

Dual-aspect monism

JIRI BENOVSKY

Abstract:

In this article, I am interested in dual-aspect monism as a solution to the mind-body problem. This view is not new, but it is somewhat under-represented in the contemporary debate, and I would like to help it make its way. Dual-aspect monism is a parsimonious, elegant, and simple view. It avoids problems with 'mental causation'. It naturally explains how and why mental states are correlated (and interact) with physical states while avoiding any mysteries concerning the nature of this (cor)relation. It fits well with our ordinary picture of the world, as well as with the scientific picture. It gives its rightful place to the phenomenal, qualitative, subjective character of experience, instead of reducing it or eliminating it. It does not unnecessarily multiply ontological categories. It can come in many versions, and is compatible with neighbouring interesting views, such as panpsychism.

§1. In this article, I am interested in the mind-body problem, *qua* metaphysical problem, and I defend a version of dual-aspect monism as a solution to it. This view is not new, but it is somewhat under-represented in the contemporary debate, and I would like to help it make its way. Dual-aspect monism is a parsimonious, elegant, and simple view. It avoids problems with 'mental causation'. It naturally explains how and why mental states are correlated (and interact) with physical states while avoiding any mysteries concerning the nature of this (cor)relation. It fits well with our ordinary picture of the world, as well as with the scientific picture. It gives its rightful place to the phenomenal, qualitative, subjective character of experience, instead of reducing it or eliminating it. It does not unnecessarily multiply ontological categories. It can come in many versions, and is compatible with neighbouring interesting views, such as panpsychism. Let me, then, put this view on the table.

To start, let us briefly consider the main types of views there already are on the table. This will provide us with a first motivation for dual-aspect monism. Indeed, the state of the traditional debate understood as an opposition between dualism and physicalism is in a rather uncomfortable impasse. To put it shortly: either we embrace a form of dualism, but then we have problems with mental causation (that is, the difficulty to explain the relationship between the mental and the physical), or we embrace a form of physicalism but then we seem to have lost something of crucial importance: the very mental character of the mental. Even though these matters are well known, I will have a closer (but still rather quick) look, in the next two sections, at this uncomfortable situation – this will provide us with the sort of desiderata that a theory of the mind and the body should satisfy. (It is possible to skip these next two sections (§2-3), but it is useful to have them in mind, as a motivation for what comes after. What I want to achieve in these two sections is to set the stage for dual-aspect monism – the various problems and objections I mention here do of course have answers, and objections to these answers, and so on, and it is not the purpose of these two introductory sections to deal with these controversies in detail.)

§2. *Physicalism* comes in many varieties. Many of these varieties share the idea of reduction. In this view(s), mental properties are then said to be reduced to physical properties. This can be because mental properties *just are* physical properties, or because they are a *function* of physical properties that *realize* them, to cite only the two main variants of reductionist physicalism. (Yes, functionalism is a kind of reductionism, since it reduces mental properties to a functional role they play. Under functionalism, ontologically speaking, only brain states and brain processes exist.) The main advantage of this family of theories is

that they integrate well with neuroscience and with physics¹, in short, they fit well the 'scientific picture' of the world. In particular, these theories typically do not yield any special difficulties with mental causation and preserve the idea of the causal closure of the physical world – all there is, is of the same ontological kind, namely, of a concrete and spatio-temporal kind (brain states, brain processes), and any causality is then causality involving solely entities of the same kind, the physical kind.

But, to make the well-known worry short, these views miss the target. By reducing the mental to the physical, they lose what makes the mental to be *mental* – call it as you wish: the phenomenal character of experience, the what-it-is-like phenomenon, the subjective character of mental states, qualia. Think of what the Terminator replies² when John Connor asks him (it?) if he feels pain when he gets hit by a bullet: the injuries he senses, the Terminator replies, are "data that could be called pain" – but no whines and groans, and no unbearable experience accompany the data. Perhaps this is similar to how a functionalist conceives of pain: it has a causal role in an organism, and it informs the organism about tissue damage. But pain, at least human or animal pain, is clearly *not* just information ("data") about tissue damage – anybody who has ever felt pain knows this first-hand. This is what makes mental states to be mental (at least insofar as their qualitative character is concerned), and any theory of the mind must leave room for it. There seems to be a difference in kind between such-and-such a brain state or brain process (and the causal role it plays in my organism), and *the pain I feel*. Both exist, and both need to be accounted for. Feeling pain just is not the same thing as there being such-and-such a physical/chemical process in my brain. If one says that pain is such a process, or that it reduces to one, one seems to have missed the point entirely. All this is just the old idea that mental/phenomenal properties or states are irreducible. If you reduce them to something else, you lose their phenomenal character, and thus you lose *them*.

