Psychophysical what?

What would it mean to say 'there is no "body" ... there is no "mind" in dance practice?

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Abstract

There have been numerous attempts to solve the apparent dualism of 'body' and 'mind', purportedly uniting mutually incompatible binaries through hyphenation, the creation of compound terms, or the erasure of one of the terms entirely. 'Psychophysical', 'psychosomatic' (with or without the word 'unity'), 'mind-body', 'body-mind', and, following Hanna (1970), 'somatic', have all been advanced as a means of articulating an undivided sense of human being.

This discussion deconstructs this descriptive matrix in an attempt to expose the naked paradox of human being obscured by tacit assumptions hidden in language. In dance the idea of 'body' is often afforded priority. Dancers understanding of themselves in activity, whether performing or observing – in the fields of learning, creating or rehearsing – is critically affected by their conception of themselves as divided or unified beings. To say, 'there is no "body" ... or "mind" might facilitate a more productive, *poietic* sense of practice, a 'thinking *in* activity' that does not imply a dualistic ontology. This requires a *practical* philosophical perspective. Such 'philosophical practicality' *in* dancers' practice may afford them greater resilience for their future careers against the fragmentation of *dis*-unity that thinking of 'body' or 'mind' engenders.

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Keywords

Aristotle, dancer, Heidegger, mind-body problem, psychophysical, soul

Biography

Martin Leach is a senior lecturer at De Montfort University where he teaches anatomy, physiology and philosophy to dance students. He read English and Drama at the University of Hull before studying theatre directing in Poland in the early 1980s and then training and qualifying as a teacher of the Alexander Technique. Martin obtained his PhD on Tadeusz Kantor, a Polish artist whose theory and practice combined fine art and performance practices in a poetic exploration of human being. He was recently invited to contribute a chapter to the forthcoming *The Theatre of Tadeusz Kantor* (Northwestern University Press).

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The dominant hegemonic ontology of our time is surely materialism. This idea would seem to imply that reality consists entirely of 'material', the current scientific understanding of which is that it consists of atoms. On one level no sane person can have any argument with this. However, when it comes to the being of living creatures, and particularly, to that category of the living that is human being, 1 the idea of 'material' becomes problematic. In part the problem is in trying to account for the difference between animate and inanimate matter, and more personally, in trying to account for the reality of subjective experience that we assume we share in the kind of being we have. 2 Dance provides a vivid example of this problem when one begins to question the idea of the dancer as a purely material being. As the poet W. B. Yeats characterised it: 'O body swayed to music, O brightening glance / How can we know the dancer from the dance?' Does thinking of dancers as material account for the sense one has of their performance? And what does it do to dancers, and for their futures in dance, for them to think of themselves as wholly material?

As the philosopher Raymond Tallis has recently argued (2011), the attempt to account for human being in terms of 'material' generally involves reducing the reality of subjective experience to the material cellular reality of neurons in the central nervous system. As such, the sense of the reality of any real agency for us as individuals is therefore undermined. Such anxiety concerning individual agency is not new. Fifty years ago Guy Debord argued in *The Society of the Spectacle* ([1967] 1995), that our life – our very sense of our individual reality – was being stolen from us. In this discussion I will argue that key to the continued clandestine 'house clearance' of human being, to its on-going commodification by market forces, is a misinterpretation of the concept of materialism that sees the only reality as

'physical'. The tacit assumption that physical reality is only something solid implies that no space is left in reality for the apparently non-physical reality of subjective experience: what I argue is the real reality of 'us'. In the discourse surrounding performance, and especially in dance, the ubiquitous use of the term 'body' to refer to the dancer as a whole is at odds with a sense of agency that is nevertheless assumed and expected. One of the crucial places where this becomes a practical issue is in the situation of dance students in the studio, watching their teacher demonstrate movement that they are expected (and they themselves desire) to somehow make their own. In this situation, the complex set of issues arising from the confusion around materialism and the body causes problems for the dancer at a practical level, fracturing the hidden continuity between conception and action.

For over twenty years my job has involved helping undergraduate dance students improve their performance in the sense of dealing with the problems they experience in their practice, specifically, the disturbing experience of finding themselves unable to do what their teachers demonstrate in dance class. Students watch their teacher demonstrate movement material. However, whilst the teacher's movement is the animation of an idea, and integrates conception and action, students often attempt to directly copy the bodily movements they observe. When they come to perform the movement themselves, a problem arises when their teacher points out that they are not doing what they think they are doing. They see the teacher dance and make sense of the movement in terms of their own unconscious, habitual associations. They associate the movement with how they think performing that movement feels. The result of this confusion is that what the teacher sees when students perform is often not the students' own subjective experience of what they are doing. In this sense their sense of self is fractured. A common way in which students perceive the problem is that their 'body' is not doing what 'they' would like 'it' to do. In this way they split themselves into two beings: the subjective reality of the apparently 'mental' perceiving 'I', and another reality, objective

and apparently 'physical' and 'bodily'. Despite advice to think of themselves as a whole being, the split, once made becomes tacitly ingrained and causes fundamental problems in their doing and learning-to-do in their dance practice. If dance training continues to give primacy to the body in this sense it will continue to inform dancers, dance teachers and choreographers of the future. As such the future of dance as an art form will, I argue, be impoverished at a fundamental ontological level.

