

# Mind, brain and person: reviewing psychiatry's constituency

**CW vanStaden**

Department of Psychiatry, University of Pretoria, Pretoria, South Africa

## Abstract

**Objective:** To clarify monist, dualist, and pluralist philosophy that could help psychiatrists to explain how mental and physical states relate in general. **Method:** Varieties of monism and dualism are summarised and the problems that they entail for psychiatry are briefly described. Pluralism in the mind-body debate is reviewed in relation to the concept of a person, and mathematical representations are formulated to capture the relation between mind, body and person. **Results:** Monism, dualism and a conjunctive approach to mind and body are rejected in favour of a non-conjunctive pluralism that locates logical primacy at a person. Accordingly, mind and brain are extricates among a plurality of extricates of a person. This conceptualisation accounts for both the intimacy between mental and physical states in some instances and the distance in others. **Conclusion:** The patient, rather than a mind or a body, has been logically and historically at the centre of psychiatric practice. This suggests psychiatry has its own epistemology that is logically primary in relation to its contributory subjects (biology, psychology, sociology, etc).

**Keywords:** Philosophy; Models/Theories of Psychiatry; dualism; monism; pluralism

**Received:** 26.05.05

**Accepted:** 05.08.05

## Introduction

Being crucially concerned with mind and brain, psychiatrists need to be acquainted with the philosophical options of monism, dualism and pluralism in explaining how mental states and physical states relate.<sup>1-6</sup> This paper aims to clarify these options and thereby provide the psychiatrist with the tools to explain the relationship between mind and brain in a sophisticated way that is well-matched with clinical evidence and practical experience in psychiatry.

Clinical evidence is pertinent in making a choice between a monist, dualist, or pluralist option. For example, dualism, which argues for two distinct entities (mind and brain), is challenged by the intimate presentation of some physical and mental states (eg spongiform brain tissue and cognitive deficits). Monism, which argues for one entity, is challenged by the vast distance between the presentation of some physical and mental states (eg the physical state of synaptic serotonin concentration and the mental state of projection).

After explicating the dualist and monist options and the problems they entail for psychiatry, this paper argues for a

particular kind of pluralism that begins at the practical starting point, namely the person (patient) rather than a mind or a brain.

## Dualism and monism

### *Varieties of dualism and monism - summarised*

The dualism of the mathematician and philosopher, Descartes, holds that the mind and body are both substances, but while the body is extended in space, and is thus a material substance, the mind is an unextended, or spiritual substance. Psychophysical dualism rejects the idea of two distinct substances, but adheres to a sharp distinction between physical and mental states. Interactionism, being a form of dualism, posits that the mind can act on the body and vice versa. Parallelism alleges that mind and body are incapable of acting upon one another. Epiphenomenalism teaches that the body is capable of acting on the mind, but the mind cannot act on the body.

Where dualism posits two entities, monism only posits one. Most monists adhere to a "nothing but" argument, where one entity is said to be nothing but another entity. This is commonly described as a reductionism.<sup>7</sup> Reduction in the mind-body debate implies a form of subsumption, that is the one entity is reduced to the other.<sup>8</sup> Either mental states are reduced to physical states (called materialism or physicalism) or physical states are reduced to mental states (called mentalism or idealism).

## Correspondence:

Professor C W van Staden, Department of Psychiatry,  
PO Box 667, Pretoria, 0001, South Africa  
e-mail: cwvanstaden@icon.co.za

Materialism and physicalism hold that fundamental laws of nature are exhausted by the laws of physics. The peripheral materialist view is that the mind is constituted by "nothing more than" overt behaviour, or being disposed to engage in such behaviour. Central materialism identifies mental processes (inclusive of the "inner" processes) with purely physical processes in the central nervous system.

Functionalism is another kind of materialism, which posits that mental states should be identified not with the brain's physical states but with its functional states. The latter can be specified in terms of the logical and computational processes involved and are neutral with respect to the way in which the processes are physically recognised.