There is a family of theories labelled "non-reductive physicalism". I am not sure I understand such a view. It is often said to take the form of supervenience physicalism, where one claims that mental states are (ontologically) dependent on physical (brain) states, and that the former are determined by the latter – but, that they are not reduced to them.

¹ On the interesting difference between *physicalism* and *physicSalism*, see Strawson (2006, p.54): "[...] real *physicalism* can have nothing to do with *physicSalism*, the view - the faith - that the nature or essence of all concrete reality can in principle be fully captured in the terms of physics. Real physicalism cannot have anything to do with *physicSalism* unless it is supposed - obviously falsely - that the terms of physics can fully capture the nature or essence of experience."

² "The Terminator 2: Judgment Day", 1991, James Cameron.

Supervenience, as a formal relation, is mere co-variation³. The dependence and determinacy claim is an additional one. But then, this view simply amounts to a *stipulation* of a solution: it merely claims that one type of properties depends and is determined by another type of properties without being reduced to it, but it does not say how, and it does not provide any explanation of this, it only states that this is so. I am not going to press the issue here. As we will see below, this view (contrarily to *reductionist* physicalism) has problems with mental causation, and this will strip it – I take it – of one of the main reasons to go physicalist in the first place.

§3. *Dualist* theories of the mind all have in common the idea that mental states and properties are of a different ontological kind than physical states and properties, and that they are not reducible to each other. There are, under dualism, two 'ontological realms', the mental and the physical, and they both are – ontologically speaking – autonomous. This makes mental states and properties to be genuinely ontologically self-sufficient and irreducible, which allows then one to make room for the irreducibility of qualia, unlike under physicalism (see above). Good point for dualism(s). But the bad point comes precisely from this – dualist – 'two-realms ontology'. Both the substance dualist and the property dualist share this problem, albeit in different ways.

The *property* dualist claims there to be two ontological kinds of properties, which are had by brain processes and/or states. Mental properties are properties of a different ontological kind than physical properties and are not reducible to them. This creates a very peculiar situation for the property dualist who has to say that there are two ontological kinds of properties – mental and physical – but that they are *both* instantiated by an entity that is of the physical ontological kind (the brain, or brain processes). Thus, physical properties are instantiated by an entity of the same kind they are, while mental properties are instantiated by an entity that is of a different ontological kind they are. The instantiation/exemplification relation must thus be such that it can allow for 'regular' instantiation *and* for 'cross-ontological-realm' instantiation, linking entities of two different ontological kinds.

The *substance* dualist has a different picture: mental properties are instantiated by a mental entity, and physical properties are instantiated by a physical entity. Thus, there are two

³ Supervenience is standardly defined as follows: "A set of properties A supervenes upon another set B just in case no two things can differ with respect to A-properties without also differing with respect to their B-properties. In slogan form, 'there cannot be an A-difference without a B-difference'." (Bennett and McLaughlin (2005))

ontological kinds of properties, two ontological kinds of substances, and two types of relations of instantiation/exemplification. In short, the mental realm and the physical realm are even more separated under substance dualism than under property dualism.

So, these two versions of dualism are different and have different peculiarities to endorse. But, relevantly to our present discussion, they have this in common: in one way or another, the mental and the physical are two distinct mutually irreducible ontological categories. This is where both agree, and this is where both share problems. Indeed, once you have two realms in your ontology, and if you need them to interact, you need to explain how this interaction works. And, mental properties and physical properties do interact, a lot. They are (cor)related in a very intimate way: there never is pain without some kind of physical processes taking place. This is Descartes' problem of the union. The mind and the body are separate, but somehow strongly linked or united, and this calls for an explanation. How can a physical, extended, spatio-temporal body interact with a non-extended mind, unlocated in space, and thus unable of contact or movement? How can a mind make my hands and fingers move, in order for me to type this sentence? How can the non-physical mind have an influence on my brain in such a way that it can make my fingers do these things? The answers to these questions are as varied as they are frustratingly unconvincing: Descartes's causal interactionism, Leibniz's pre-established harmony between the mind and the body, Malebranche's occasionalism, or the view that the mind is no more than an epiphenomenon. This is the problem of mental causation. To be more precise, it is often articulated in the three following ways:

- The general ontological way: how can one ontological realm interact with another (in such an intimate way)?
- The overdetermination way: there seem to be – unnecessarily – two causes for my finger's typing this sentence, a physical cause involving my brain, and a mental cause involving my mind.
- The closure way: dualism forces us to abandon the causal closure of the physical world.