For most people, it will, perhaps, seem obvious that they 'have' a 'body' and that this is what they perform their 'physical activity' with. It is also perhaps what most people think they see when they see other human beings. For the dancer, if anything, this may seem even more obvious. The 'body' is surely what dancers feel when they dance, what feels pain when they are injured, what feels fatigued when they are tired. A 'body' is also what they think they see when they watch another dancer, as, for example, when they watch their teacher or choreographer demonstrating movement. However obvious and self-evident this might seem, in this discussion I argue that a 'body' is not what we 'have', is not what we 'feel' and, perhaps most peculiarly, is not what we see when we see a dancer dance. Using Heidegger's approach to Aristotle's concept of *Phūsis* (Heidegger 1998), I argue that 'there is, in fact, no "body".

The concept of 'psychophysical unity'⁵ is a central tenet in the writings of F. M. Alexander,⁶ and, as a teacher of the Alexander Technique I have subscribed to this idea using this apparently anti-dualistic language in my teaching with dance students for over twenty-five years. As such I have become particularly attuned to terms that, at least on the surface, appear to signify one side of this binary pairing. The terms 'body', 'bodily', 'embodied' and 'corporeality' have become ubiquitous in contemporary discourse around performance, especially in dance.⁷ However, if a 'body' is what is buried (or cremated) then what are we watching when we see someone alive, not dead but dancing, or performing any living

activity? It has become a truism that psychophysical dualism is unhelpful in thinking about performance, and much valuable work has been done – for example, by Sondra Horton Fraleigh (1987), Graham McFee (2011) and Maxine Sheets-Johnstone (1998), and more recently by Erin Manning (2006, 2009) and Brian Massumi (2002, 2011) – to develop ways of thinking about human being in performance in a non-dualistic way. However, in terms of the language used by these authors the tendency has been and continues to be to speak of human being in 'bodily' terms, especially with respect to dance, theatre and live art.

Observing dance students over many years it is clear that their default conception of dance practice is dualistic: they routinely speak of their 'body' in a way that implies a separate 'self', and in this way a 'self' implied that is somehow separate from a 'body'. This in turn implicitly carries the suggestion of mind-body dualism.

I will begin, therefore, by discussing the term 'psychophysical', one of the adjectives frequently used by dancers and other performers to describe the self in activity. I would think that there are few if any readers of this discussion who would subscribe to the idea of bodymind dualism. As Anna Pakes has noted in her essay 'Dance's Mind-Body Problem': 'Within dance circles, there is a tendency to think that even to refer to the mind-body relation as a "problem" is to get off on the wrong foot by assuming that mind and body are separate entities', and that, as such, Cartesian dualism is 'assumed to be antithetical to dance's essence' (Pakes 2006, 88). Most if not all will be familiar with the language of 'psychophysical' or 'psychosomatic unity', language used to imply that 'body' and 'mind' are 'one'. However, increasingly I have been troubled by the suspicion that the term 'psychophysical' merely obscures the Cartesian problem by linguistic sleight-of-hand.

Terminology does nothing to change a concept if it tacitly reinforces it. My first task here is to try to demonstrate that this is exactly what these compound terms do. 10

So, what is the problem? Well, obviously the term 'psychophysics' is simply a compound word created from the roots 'psyche' and 'physics', the former apparently referring to 'mind' and the latter to 'body'. The combining of two seemingly mutually exclusive terms into a compound term in no way deals with their opposition. What is an attempt at *unification* merely re-inscribes their separation. If the roots of each term are examined the implicit dualism becomes more problematic. 'Psyche' is derived from the Greek ψυχή $(ps\bar{u}ch\bar{e})$, meaning 'breath', 'soul' or 'mind' and was translated by the Latin *anima*. (The idea of $ps\bar{u}ch\bar{e}$ – the animating principle of life – links together the terms breath–soul– mind in a way that suggests a performative quality that is at odds with the contemporary sense implied by the nouns 'mind' and 'consciousness'.) 'Physics' is derived from the Greek ψύσις (phūsis), meaning 'nature'. The root Greek meaning of these terms seems at odds with our contemporary 'materialist' understanding where anything 'physical' is thought of as tangible and solid, whereas anything 'mental' or 'soul-like' is thought of as ephemeral, and somehow 'not really real'. In the seventeenth century René Descartes struggled to distinguish between the 'natural' aspect of reality, that was solid and corpuscular (a kind of precursor to current atomic theory)¹¹ and the 'supernatural'. The world he had to contend with had different kinds of imagined super-natural phenomenon, that is, phenomena understood as 'over' or other than physical reality. The supernatural included the idea of natural spirits, such as fairies, and the supposed influence of celestial bodies in astrology, as well as phenomena traditionally ascribed to the Divine, such as miracles and the agency of individual subjective experience, thought of as 'mind' or 'soul'. Descartes and others wanted to distinguish what they thought of as non-Divine supernaturalism (fairies and astrology) from, for want of a better term, 'true supernaturalism', of that which is derived from God (See Gaukroger 1995, 147). The combining of the terms 'psyche' and 'physics' in 'psychophysical' thus becomes highly problematic when viewed in this Cartesian as opposed to the pre-scholastic Aristotelian

tradition. In Cartesian terms this would appear to set either the 'psyche' as 'super-natural' against the 'body' as 'natural', or, if, as for Aristotle, 'psyche' is taken as a 'natural' phenomenon, the compound term is setting 'nature' against 'nature'. In this case the 'body' implied by the 'physics' must be understood as an abstraction, just one part of 'nature' in general, a 'nature' that, taken as a whole, includes both 'body' and 'psyche'. Following this analysis 'body' becomes some special example of nature, and not its essential or fundamental feature (as assumed in the concept of materialism), since 'psyche' in this case is also 'natural'. Either way, this ambiguity would suggest that there is a conceptual confusion at the heart of the language of 'psychophysical' or 'psychosomatic' (or 'psychophysical unity' and 'psychosomatic unity'). On the one hand there should then be no opposition between 'psyche' and 'nature', between 'mind' and 'body'. But, on the other, an opposition persists because the words themselves seem to oppose one another. This opposition is revealed in the seemingly singular term of 'body' or 'soma'. When writers write of 'body', 'bodily' or 'somatic practices', 12 or 'bodies that matter', 13 or the 'dancing body', or 'the body eclectic', 14 or 'corporeality', they would seem to be using the term 'body', or synonyms for it, synecdocically. One part, the 'body', is being taken for the whole, and in this the incompleteness of 'body' as a term for 'person' is implicit. It is worth making explicit this insufficiency. As the philosopher Keith Campbell so vividly puts it in his short 1984 book Body and Mind when he defines the term 'body',