A variety of physicalist monism, which is perhaps a covert kind of dualism, is a one-substance view with dualism of properties, that is, non-reductionist physicalism in which brain processes have physical and non-physical properties. Hence, in Davidson's terms, an anomalous monism.<sup>9</sup> Here, the dependence between the physical and non-physical properties is depicted by the concept "supervenience".<sup>8</sup> Supervenience means "there cannot be two events alike in all physical respects but differing in some mental respect, or that an object cannot alter in some mental respect without altering in some physical respect".<sup>9</sup>

Mentalism and idealism give precedence to the mind. Berkeley's mentalism conceives of the mind as a spiritual substance and reduces bodies to sensations of minds. William James's neutral monism posits that mind and matter are simply different ways of organising and marking off bundles of the same constituents.<sup>10</sup> ("Bundles", according to Hume, means bundles of perceptions, which are presumed as being non-physical). Spinoza's identity theory is also a monistic theory. It posits that there is just one thing, which may be viewed or described as a mind or a body. Physicalists who claim that mental states are just physical happenings in the brain, often identify with Spinoza's theory but are apparently oblivious to his reverse claim: that any physical occurrence may be fully explained in mental terms.<sup>6</sup>

### **Problems for psychiatry if either dualism or monism is adhered to**

The problems with dualism and monism in psychiatry are particularly evident on two fronts:

- i) Psychiatry as a subject in relation to psychology and neurology, or psychiatry when defined as psychological medicine as distinct from physical medicine.<sup>11</sup>
- ii) Within psychiatry, where distinctions are made between psychological and neurological (or bodily) aspects of psychiatric disorders, specifically between psychological (mental) and neurological (physical) causes, between psychological and neurological symptoms, between psychological and neurological nosological categories, and between psychological and biological (physical) treatments of psychiatric disorders. A cause would typically be seen as psychological or physical, a symptom as psychological or biological, a treatment would be a psychological therapy or a biological treatment, and a disorder classified in ICD-10 as either "organic" (that is "physically" caused) or "non-organic".<sup>12</sup> DSM-IV attempted to re-dress the latter distinction by expunging the term "organic" and calling physically caused psychiatric disorders "secondary".<sup>13</sup>

In reductionist monism, psychiatry as a subject (on the first front) could either be subsumed by psychology if the reduction is to a mentalism or idealism, or it could be subsumed by neurology if the reduction is to a physicalism.

The outcome of a reductionist monism within psychiatry (on the second front) is similar. Those psychiatric conditions considered to be brain disorders could relocate to neurology (ie physicalist reductionism) and those considered to be mental could end up at psychology (ie mentalist reductionism), especially if one believes like Szasz that "illness" is a concept only appropriate for physical disorders and not for mental disorders.<sup>14</sup> Then, psychiatry would be an interim subject, pending indications of where the conditions it deals with would fit in.

Unlike reductionism, dualism and non-reductionist monism require that psychiatry commit to a "bridge" between mental and physical states, or to a "supervenient" relationship between mental and physical states. Yet, clinical evidence of a "bridge" or "supervenience" has been either elusive or has indicated that a "bridge" is inappropriate to the intimate presentation of other physical and mental states (eg spongiform brain tissue and cognitive deficits).

### **What do a brain and a mind have to do with a person?**

What do a brain and a mind have to do with a person? Well, we speak of the mind of a person as well as a body of a person. Harré argued that human bodies are the bodies of persons.<sup>15</sup> Campbell makes the point that there is an implicit reference to a person as a coherence constraint for someone's bodily and mental ascriptions.<sup>16</sup> He says someone's ascriptions need to be relativised to the "same thing". This "same thing" is a person.

However, two ways of thinking about the relation between a person, a body and a mind leave psychiatry stuck with the above-mentioned problems. The one way is more or less to equate mind or body with a person. We can represent this mathematically as  $m = p$  or  $b = p$  where  $m =$  mind,  $b =$  body, and  $p =$  person. This approach is found among dualists, mentalists and non-reductive physicalists for whom  $m = p$ , and among reductive physicalists for whom  $b = p$ .<sup>17</sup>

The other unhelpful way is the conjunctive approach that claims a body plus a mind constitute a person. Represented mathematically, this is  $m + b = p$ . This conjunctive approach is suggested by the mathematical philosophy of Descartes.<sup>18</sup> Consider his proposition (vol. 1, p.142): "...the mind of man is really distinct from the body, and at the same time, [that] the two are so closely joined together that they form, so to speak, a single thing". This is to say  $m$  and  $b$  are in a close relation where  $m$  and  $b$  are "joined" in a "single thing". Say  $p$  is "single thing", then  $m$  and  $b$  "form"  $p$ . Moreover,  $m$  and  $b$  "form"  $p$  by being "joined". Therefore,  $m$  joined with  $b$  form  $p$ . Provided that no variables other than  $m$  and  $b$  are necessary to form  $p$ , and  $m$  and  $b$  are sufficient to form  $p$ , "form" can be taken as "equal". That is,  $m$  joined with  $b$  equals  $p$ . If "join" means addition, the equation is  $m + b = p$ . The conjunctive approach is also seen, for example, in the chapter on mind and body in Nagel's *"The view from nowhere"*.<sup>19</sup> He uses the concept addition in the following statements: "the main objection to dualism is that it postulates an additional, non physical substance"; "something else must be added, which may as well be the soul". Popper also uses "addition" in italics

a few times in his essay on the mind-body problem in an attempt to support interactionism.<sup>20</sup>