Note that the *non-reductionist physicalist* shares a part of these worries. At the very least, it shares the overdetermination problem, and it does not answer well the general question about how the mental can influence the physical. Indeed, if mental properties depend on physical properties (while not being reduced to them), but not vice-versa, then – given this situation of

one-way dependence – it is hard to see how the mental can have a (causal) influence on the physical, since it seems to be fully dependent, but not reduced/identical to it. If the mental were reduced to the physical, like under a mind-brain identity theory, one can see how one side can influence the other, since they are the very one and the same thing. But here, under the non-reductionist view, one side – the mental one – want it or not, looks like a mere secondary by-product, perhaps an epiphenomenon. It depends for its existence on the physical, but not the other way around, so it does not seem to be doing any real work. The problem here comes from a claim of *priority without reduction*: physical states are prior, and mental states only exist because the physical states do. As already noted above, the trouble here does not come from the supervenience claim, since supervenience is mere co-variation, but from this additional priority-without-reduction claim. Mere co-variation would not be enough, but this additional claim makes the interaction between the mental and the physical (almost) as complicated as it is under dualism(s). The mental just seems to be *de trop*.

To come back to dualism, the worries above will not go away. It's not a question of finding the proper answer to them. These worries are there because of a structural feature of dualism (namely, the two-realms ontology) – being a dualist *is* to say that there are two ontologically separated realms, and to say this automatically creates a problem concerning the interaction between the two, with the consequence that one loses the causal closure of the physical world. Of course, the dualist can argue that these worries are not as harmful as they look like, but she will not be able to really 'solve' the problem or avoid it.

§4. So, as always in metaphysics, we have an accounting problem. Having in mind the mind-body issue, we ask: how many types of entities are there? If we say "one", we seem to be stuck with physicalism, and if we say "two" we seem to be committed to dualism – with their respective drawbacks to deal with.

This is where *dual-aspect monism* comes in. The idea is that we can reply "one" to the accounting question, without embracing physicalism. In this view, there is only one (ontological kind of) entity, but this entity is not there at the cost of another one – that is, the mind does not *reduce* to the brain (and the brain does not reduce to the mind either), there is no ontological or conceptual priority, both the mental and the physical are on a par. The friend of reductionism claims that the physical is prior over the mental. The monist rejects any claims of priority, and she thus rejects what Kim (1998, p.11) takes to be a central component of physicalism, namely 'the mind-body dependence principle': "What mental properties a

given thing has depends on, and is determined by, what physical properties it has. That is to say, the psychological character of a thing is wholly determined by its physical character."

In a slogan, dual-aspect monism then claims that there is only one entity, let's call it "a person", which has two aspects – a mental one and a physical one – and which has them in an equal and non-reductive way. In this article I will try to flesh this claim out. The core idea can be found in Spinoza's Ethics (Part II), but I shall not attempt any exegetical work here (besides, Spinoza's own view is heavily marked with theistic considerations, which I prefer to set aside – they are not necessary). One can also find a similar idea in the work of Bertrand Russell, who is the champion of 'neutral monism' (see below). Chalmers (2003) speaks approvingly⁴ about a (similar but different) variant of mind-body monism, without embracing it. Strawson (2003, 2006) defends a (similar but different) variant of it. In what follows, I'll try to develop a version of mind-body monism with the purpose of putting on the table a simple and clear view, and the main reasons to endorse it.

So, here is the idea: the body and the mind are two aspects of one and the same thing, and they do not reduce to each other. There is one entity, "a person", which is not a brain, not a mind, and not a union of both. The person has two aspects, a mental aspect and a physical aspect, and this is also how it is given to us – it is accessible to us, perceptually and conceptually, in the two different ways we are familiar with. To get an intuitive starting point, consider the pain in my shoulder while I am typing this article, it's been bothering me since I started writing it a week ago. It distracts me from my work, and it is accessible to me "in a mental way", that is, in a qualitative way, it has a distinct phenomenal character. But – suppose – I have at my disposal a very sophisticated futuristic MRI scanner, capable of monitoring in fine detail the activities of my brain in real time, and showing the nicely animated 3D results on my computer screen. It keeps showing me the portions of my brain corresponding to my shoulder pain. So it – too – keeps distracting me from my work. I thus have an access to seemingly two things, the pain I feel and the brain processes I observe, but

⁴ "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)

the monist's idea is that these are merely two aspects of one and the same thing – "the pain". Being in pain, in this view, is to be an entity with a brain (or similar) in a certain state and to have a qualitative experience of a certain kind, where these two are two aspects of one and the same thing, namely, the pain. The idea here is that I detect and I interact with one thing – my pain – in two different ways. These are two different aspects of one and the same metaphysical reality.