Provided you know who *you* are, it is easy to say what your body is, it is what the undertakers bury when they bury you. It is your head, trunk and limbs. It is the collection of cells consisting of your skin and all the cells inside it. It is the assemblage of flesh, bones, and organs which the anatomist anatomizes. It is the mass of matter whose weight is your weight.

(Campbell 1984, 2)

It is a common experience in the presence of the dead to refer to the body as a 'shell'. In death the body is very obviously not a whole person. Therefore, if the word 'body' is used to refer to a living human being (arguably the only sort of human being) it is clearly referring to both the 'body' *and* what is missing in death. The original Cartesian problem remains.

But, why does any of this matter? Is this not simply pedantic quibbling over words? Well, I argue that it does indeed matter because it is of primary *practical* import, as mentioned earlier. In their articulation of their experience of this problem, dancers habitually resort to talking about their 'bodies'. As soon as they do this, they automatically split themselves into two things, a 'me' and 'my body'. What is this 'me' but conscious self-awareness – the 'mind'? In dance students' writing, references are often made to what their 'body' does, implying a separation between the dance student and her or his corporeality. In this way, if the word 'body' is used, it is not long before the word 'mind' or some cognate of mental activity or 'thinking' is also employed.

Thinking only in terms of 'body' causes problems in practice because it fundamentally disrupts the continuity between thought and action. When dance students observe their teacher move, they believe they see a 'body' in motion. Well, of course, in a sense they do see this. However, what they tend to do with this interpretation is try to imagine how that movement must 'feel'. The desire to attend to feeling is an unhelpful and destructive distraction because the feeling is the product of activity *after the event*; it is the conception – the *idea* of the movement – that is the organising principle. The *feeling* of movement is simply a by-product of the functioning of the system as a whole. The dance student's attempt to copy the teacher by emulating some imagined 'feeling' results in a *simulacrum*, a poor copy. In Instead what is needed is for dancers to to construct for themselves *their* version of their teacher's *conception*, the *idea* that is producing the movement that they see. I argue that what they see is in essence their teacher's *idea in action* and not their teacher's feeling of her

or his 'body' in motion. Although the idea animates the 'body', the distinction I want to foreground is that it is the animation of the idea we see, not the 'body' itself. What we see, I propose, is the idea in animation. What I am arguing for is a recognition of something like Aristotle's conception of the soul, but a soul understood in biological terms as the dynamic interplay of action potentials in the nervous system. I would like to call this a 'biological soul' as signifying the animating principle or form of the *living* body in contemporary terms. In order for student dancers to realise that this is indeed what they see, a paradigm shift is needed in their conception of what they are seeing, and also, of what they themselves 'are'. Insofar as student dancers perpetuate a 'body'-'mind' dichotomy it will predispose them to repeated failure in terms of doing what they want to do for it will perpetuate the split between thought and action that facilitates the unreliable appreciation of their movement intention. Such experience of repeated failure, of their not doing what they think they are doing, together with the lack of understanding of why they fail, erodes students' resilience at a fundamental level. It ensures that only students who already have a sound way of thinking about how they go about learning movement will progress and continue to progress. Practical success then becomes a matter of luck rather than the application of a rational constructive process.

Despite over a century of attempts in the phenomenological and post-Heideggerian traditions¹⁷ to overcome Cartesian dualism the idea of human being remains stubbornly resistant to unification. Instead the general trend has been increasingly to imply a privileging of 'body' that carries through into contemporary work such as that of Erin Manning and Brian Massumi, even when this is discussing 'the virtual' and the 'abstract body'. For example, Massumi's discussion of the 'abstract body' is still articulated in terms of and from the perspective of 'body': 'What if the space of the body is really abstract? What if the body is inseparable from dimensions of lived abstractness that cannot be conceptualized in other than

topological terms?' (2002, 177). In all of this discourse, the term 'body', I argue, is still used synecdocically and therefore tacitly re-inscribes in its usage the idea of some additional 'quality' or 'entity' that it does not explicitly signify: 'soul', 'mind', 'spirit' ... whatever the unsayable name there is for the apparently non-corporeal aspect of human being – whatever it is that cannot be buried with the 'body'. As the British Philosopher David Best has argued in his 1974 book *Expression and Movement in the Arts*: 'to think in terms of two entities' (1974, 188) must eventually result in a dualistic conception of the subject under consideration.

