is a specific sort of mental states about other mental states. The only condition imposed by my proposal is that phenomenal entities may exist without necessarily entailing the existence of subjective entities.

This approach offers a straightforward answer to the combination problem. When you consider the proper parts of a system doted of subjectivity, the fact that these parts are not themselves subjective does not mean *ipso facto* that these parts do not possess phenomenal content.

Panprotopsyism implies that consciousness and proto-mentality are of the same metaphysical kind, although we only gain epistemological access to this metaphysical kind through consciousness. Proto-mentality exists, therefore, everywhere, and is beyond our experiential reach. It is worth noting, though, that proto-mentality and full-blown mentality differ in *degrees* and not in *kinds*. Proto-mentality is an aspect of any neutral part of the world and sometimes, collections of neutral parts give rise to complex systems, which enjoy full-blown mentality.

What are, then, one may ask, the conditions needed for full-blown mentality to be composed from proto-mentality? But this question has nothing to do with the hard problem of consciousness and should be answered by empirical means through physics and cognitive sciences. The project of the naturalisation of intentionality and of any aspect of the mind other than its qualitative aspect, constitutes a distinct matter. Our objective is to make progress with respect to the hard problem of consciousness, namely to offer an explanation of the apparent explanatory gap between physical and mental descriptions of a very same system. Fortunately, the dual-aspect monist has an interesting answer to the hard problem: they reject the idea of mental emergence, supervenience, grounding or any other alleged ontological relation connecting the mind to the physical. A simple (apparent) physical system is, in fact, a neutral system with properties that have *both* mental and physical aspects. The system is too simple to have subjectivity or a first-point of view but, still, it owns primitive mental aspects. Symmetrically, a complex (apparent) physical system, like a brain, is in fact a neutral system equipped with complex properties, both mental and physical. But there is no

brain in the world, at least if one takes a brain to be an entity exclusively physical. And there is no mind in the world, at least if one takes a mind to be an entity exclusively mental. What there is, is a neutral system having two features: the brain aspect and the mind aspect.

To sum up, panpsychism is only counter-intuitive if it amounts to the claim that material objects like rocks think. But the realist interpretation of aspects does not entail panpsychism, but only *panprotopsychism*, the view that pro-mentality is everywhere, and occasionally gives rise to a full-blown consciousness equipped of subjectivity. Material objects have a little dose of qualitative aspect, namely proto-mentality, quite different from the complexity to be found in a mind doted of a rich inner life. Interestingly enough, in this model, a conscious entity is not different in kind from other natural entities. In the spirit of physicalism, full-blown consciousness is solely a matter of natural complexity, nothing more.

§6. Conclusion

Dual-aspect monism is an elegant middle way between physicalism and dualism. It fits well with the naturalist motivation for physicalism, namely the belief that the world is entirely natural without extra-natural entities appearing in the picture and interfering with natural mechanisms. Dual-aspect monism is a particular kind of naturalism since it states that the world is one, and only one, realm with two aspects. In asserting the reality of these two aspects, dual-aspect monism gives justice to our belief in a specificity of the mental with respect to the physical. In order to avoid dual-aspect monism collapsing into property dualism, it is important not to reduce aspects to properties, as suggested by Benovsky. But, *contra* Benovsky, we must then add aspects to the inventory of the ontological realm and they should not be regarded as an ontological 'free lunch'. Otherwise, the aspects will not play any interesting role, and dual-aspect monism will turn out to be merely a novel name for neutral monism. With the realist interpretation of aspects, dual-aspect monism is closer to dualism than to physicalism, although it preserves the naturalist intuition. Furthermore, the panprotopsychist consequence of the realist interpretation of dual-aspect monism remains unproblematic when we remind ourselves how weak and unarticulated the ubiquitous mental aspect of the world is.

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