To be more precise, from the ontological point of view, there are two options. Firstly, we could say that the person *has* a dual aspect, that it *is* neither mental nor physical but, rather, '*phental*' ('physical-mental'). We then have access to these two different aspects of reality. This is the realist interpretation of dual-aspect monism. But, secondly, we could also say that the fundamental metaphysical nature of a person is unknowable to us, and that the two aspects that are given to us are different *appearances* of this metaphysical nature. This is an anti-realist reading. I myself have sympathies with the anti-realist reading⁵, but a monist is not forced to share my sympathies. In what follows, if I do not say otherwise, I will try to be officially as neutral as possible between the two readings.

The kind of mind-body monism I am exploring here has similarities with Russell's neutral monism (see, *inter alia*, his (1919)). The idea common to both Russell's view and the one I am concerned with is that ultimate reality is of only one kind (this claim, standing alone, is true of reductionist physicalism and idealism as well). Russell's *neutral* monism is then based on the additional idea that this reality is neither mental nor physical – it is, in this sense, neutral. To my mind, the monistic idea is better defended when formulated as a dual-aspect view: instead of saying that the reality is neither mental nor physical and that it is neutral, the monist's idea is better captured by saying that it is dual, namely, phental. But perhaps, this is only a terminological disagreement. (Russell himself then went further and claimed that the neutral stuff is the sensations or perceptions we have – as he puts it "Sensations are what is common to the mental and physical worlds; they may be defined as the intersection of mind and matter" (Russell (1921, p.144)). In my view, sensations and experiences are mental, and not neutral, and I would like to distance myself from *this* claim.)

§5. Now, let us face the main difficulty in explaining dual-aspect monism, namely, to explain what an *aspect* is. I will be content if I can provide an explanation, even if not a

⁵ For unrelated reasons, I defend a version of metaphysical anti-realism in Benovsky (manuscript, Part II, Chap.3, esp.§11-).

definition. One way to put the question is to ask what the difference is between an aspect and a property. An aspect is *not* a property, that much is clear. An aspect is not exemplified by a person, like a property is. (Keep in mind that "person", as I use it here, is the neutral word.) A person exemplifies F (say, "being in pain"), and the monist's idea is that this situation⁶ has two aspects. Under the realist reading, the person is not physical, it is not mental, it is phental. It exemplifies F, and F is *also* a phental property. It has a physical aspect and a mental one, but in itself it is not physical and it is not mental, it is dual. Both the person and its properties are thus of a – phental – dual aspect kind. Under the anti-realist reading, the way to put it is to say that the person's nature is unknown and that F's nature is *also* unknown, but that the person's being F is given to us in two ways – it appears to us as having two aspects, a mental one and a physical one. Thus, under both readings, "to have an aspect" is not to have a (higher-order⁷) property, rather it is a way to describe the entity that is F, it is a non-arbitrary way to talk about it, to say how it is (or how it appears to be). Under the realist reading it would perhaps be more appropriate to say that having two aspects is just part of the nature of a person and of F; being phental is just the way the person and F are. This is far from being a definition of "aspect", but I hope that by making clear that it is not a property, we are starting to get a better grip on what dual-aspect monism amounts to and what an aspect is. Let us try to tighten our grip further in the next two sections.

§6. One could perhaps find dual-aspect monism and the whole dual-aspect idea bizarre. Of course, it is, to some extent. But so are all the other views on the market, with no surprise: the nature of the mental is probably one of the biggest mysteries in the universe. A theory of the nature of the mind *has* to be bizarre. The fact that dual-aspect monism is bizarre is a *good* sign. Perhaps, the trouble with reductionist physicalism is that it is not bizarre enough – it eliminates the mystery almost entirely, but while doing this it goes too far, adopting an ostrich strategy.