What is at stake here then, is the question of the *nature* of human being. If we take seriously the fact that a dead 'body' is an inanimate material 'body', and not a human being, what is it that we see when we see the living? In his 1969 book *Meaning in the Arts*, the British Philosopher Louis Arnaud Reid observes that, 'to "see" character in a person's face, in his posture and gesture, is neither to perceive his body only nor to apprehend his character through his body, but to apprehend one single embodied person with distinguishable aspects' (Reid 1969, 76). Reid goes on to use the term 'psycho-physical' to describe the phenomenon of the living person. However, Best, in his discussion of this passage, argues that: 'to see character in a person's face is not to see the mental embodied in the physical, it is to *interpret* his physical expression' (Best 1974, 188). This seems close to what Descartes argues in a passage in his *Meditations on First Philosophy* ([1642] 1984), that we *see* the fleshly 'body' but *interpret* something else. To say that we see a 'living body', therefore, does not really solve the problem, because it is to think of a 'body' (as in the corpse) and imagine it moving. This seems simply to continue the re-inscription of the problem. However, to pursue this strategy for a moment here is Descartes' famous observation from his *Second Meditation*,

[...] if I look out of the window and see men crossing the square [...], I normally say that I see the men themselves [...] Yet do I see anymore than hats and coats which could conceal automatons?

So what if this is exactly what we see? I would ask the reader to try the following experiment the next time you are in a position to observe a room (or street, or square) filled with people. Look around and ask: 'What do I see in this room (or street, or square) now?' A moment's reflection, it seems to me, suggests that what we see beneath the cloak of social normalcy are indeed anatomical 'bodies'. However, we would still see these 'bodies' once they are, sadly, laid out in their coffins. What would be missing, scientifically speaking, would be their animation by means of the neurological functioning. So, in a sense, it can be argued that Descartes was right: we do see automatons: 'flesh robots' animated by living nervous systems.

This is a very difficult thing to talk about, both because language 'anatomises' things, and also because human knowledge 'anatomises' itself. So we understand a human being in terms of a multitude of interlocking systems, each of which, *for* understanding, has been abstracted *from* the whole. So it is very difficult to speak of, for example, the musculoskeletal system in terms of its continuity with the nervous system, even though the nervous system developed with its motor-mechanical effector system 'in mind', so to speak. Nevertheless, reality for each and every one of us consists of nothing other than the dynamic interplay of signals within the nervous system, one aspect of which we experience as conscious awareness. As is now well known, ¹⁸ the nervous system constructs a model of the world, including the other beings it 'sees', and organises itself around this. This would suggest that our sense of reality is part of one continuum that includes conception and judgement.

Descartes continues his account of looking out of the window with the realisation: 'I *judge* that they are men' (Ibid.). Again, he is right: the photons reflected from the 'bodies' that stimulate our retinas trigger action potentials from which the nervous system constructs its images and the sense it makes of them. All of our realities consist of this 'made up' world. 'I

judge', Descartes writes, because, although he truly sees the *matter* of the automaton, he *intuits* the *presence* of the living human being. ¹⁹ He states that he 'sees' the human being 'in itself', not because he has merely seen it, but because he has made a *judgement* about it. He has discerned what Plato calls in his *Seventh Letter* 'the thing itself' (342a–b, Plato 1952, 533). ²⁰ This therefore begs the question, 'what is the true nature of the human being?' What is human being as a 'thing in itself'? If we maintain that 'bodies' *are* 'automatons', what is it that we see in the sense of Descartes' 'judgement'? Put like this I hope we can agree that when we see a dancer dancing, what we do not see is a dancing 'automaton'.

To be clear, what I am arguing is that although we do really see 'bodies', in the sense of anatomical entities that are composed of atoms – of *matter* (Descartes' 'automatons') – what we *judge* we see, and confuse with 'body', is not, in fact, 'bodily' at all. What I am suggesting is that what we *really* see is not 'body', but 'soul'. But not 'soul' in the early-modern Cartesian sense of 'mind' that persists today, but in the sense of a 'biological soul' understood as nervous activity as the animating principle or form of the living body that I introduced earlier. However, this 'biological soul', although couched in somewhat more modern terms, has an ancient precursor. What I propose that we actually have sense of is 'soul' in the Ancient Greek sense discussed by Aristotle of *psyche* or (to use its Latin translation) *anima*.²¹

The term 'soul' is problematic because of its contemporary associations, on the one hand with a religious perspective, and on the other because it is one of the synonyms for the contemporary idea of 'mind'. While the former is not necessarily a conceptual problem, insofar as it might inform and encourage a culture of care and empathy, the latter *is* problematic in the sense that it suggests an incorporeal entity understood in opposition to the corporeal 'body'. Consequently I find myself needing to propose, therefore, not only that 'there is no "body", but also that 'there is no "mind". In order to think this, however, a revision of the fundamental idea of reality is necessary.²²

As Martin Heidegger has argued in *Being and Time* ([1927, 1953] 2010, 61), the Western understanding of reality is based on the sedimentation of meaning deriving from the centuries of interpretations of the ideas of Plato and Aristotle. According to Heidegger, this understanding was crystallised by Descartes and his interpreters into a particular conception of reality. This conception, again according to Heidegger, requires deconstruction from the burden of this tradition if it is to be understood anew. In this traditional Western metaphysical idea of reality, the original Aristotelian distinction between 'form' and 'matter' is thought about in one particular way that becomes tacitly assumed as the *only* way. It is this that informs our common understanding of what a 'thing' is. For something to exist at all, it must be some sort of 'thing'. As Heidegger observes in a later essay, 'the meaning of the name "thing" varies with the interpretation of that which is' (Heidegger 1975, 174). All sorts of kinds of 'things' exist, some of them 'things' that are material objects, such as cups or tables, others are processes, such as performances or the act of reading. In fact, in terms of contemporary physics, anything that exists is a process.²³ The only distinction would be one of timescale. Human being is arguably a set of interlinked processes running at different timescales. The 'bodily' aspect of human being, the 'automaton' that we think we see, is a set of systems running at the same sort of timescale as that of the atoms and their sub-atomic particles making up a cup or a table. I am thinking here of the musculo-skeletal system of the bodily framework and the collection of organs suspended within it. However, each of these systems is, in fact, dynamically performative in its own terms and each to its own timescale. To take one example, the most apparently permanent part of human being is the bony skeleton. Symbolically it is 'all that is left' after 'we' are gone. However, those dry bones are, of course, no longer living. Living bone is actually dynamic and constantly remodelling itself according to the monitored stresses on the structure. Special bone-building cells called osteoblasts are directed to appropriate locations where they entomb themselves in mineral