The dual-aspect idea, while being bizarre, can be found in other places of science, namely quantum physics. Indeed, the idea that an entity can exhibit very different "aspects", and perhaps even incompatible ones, can be found in one of the central concepts of quantum mechanics, and can echo the kind of idea the monist appeals to. Indeed, at least under a

⁶ I am trying to avoid a strong commitment to facts here, but a friend of facts could formulate it that way.

⁷ Compare to Heil's (2003) conception of properties as being both dispositional and qualitative. Heil also mentions the possibility that such 'aspects of properties' are higher-order properties, and - rightly - rejects it (p.119).

widely shared understanding of the nature of photons, electrons, and other 'particles', it seems that they have both a particle-like nature and a wave-like nature – this is the famous particle-wave duality problem. Under some experimental conditions, such quantum entities behave like particles, while under other experimental conditions (for instance, in the case of a double-slit experiment) they behave like waves. It is not implausible, then, to attribute to such entities a dual-aspect behaviour, simply accepting that – as strange as it may seem – they are both like particles and waves⁸. Interestingly enough, this interpretation of the behaviour of quantum entities also comes in two versions, a realist and an anti-realist one, the latter having been famously championed by Bohr who insisted that such a picture means that we should abandon the idea that any of these claims refer to physical reality, which, as a consequence, remains unknown.

Perhaps a simpler – non-quantum – case one can have in mind is, as Chalmers (1996, p.129) quickly remarks in connection with monism, the fact that matter and energy turn out to be two aspects of a single kind. Intuitively speaking, matter and energy look like two very different types of entities, but if physics has it right, they might turn out to be merely two different aspects of one and the same thing.

I already insisted above that an aspect is not a property, but it can still be useful here to compare dual-aspect monism to property dualism. Chalmers (1996, p.130 and p.302) asks: what exactly is the difference between monism and property dualism? Well, as already mentioned above, according to property dualism, physical properties are exemplified by physical processes and mental properties are *also* exemplified by physical processes. The bearer of any of these properties is the brain (brain states/processes). The bearer is a physical thing. So, here as well as under physicalism, the physical is in a sense prior over the mental. For the monist, things are different, since there is one thing, the person, that is neither physical nor mental, but phental, and thus the bearer is *not* a physical thing. Here, the comparison with the particle-wave quantum issue is useful again: a photon, under this interpretation, is *not*, say, an entity that is a particle but that sometimes exemplifies wave-like properties in addition to its particle-like properties. Rather, it is a particle-wave entity (a 'wavicle'), exactly as a person is a mental-physical ('phental') entity.

⁸ Galen Strawson, who defends a variant of mind-body monism, claims that it is actually *easier* to conceive of a dual-aspect mental-physical entity than a dual-aspect particle-wave entity, because "the experiential terms and the non-experiential terms do not in fact *actively clash*, as the wave and particle terms do" (Strawson (2003, p.39))

§7. Dual-aspect monism is usefully combined with *panpsychism*. Panpsychism, like monism, is often set aside as being a 'weird outsider' view, but there has recently been a revival of interest in this old view (see, for instance, Chalmers (1996), Coleman (2014), Goff (2009), Seager (2006), Strawson (2006)). In short, panpsychism claims that there is a level of mentality (experience/consciousness) even in entities like thermostats (see Chalmers (1996, p.293-)), or even the fundamental entities (particles, strings,...) that constitute the universe. The level of mentality in these very simple entities would of course not be very high, and typically it would not involve self-consciousness.

Strictly speaking, the kind of monism I am concerned with in this article is perhaps compatible with the rejection of panpsychism – it could be modified to embrace the emergentist view that mentality is only associated with some sufficiently complex systems, and that entities that are too simple just do not exhibit any mental aspects and only exhibit physical aspects. But such a combination is not a natural one for the monist, since she has to deal, then, with two kinds of entities in her ontology: the ones that have two aspects and the ones that have only one. This spoils the whole monistic idea, and the whole idea of mental entities and properties. Combining her view with emergentism would be a huge step back for the monist, and it would amount to abandon the spirit of the view. Embracing panpsychism makes dual-aspect monism a more systematic and simpler view: it does not need to explain when and why entities start to have a double aspect.

Indeed, such an explanation is bound to be difficult to find, and this is where panpsychism gets its main *raison d'être* in the first place: it arises from the difficulties associated with emergentism. Strawson (2006) is a recent example of a rejection of emergentism in favour of panpsychism (he actually argues that all physicalists have to be panpsychists, given the failure of emergentism). The trouble with emergentism is, in short, that it makes a complete mystery of how something like experience or consciousness could emerge from an arrangement of fully non-experiential and non-conscious entities, like purely physical fundamental particles (or similar). To take his example, we *do* understand how liquidity arises from the combination of H₂O molecules under some well-understood circumstances, even if the molecules themselves do not exhibit liquidity. Liquidity is a new feature of the macro-entity that is composed of micro-entities that do not possess liquidity themselves, but we do understand how and why this new feature comes into existence. Importantly, the rise of liquidity is not a brute metaphysical phenomenon; rather, the liquidity of water is explained by the features H₂O molecules *do* have, it is wholly dependent on these non-liquid features, in a non-mysterious way.

Nothing like this is available in the alleged case of emergence of experience/consciousness from physical micro-entities. As Strawson (2006, p.66) puts it: "For Y truly to *emerge* from X is for Y to arise from or out of X or be given in or with Y *given how* X is. Y must arise out of or be given in X in some essentially non-arbitrary and indeed wholly non-arbitrary way. X has to have something – indeed everything – to do with it. That's what emerging is (that's how liquidity arises out of non-liquid phenomena). It is essentially an in-virtue-of relation. It cannot be brute. Otherwise it will be intelligible to suppose that existence can emerge from (come out of, develop out of) non-existence, or even that concrete phenomena can emerge from wholly abstract phenomena. Brutality rules out nothing."

Dual-aspect monism is the theory that is the best suited to adopt a panpsychist view. Mentality, so to speak, is present in the very nature of all entities/properties, since these are taken to be mental. This, one could say, *makes sense* of panpsychism, not just as being the default view – given a (controversial) rejection of emergentism – but as actually being the natural view to hold.

Thus, dual-aspect monism is best understood in combination with panpsychism. But doesn't it then have an equally serious difficulty to explain how the experiential properties of very simple systems or fundamental particles combine to generate experiences of more complex systems (such as human beings)? This is the 'combination difficulty': how can macro-experiences be understood as combinations or as being constituted by micro-experiences?

Here, it is useful to have in mind a distinction Coleman (2014) makes between *two* combination problems. The first problem arises if one thinks that the micro-experiences are had by micro-subjects, and that combining micro-properties to get macro-properties requires then to combine micro-subjects to get macro-subjects. Subjects are, presumably, points of view, at the very least. But then, it becomes very hard to see how a combination of many points of view could make up one (bigger?) point of view. Different points of view will always be different points of view, and will not become another *unique* point of view by being somehow combined. They could, perhaps, be destroyed and replaced by another point of view, but this is not *combining* them. Thus, this first combination problem seems to be a very serious one for the panpsychist (and the monist). Fortunately, one does not have to understand the rise of macro-experiences from micro-experiences in this way: one can see the combination problem as being a problem about combination of *phenomenal qualities*, and not of subjects. This is a much easier problem to handle. In a painting, to take Coleman's example, bits of paint form a picture by being juxtaposed and/or blended, and the way a

complex painting arises from these tiny bits of colour is perfectly intelligible. Along the lines of this example, one could then understand – or at least have a rough idea – how phenomenal micro-qualities could be combined (by being juxtaposed or blended) to give rise to more complex (macro) qualities. This is of course only a rough sketch of how this type of combination could work, but it does not seem to present insufferable difficulties, like the case of combination of subjects. Colours, say, can be combined by being juxtaposed or blended, and so could phenomenal qualities, provided that this combination does not require the combination of different subjects bearing those qualities. In this way, and in general, macro-objects could have more complex macro-properties than micro-objects (in pretty much the same way this is the case for all properties, and not only phenomenal/experiential properties – tables, say, can be rectangular, while fundamental particles cannot, but the rectangularity of the table depends on the particles that constitute it and the way they are arranged).

So, the kind of monism I am exploring in this articles has now become richer in content. It is a combination of three views: (i) the properly monistic dual aspect idea, (ii) panpsychism, and (iii) the rejection of a strong and metaphysically loaded conception of the subject of experience(s). Given the advantages of panpsychism (namely, the fact that it avoids problems with emergence), (ii) can be seen as a good point in favour of dual-aspect monism. What about (iii)? If we had a good reason to think that there has to be a subject of experience for every experience, it seems that this component of the package of views I am considering here would be a burden.