prisons and commit suicide. Other cells, osteoclasts, move in if these mineral deposits need to be removed for remodelling. As such, the apparent substantial permanence of the bony skeleton in the living is only an appearance. The reality is a constant dynamic process of formation, destruction and re-formation. It is this constant performance that gives our physical presence its thing-like quality. The dry dead bone, as with the corpse, is, in reality, a different kind of being, lacking this invisible entropy-resisting animation. Because of the apparent solidity and illusory permanence of the living body (in reality, of course, all-too short-lived!) we tend to think of it as a 'thing' in the sense of 'material object'. But there are other systems, apart from the osteological system just described, that comprise human being, different systems running in different timescales. The process that constitutes the aspect of human being that I want to argue we actually relate to in terms of our day-to-day conscious perception, is operating at a much faster performative timescale, that is, the fragile, dynamic constellation of electro-chemical signals that constitute the functioning of the nervous system.²⁴

To return to the situation of the student dancer standing watching her or his teacher in the studio. We certainly think that to really be there they both have to be there *in substance*, and by 'substance' we tend to mean 'in the flesh', the material, the collection of different types of matter, that they are composed of. But for dancers to be 'themselves' there have to be a number of things present. To be sure, all their atoms have to be present. But, at the functioning performative level, they also need to remember who they are. If, heaven forbid, they were suddenly afflicted with instantaneous Alzheimer's disease and no longer remembered who they were, we would surely say that 'they were not all there', that they were no longer completely 'themselves'. Some aspects of their 'substance' had made it to the class, but not all. The part that would be missing in our example, according to current neuroscience, would be a particular arrangement and functioning of certain aspects of the nervous system

connected with memory, a 'thing' in the sense of ongoing process or performance, not of material object. In general, we probably think in terms of a quorum of elements being present for a complex being like a dancer to be deemed fully 'there'. If, for example, they had had a bit of a wild night and woken up in someone else's flat, and had to borrow clean clothes to come to class, well, then we'd probably still admit it was still 'them', just a bit 'worse for wear'. We would be happier with the absence of their own clothes than we would be with the absence of their memory, or the absence of their ability to reason. Thinking of human being in terms of the dynamic activity of its systems *in time*, affords the possibility for a different conception of nature than the particular matter-as-substance ontology that Heidegger argued has been the Western *mis* interpretation of Aristotelian physics. If Aristotle's account of 'nature' in Book Two of the *Physics* is read anew in the performative terms of Heidegger's 1939 reading, ²⁵ then the apparent primacy of 'body' and its associated 'physicality', which Pakes suggests 'might seem more accommodating of dance than the dualistic framework' (Pakes 2006, 88–89) is brought more sharply into question.

In the *Physics*, Aristotle states, 'two sorts of things are called nature, the form and the matter' (194a 13, Barnes, 331). The notion that we tend to have is that the substance of a 'thing' is somehow static. But for Aristotle, the essence of nature is κίνησις (*kinēsis*), the state of movedness, a fundamental movement from the potentiality of matter to the actuality of form. Aristotle states: 'The form indeed is nature rather than the matter; for a thing is more properly said to be what it is when it exists in actuality than when it exists potentially' (193b 6–8, Barnes 1984, 330; see also Heidegger 1998, 215).

To return again to the situation of a dance student and her or his teacher in the studio, a space in which there are two 'bodies', one carefully watching, the other carefully performing movement for demonstration. Neither 'body' can be understood, in Aristotelian terms, as being essentially anatomical or 'bodily'. In his 1939 essay Heidegger states, echoing

Aristotle, that, 'we do not say "that is $\varphi \circ \sigma \varsigma$ " ['nature'] when there are only flesh and bones lying around' (Heidegger 1998, 214). For Aristotle, 'nature', or reality, is not a static 'place' containing a collection of 'things'. It is instead fundamentally dynamic and performative. It is out of this understanding that Aristotle develops his conception of 'psyche', *anima*, or 'soul'.

Aristotle's concept of 'soul' seems completely alien to our post-Cartesian idea of 'mind', which in turn seems so irreconcilable with the idea of 'body'. If, for Aristotle, the form of matter is nature, with respect to *animate* nature, it is the 'psyche', as the 'form' or 'organising principle' of the *living* thing that constitutes its reality. In human being, according to Aristotle, this 'form', or 'soul', includes intellect and, because form is the *realisation* of the potentiality of matter, it is not separate from it.²⁶ Aristotle asks the question in the *Physics*, 'Since there are two natures, with which is the student of nature concerned?' (194a, 16–17, Barnes 1984, 331). The implicit answer is that there is one nature that appears to be two depending on the perspective.

All too frequently, when viewing dance performance, the spectator is drawn to dwell on what is seen in terms of conceptions of 'bodily *physicality*'. In this way any attempt to think about the performance succumbs to the gravitational pull of the old ideas of substantial permanence of materiality as being some kind of guarantor of what is important, of what is 'real'. What I am arguing here is that the real substance of the performance – the idea and animating principle in action – escapes into ethereal abstraction and is all too easily ignored.

Perhaps the answer to the implicit question in the title of Wim Vandekeybus's and Ultima Vez's recent (re)revival of their 1987 work *What the Body Does Not Remember* is nothing 'bodily' at all, but instead the business of Aristotle's difficult to apprehend principle of animation ... the soul. In much European 'conceptual dance' of recent times,²⁷ the essence of the live performance is not what is physically happening before the spectators' eyes but instead a move away from the corporeal, to use absence as presence, or else to use the

corporeal to highlight the non-corporeal. In the work of artists such as Jérôme Bel, Ivana Müller, New Art Club, and Xavier Le Roy, what is often important is *not* 'physically' present: the mind, memories, meaning, ability, action. In the various strategies of absence employed by these artists what the apparent vacuum enables is the potential for a ghostly presence to inhabit the performance.²⁸

It is strange that, given the performative nature of reality described by Aristotle in the *Physics*, and the character of much contemporary performance work in Europe, the predominant tenor of contemporary performance discourse should continue to cohere around the potential matter of 'body' as opposed to the actuality of its animation of an idea, its 'form', its 'soul'. It is for this reason that I find myself wanting to now say, 'there is no "body" ... there is no "mind", as currently conceived. Thinking of themselves in terms of 'body' and 'mind', I propose, undermines student dancers' strategies for their own successful self-performance, sapping their resilience and sabotaging their futures in dance. Thinking in terms of 'body' allows dancers to continue in their conception of reality as primarily 'bodily' and further serves to limit the horizons of their creative potential in relation to developing future trends in the arts. It maintains the split between conception and action creating a rift between the idea and its animation. What a dancer is, and what she or he sees in others, is the gathering of the total system in dynamic activity, the self-animation of the system, a performance of 'soul'. What is therefore important is not 'body', but 'soul', not in the sense of 'mind', but in this sense of 'animating principle', the self as performance of itself. Curiously, conceiving of themselves in this way, as the more insubstantial, provisional 'substance' that Aristotle argues is their true nature, will, I maintain, afford dancers more resilience in their practice, than any 'body', no matter how strong it may 'feel'. What 'is' is the animation of 'body' by thought, and not the 'body' itself, which, without animation, becomes mere matter, mere corpse: it is, rather, the animation of the *idea*. In this sense,

thinking 'there is no "body" ... there is no "mind", paradoxically, foregrounds this 'ensouling' of matter, an idea that is the opposite of the idea of 'embodiment' that is at the heart of 'somatic' or 'bodily' thinking that characterises so much of the discourse around contemporary dance practice.

What might this mean in practice? It would mean encouraging students to look for the idea informing the movement, rather than the movement itself. This would involve: more thinking while looking and less immediate doing upon the conclusion of the teacher's demonstration (or doing while looking in the form of 'marking'); more active self-questioning of initial understanding and willingness to experiment with different related conceptions of the movements to be performed; developing and encouraging more explicit strategies that facilitate ways of 'thinking in activity'²⁹ for student dancers in their dance class that are based on the idea of ensoulment as opposed to embodiment. But for this to begin to be possible the fundamental paradigm shift proposed would need to happen. And if this can happen then the idea of ensoulment and the foregrounding of 'thinking in activity' could possibly benefit the art form at a fundamental ontological level. In this case what potential futures for the spectrum of dance practices produced by such a shift would then be possible?

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¹ I use the term 'human *being*' rather than 'human beings' throughout my discussion, to denote the kind of being that is human, rather than to refer to any individual human beings as such.

² In his recent book on materialism Terry Eagleton (2016) appears to both accept and dismiss the reality of subjective experience, what he terms 'soul', as something that just 'is': 'Soul-language is simply a way of distinguishing between bodies of this type [i.e. human being] (or of some other animal kind) and bodies such as pitchforks or bottles of brown sauce' (Eagleton 2016, 39).

³ W. B. Yeats 'Among School Children' in: Yeats 1967, 245.

⁴ For recent examples of this tendency of undermining agency through reductionism see: philosopher Daniel Dennett interviewed by Jim Al-Khalili in the BBC Radio 4 programme The Life Scientific (http://www.bbc.co.uk/programmes/b08kv3y4), and, albeit from a more comic and critical perspective, Robert Newman's book (Newman 2017) and BBC Radio 4 programme Rob Newman's Neuropolis (http://www.bbc.co.uk/programmes/b08nkn4k). This reductive tendency (whether that is an author's or commentator's intention or not) frames human being in terms of a reduction to physical processes (the assumption being that there can be nothing mysterious, magical or conscious in such phenomena). Newman cites Professor Brian Cox's assertion that 'There is nothing special about human brains. They operate according to the laws of physics. In a sufficiently complex computer, I don't see any reason why you couldn't build AI' (Cox cited in The Times 2014, available from https://www.thetimes.co.uk/article/brian-cox-says-principle-of-ai-ispossible-j2m8nzvf905). An earlier example of this reductionism can be found in Francis Crick's The Astonishing Hypothesis: The Scientific Search for the Soul (1994), where Crick argues that: 'You, your joys and sorrows, your memories and ambitions, your sense of personal identity and free will, are in fact no more than the behavior of a vast assembly of nerve cells and their associated molecules' (Crick 1994, 3). As an example of how Crick's reductionism translates into science textbooks the authors of the 2007 edition of Neuroscience: Exploring the Human Brain state: 'In neuroscience, there is no need to separate mind from brain, once we fully understand the individual and concerted action of brain cells, we will understand the origins of our mental abilities' (Bear et al. 2007, 24). More recently neuroscientist David Eagleman's Incognito: The Secret Lives of the Brain (2011) and psychoanalyst Josh Cohen's The Private Life: Why We Remain in the Dark (2013) seem to make the case that 'we', in the sense of our subjective identities, do not exist. It is not necessarily that this scientific picture is wrong; it is rather the pejorative implications of the language and the tenor in which it is interpreted that are problematic. It may well be the case that the received idea of human being is inherently incorrect, but it is also the case that a great many other assumptions in the received idea of reality in general are incorrect (for example it might be said coequally that, as with the experience of subjectivity, 'colour' and 'solidity' do not exist 'in reality' in the way we experience them).