But the claim that there has to be a subject of experience can be understood in a metaphysically less loaded and harmless way. I have defended this view in detail elsewhere⁹, so let me here only roughly outline it. The idea is that the subject of experience, let us say the 'Self', can be understood as being a *plurality*: in a way that is analogous to metaphysical eliminativism (i.e. the view that instead of there being tables, there are atoms arranged tablewise), one can say that instead of there being a Self in the form of a substance or a bundle, there 'only' are *experiences arranged Self-wise*. This is not to say that the Self does not exist (so, this is reductionism, not an eliminativism). The idea is that there are the experiences (in general, mental states) we have, and the Self *is the experiences*. Thus, it is a

⁹ See Benovsky (2014). There are some similarities between the view I defend there and Parfit's (1971, 1984) reductionism, as well as Strawson's (1997, 1999) Pearl View (a view which itself comes structurally close to the Stage View about persistence through time and personal identity (see Sider (2000, 2001) and Varzi (2003))), and – as far as I am able to tell – the Buddhist view of the Self.

plurality. It is not a bundle or a collection of the experiences – that would be a single entity, additional to there being the experiences – and it is not a bearer of the experiences, whatever such a bearer may be. It does not supervene on the experiences, it is not derived from them, it does not exist in any second-hand ontologically derivative sense. *It is them*. Linguistically speaking, "I" and "Self" and "me" are all plural terms (like "the crew of the USS Enterprise"). Thus, being arranged Self-wise is not the same thing as being bundled together in order to make up a Self which is a bundle. The latter requires, metaphysically speaking, the existence of a bundling relation (often called "compresence") and it makes the Self to be a single entity. Experiences arranged Self-wise are ontologically less demanding. The idea is this: there are experiences, they happen to be arranged in such-and-such a way, and that's me.

With such a conception of the Self (that can, despite it being a plurality, play the role of a subject of experience (see Benovsky (2014, §4)), dual-aspect-monism-*cum*-panpsychism-*cum*-pluralism-about-the-subject is well equipped to face the combination problem.

§8. Until now we have seen what dual-aspect monism *is*. I hope we have here a rather clear view, and I hope that the idea of a double-aspect is at least intelligible. It is now time to see what dual-aspect monism is *good for*. It's very simple: it provides an elegant way out of the dilemma we started with in §2-3.

Firstly, dual-aspect monism does not reduce mental properties to physical properties. It does not give priority to the physical over the mental, nor does it give priority to the mental over the physical. Both are simply different aspects of one and the same thing. The qualitative and phenomenally rich aspects of this one thing are ontologically, conceptually, and empirically on a par with the physical aspects of it. The mental aspects do not depend for their existence on the physical aspects, they both depend for their existence on the one thing. Ontologically speaking, the priority is given to the one thing – the person (and her properties) – that has different aspects, where both enjoy the same status. Thus, in particular, the mental aspects of a person are not reduced to her physical aspects and can be genuinely said to have an irreducibly qualitative character. They have a qualitative character, they have the desired what-it-is-like character, and in general they can have all the features mental entities typically exhibit. They can have these features intrinsically and genuinely, without being reduced to something else, so there is no risk here to lose anything, unlike under physicalist theories.

Secondly, and importantly, while this type of monism can satisfy this desideratum concerning the irreducibility of qualia which is part of the motivation for dualism, it avoids the problems dualism has with mental causation. For the dualist, the question was: how can a

mind have a causal influence on a material body (the brain)? And how can a brain give rise to qualitative experiences such as pain? How to explain the (causal) interaction between the mental and the physical? The problem comes here from the dualist's idea that there are two ontological realms, that appear to be causally disjointed, and any cross-realm causal (or other) relations then become problematic. For the monist, there is no threat here. Strictly speaking, there is no causality at all between mental properties/states/events and physical properties/states/events, since they are (aspects of) one and the same thing, so there can be no causality *between* 'them'. There only is one ontological realm, there only is one entity – the person (and her properties) – and so the mental causation issue does not even arise, there is no 'interaction mystery' to be solved. For the same reason, there is no threat of causal overdetermination. As far as the causal closure of the *physical* world is concerned, of course, it has to be abandoned here, since the idea is that the world is not *physical* but that it is mental (or unknown, under the anti-realist reading). But here the rejection is harmless: what's at stake in the causal closure of the physical world principle is not that much the idea that the world has to be physical and that it needs to be causally closed, but rather that causality always occurs between things of the same kind, namely, the kind that the world is made of, be it physical or be it mental, the principle can be salvaged with everything that is essential to it¹⁰.