⁵ In the following discussion I will concentrate on the compound term 'psychophysical' as being the essential component of the sometimes-employed 'psychophysical unity'. The compound nature of the terms 'psychophysical' and 'psychosomatic' already implies unification; the suffix 'unity', sometimes appended to them, is therefore arguably redundant. A term such as 'psychophysical unity' is, on closer examination, tantamount to a tautology.

⁶ See Alexander 1996 (originally published 1918), 2000 (originally published 1940), 2001 (originally published 1932) and 2004 (originally published 1923).

⁷ For example: Dance and the Lived Body (Horton-Fraleigh, 1987), Corporealities: Dancing Knowledge, Culture and Power (Foster, ed. 1996), Dancing Bodies, Living Histories: New Writings About Dance and Culture (Flynn and Doolittle, eds. 2000), The Body, Dance and Cultural Theory (Thomas, 2003), The Body Eclectic: Evolving Practices in Dance Training (Nettl-Fiol and Bales, eds., 2008), Agency and Embodiment: Performing Gestures/Producing Culture (Noland, 2009), The Wise Body: Conversations with Experienced Dancers (Early and Lansley, eds., 2011), Ageing, Gender, Embodiment and Dance: Finding a Balance (Schweiger, 2012).

⁸ The British philosopher Louis Arnaud Reid discusses the idea of 'embodiment' as a 'psycho-physical' phenomenon in relation to expression in the arts in his book *Meaning in the Arts* (1969, 76–77). In recent years this term has also become pervasive in the field of actor-training with the idea of 'psychophysical acting' as popularised by Phillip Zarrilli (See Zarrilli 2008 and Zarrilli, Daboo and Loukes 2013).

⁹ It is perhaps worth noting that, as Lee Braver has discussed (Braver 2012; and see also Moore 2012), Wittgenstein can be viewed from both the analytic and continental philosophical traditions. Pakes appears to be writing from an analytic perspective that tends to assume, as Andrew Bowie has recently argued (see Bowie 2015: 51–52), an attitude of 'scientific objectivity' that naturally reinforces a 'subject-object' split. Therefore, despite her observation that Cartesian dualism is 'assumed to be antithetical to dance's essence', Pakes, in constituting 'dance's mind-body problem' as an object of philosophical analysis, tacitly performs the very

subject-object split that is part of the essence of the mind-body problem. In this sense it would seem that a 'mind-body problem' will be inevitable for the analytic philosopher.

- ¹⁰ I would also argue that the problem is not even improved by using a non-compound term, such as the use of $s\bar{o}ma$ in the now-popular and ubiquitous term 'somatics'. Thomas Hanna had argued, following Bruno Snell in the 1953 translation of his influential book *The Discovery of Mind: The Greek Origin of European Thought*, that $s\bar{o}ma$, the Greek word for 'body', following Hesiod, really meant the whole living person. Although Snell's interpretation was comprehensively overturned by Robert Renehan in his 1979 article 'The Meaning of Σομα in Homer' (Renehan 1979), the myth that $s\bar{o}ma$ means something more than 'body' has persisted. Even so, as I argue here, it still fails to solve the problem it is intended to solve.
- ¹¹ The seventeenth-century mechanist world-view saw nature as consisting of small spherical corpuscular particles that were in constant motion. All natural phenomena could be accounted for in mechanical terms understood as the motion and kinetic interaction of these corpuscles. Mind or soul was outside of this schema because they were understood by Christians as being truly 'supernatural' and as originating from the Divine source (See: Gaukroger 1995: 269–270).
- ¹² For example, as used in the title of *The Journal of Dance and Somatic Practices* (Whatley 2009–).
- ¹³ For example, as used in the title of Judith Butler's 2011 book *Bodies that Matter: On the Discursive Limits of Sex.*
- ¹⁴ For example, as used in the title of Nettl-Fiol's and Bales's 2008 edited book *Bodies Eclectic: Evolving Practices in Dance Training*.
- ¹⁵ See: 'The 'problem of "feeling" in dance practice: fragmentation and unity' (Leach 2009).
- ¹⁶ It is important to point out here that 'feeling', insofar as it is anything substantial at all, is completely innocent in all of this. It is rather the inadvertent and unconscious (mis)use of perceived and imagined sensation that is problematic. This is because it is effectively the misinterpretation of an aspect of physiological functioning that results in the tacit assumption that the sensory mechanisms should deliver an absolute register of activity, which is a function that they are not designed to fulfill. The system's use of sensory information is dynamic and contextual and is best left to operate at the non-conscious level. It would seem to be an accident of evolution that we have some conscious awareness of its operations. Proprioception (rather than sensation) which is entirely non-conscious is not directly perceived, and has the capacity, through training, to function with a high degree of accuracy.
- ¹⁷ I am referring to the processing of the ideas of Descartes, Kant and Hegel by, amongst others, Friedrich Nietzsche, Edmund Husserl, Martin Heidegger, Jean-Paul Sartre, Maurice Merleau-Ponty, Jacques Derrida, Michel Foucault and Gilles Deleuze.
- ¹⁸ See, for example, Edelman 1989, 1994.
- ¹⁹ I am aware that intuition is precisely the phenomenon that David Best finds unacceptable in his discussion of Louis Arnaud Reid (Best 1974, 188–189). However, Best is of course writing from within the analytic tradition for which the subjectivity of intuition would be anathema. Intuition is not so troublesome in the continental tradition and is, for example, central to Henri Bergson's thought in *An Introduction to Metaphysics* (Bergson 1999).
- ²⁰ Plato's text is regarded as one of the sources for the idea of 'the thing in itself' that dominates the metaphysics of presence (See Agamben 1999, 27–38).
- ²¹ My understanding of Aristotle's concept of 'soul' has been informed by Giorgio Agamben's work, especially the essays in the volume *Potentialities: Collected Essays in Philosophy* (1999), particularly 'The Thing Itself' and 'On Potentiality'.
- ²² It seems to me that the common idea of 'reality' that I tacitly tend to assume in my day-to-day activities is a rather impoverished idea of 'materialism'. This is an idea in which scientific 'physicalism' is simplistically misinterpreted as merely a contemporary version of seventeenth-century corpuscular mechanics: the idea that the 'physical' world consists only of microscopic particles moving against each other. Since these particles were not in themselves conceived as animate, some extra, moving, animating 'super-natural' force was necessary to impart movement to the world (and which the Christian Descartes and the Jewish Spinoza both attributed, in their own different ways, to 'God'). As such, apparent phenomena such as animate life and the conscious awareness that we experience for ourselves as 'mind' (and intuit as present in others) seems necessarily exotic and 'super-natural'. As modern particle physics has shown, however, the contemporary version of these