Thirdly, dual-aspect monism provides a natural explanation of how and why there is a strong correlation between mental properties/states/processes and physical properties/states/processes: since they are aspects of one and the same thing, it is no surprise that they go together, hand in hand. The hard question about how a material brain can give rise to a qualitative experience is thus no mystery at all, since strictly speaking the 'material brain' does not cause any experiences at all, the brain (processes/states/...) and the experiences being two aspects of one and the same metaphysical reality.

§9. It would be possible to stop this article here. We have started with a dilemma, we have seen what dual-aspect monism is, and we have then seen how it can help to get out of the dilemma. To my mind, this is enough to take it very seriously, at the very least. In this last section I will try to add even more plausibility to this view, by claiming that it fits well with our ordinary picture of the world. There is no argument here, only a hopefully useful analogy. This last section can be entirely skipped, if it is judged irrelevant.

¹⁰ Here again, Strawson's (2006) nice distinction between *physicalism* and *psychicalism* is relevant. (See footnote 1 above.)

The idea I want to compare dual-aspect monism to is that, our senses being what they are, we have a contingently limited access to the world in various ways, all very different. Take an apple you are eating. At the same time, you taste it, you touch it, you smell it, and you see it. These different sensory modalities provide you with experiences of different properties of the apple. (Here too a realist and an anti-realist readings are possible.) There are other ways to get to know the apple as well: you can measure it, weigh it, count the molecules that compose it, and so on. The point here is that we have access to the world in many different ways, each having a certain aspect – the kind of input we get from touching the apple is different from the kind of input we get from tasting it or from counting the number of molecules that compose it. I hope that what I am saying here is a mere platitude about the way(s) the world is given to us. I also hope that it rings a bell quite obviously if we have dual-aspect monism in mind. How are we given to ourselves? Well, I've already mentioned above that we can have ourselves scanned in an MRI, or that we can, say, simply enjoy the pain we are experiencing right now – these being two different ways of accessing the same reality. We have different ways to have access to ourselves, and they are also contingently limited. I can have access to my pain, but not to yours, in a qualitative way – but I *can* have access to your pain in the other, non-qualitative, MRI-like way. If I were a specialist, just by looking at your MRI I could say that you're in pain, and perhaps I could even say that it is a pain in your left foot. But my mental access to the world is more limited: not only I do not have a qualitative access to your pains, but I am also restricted when it comes to my own mind – I can only experience the present (or, the 'specious present'¹¹), I forget my past pains, etc. All this is completely contingent, it just happens to be the way I am built. Some animals have better sight, better smell, better hearing, some have echolocation capacities, and perhaps some conscious beings in the universe have telepathic access to the minds of others – at least, there does not seem to be a conceptual impossibility in this. (I dare to think that beings with telepathic powers would find dual-aspect monism quite natural.) So, be it by our five senses or by our purely mental introspective capacities, we have a (limited) access to a selection of reality (more or less spatio-temporally close to us).

Dual-aspect monism very naturally fits this picture. Reality has different aspects (or, it is given to us as such, under an anti-realist reading), and we have various means to access them, all qualitatively different, all of a different kind. I get a lot of different type of information

¹¹ See *inter alia* James (1890), Husserl (1964), Broad (1923), Dainton (2000, 2003), Hoerl (2009), Phillips (2011).

about my brain from my five senses, and thus a lot of information about me and my experiences (again, a skilled interpretation of a futuristic MRI-like scans will certainly be able to say when I have an experience of redness, when I have an experience of pain, etc.), and I also can get a lot of information about me and my experiences 'from the mental perspective' (and here things would go the other way around: if I have an experience of redness, and a good knowledge of the workings of my brain, I can then get to know that this-and-this portion of my brain is being stimulated just because I am now having an experience of redness). I guess that what I am trying to convey here is simply the idea that we have different types of access to the world and to ourselves, and that dual-aspect monism fits well with this ordinary picture of the world – a picture that we get from our ordinary experience. Again, there is no argument for dual-aspect monism here, but it may help us to see that, far from being a "weird outsider", it actually seems to be a natural conceptual extension of the ordinary way we see the world and ourselves, as being entities with different aspects.¹²

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¹² I would like to thank Davor Bodrozic, David Chalmers, Lynda Gaudemard, Baptiste Le Bihan, and Martine Nida-Ruemelin for very helpful feedback and advice while I was writing this article.

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