corpuscles or particles – atoms – are not at all inanimate but are rather fizzing with energy beneath their apparent 'shells'. And, as contemporary molecular biology has discovered, the distinction between geological and biological vitality is more of a continuum rather than a sharp divide (See Lane 2015, 27). Raymond Tallis argues for a new conception of 'matter' as well as wisely cautioning against the recent fashion of superficially invoking the strangeness of quantum reality to provide a solution (Tallis 2011, 353–357).

- ²³ As the physicist Carlo Rovelli has recently stated: 'The world is not made up of tiny pebbles. It is a world of vibrations, a continuous fluctuation, a microscopic swarming of fleeting micro-events' (2016, 113), and an 'individual is a process: complex, tightly integrated' (2015, 72).
- ²⁴ What are the implications of this? What matters, it seems to me, is that the dancer's 'body' is understood more properly in terms of its manifestation of a sense of presence through the tangible way in which it is animated by the dancer's conception of the-act-to-be-performed. The reality that is articulating this is the activity of the performer's nervous system, which we see, and the individual experiences, through the feedback of our respective sensory mechanisms: the dancer proprioceptively, the observer visually. However, the reality remains wholly neural. Although the elements of the 'world' are transduced by specific sensory mechanisms, the nervous system knows nothing of the world in itself, as Kant rightly observed. It knows only the neural traffic and its interpretations of this. This sense of presence does not reside 'in', or 'as', the 'body' of the dancer, therefore, but in the activity of this neural traffic. This flow of information is performative, and as such, not reducible to the material substrate of the nervous system in terms of its anatomy, although this architecture does provide the parameters of its possibilities. Instead, what is important, what gives one particular dancer the particular quality he or she has, is the particular sense of quickening, a sense of gathered presence conveyed via the kinetic quality that the 'body' is imbued with by the activity of the nervous system. This kinēsis, thought by Aristotle to be one of the hallmarks of the animating principle of 'soul', is seldom thought of in itself. It is always implicitly reduced to 'body' and 'sensation', itself understood (incorrectly, I would argue) as being 'bodily' rather than intellectual.
- ²⁵ My reading of Aristotle's Physics is informed by Heidegger's 1939 essay 'On the Essence and Concept of Φύσις in Aristotle's Physics B, I' (in Heidegger 1998).
- ²⁶ The equivalent in contemporary physics to Aristotle's schema might be understood as the relationship between the wave-particle virtuality of the sub-atomic substrate, giving rise to the form of reality as we experience it. As Rovelli notes, ancient philosophy is at times uncannily prescient in its anticipation of current thinking (see Rovelli 2016, 3–30).
- ²⁷ I am thinking, for example, of: Ivana Müller's *How Heavy are my Thoughts* (2003), and *While We Were Holding It Together* (2006), Xavier Le Roy's *Le Sacre du Printemps* (2007), Jérôme Bel's *The Show Must Go On* (2001, 2004, 2015), New Art Club's *The Visible Men* (2007), *A Quiet Act of Destruction* (2011), and *Feel About Your Body* (2013).
- ²⁸ This idea of the 'seething potentiality' of nothingness can be related to quantum theory. As explained by Karen Barad: 'According to quantum electrodynamics, the "vacuum" (which, classically speaking, refers to the void) is a state in which everything that can possibly exist exists in some potential form' (Barad 2007, 92). Because of experiments conducted by Willis Lamb and Robert Retherford in 1947 on tiny shifts in the spectrum of hydrogen, Barad argues, we 'have empirical confirmation of this seething potentiality' (Ibid.).
- ²⁹ The phrase 'thinking in activity' was coined by the American Pragmatist philosopher John Dewey to describe his experience of lessons in the technique of Frederick Matthias Alexander (cited by Alexander 2001, 42). In his writing such as *Human Nature and Conduct* (1922) and *Experience and Nature* (1929) his account of the momentary aliveness of process and the illusory nature of the dichotomy between perceived 'ends' and 'means' echo similar concerns in the continental phenomenological tradition of Husserl and Heidegger.