Both these unhelpful ways locate the logical primacy at mind or body. A physicalist reductionism puts the body first. The non-reductive strategies followed by some physicalists also support the primacy of the body. Conversely, mentalism proposes the primacy of the mind. In a dualism the location of primacy appears ambiguous or obscure, but if neither ambiguous nor obscure, then primacy swings either to the mind or the body with a property dualism of the secondary variables. For example, anomalous monism adheres to the primacy of the body where mental states are considered properties of the body.

In contrast, the more plausible approach for psychiatry is to take a person as logically primary to a mind and a body. So considered, mind and body are then extricates of a person. ("Extricates" is derived from the verb "to extricate"). Strawson argued for the logical primacy of the person, and stated that all ascriptions to a person are secondary because they are derived from the person, that is, mental and corporeal attributes are known by virtue of the person.<sup>21</sup> He identified the concept of a person as "the concept of a type of entity such that both predicates ascribing states of consciousness and predicates ascribing corporeal characteristics" are applicable.

Support for the primacy of a person is ironically also found in Descartes' argument. His dualism set out to show that 'mind' was distinct from 'body' as if it had not been apparent in the first instance. His dualism therefore seems to be examining 'person' in the first instance to demonstrate the distinctness of the extricates, mind and body. A property dualism as in dual aspect theory also suggests the logical primacy of 'person' because mind and body are considered as "aspects of" or "properties of" something, say 'person'. Thus, their being properties or aspects of 'person' is congruent with the properties or aspects being derivatives from 'person', and 'person' being logically primary.

### Pluralism

With logical primacy located at a person, we have to acknowledge that we ascribe all kinds of things to a person. Strawson pointed out that we ordinarily ascribe many kinds of things to ourselves, including actions and intentions (I am doing, did, shall do this); sensations; thoughts; feelings; perceptions and memories; location; attitudes; height; colouring; shape; etc.<sup>21</sup> There are also social ascriptions to a "person" which may be viewed as neither mental nor physical ascriptions. Eccles and Popper, for example, explain this by a trialist interactionism.<sup>23</sup> According to them, besides a world of physical objects and a world of mental states, there is a third world of "objective knowledge" including such entities as "cultural heritage coded on material substrates" and "theoretical systems".

Thus, there can be various numbers of sets or categories of ascriptions or extricates. Extricates can be categorised into any number of defined categories of extricates, for example mental and physical, cultural, spiritual, religious, or good and bad, or collective and unique, or beautiful and ugly, or predicatives and attributives, facts and values, et cetera. The number of categories of extricates would depend on the a priori commitment to monism (one category of extricates),

dualism (two categories), trialism (three categories), or pluralism (multiple categories).

However, it would be inadequate to account for the diversity of extricates and categories of extricates by explaining what a person is in mere constitutive terms of bodies and experiences causally dependent on them.<sup>16</sup> Cussins argues against the same inadequacy for a "conjunctive" conception of a person, where "the concept of a person is explanatorily derivative upon the separate concepts of mind and brain".<sup>24</sup> In other words, the conjunctive conception of a person fails to be adequate when primacy is given to mind or body rather than to the person. Thus, a plurality of extricates of a person is a preferable account of the variety of possible ascriptions to a person of which some fit into categories like "mental" and "physical" and some do not.

Pluralism, however, can be conjunctive too. Cussins, for example, describes a conjunctive pluralism as being limited to a coincidental coexistence of explanatory spaces, or levels of discourse, or conceptual schemes.<sup>24</sup> He portrayed this pluralism as lacking intellectual continuity, that is lacking explanatory relations between the levels of discourse. In contrast with a conjunctive pluralism, there is continuity in the plurality of extricates where the extricates are necessarily derivatives of a person. The extricates are not co-incidentally co-existing, but are integral to the person. I call this an extricative pluralism.

### Practical implications of an extricative pluralism for psychiatry

This review brings us to a conceptualisation by which mental and physical states are sets of extricates from a person among a plurality of personal extricates, and the person (or patient) logically comes first. This conceptualisation has significant parallels with the standard conceptual model used in psychiatric practice, namely the bio-psycho-social model.<sup>6</sup> The bio-psycho-social model, derived from general systems theory, organises biological, psychological and sociological epistemological approaches in psychiatry, which present in the categories of aetiology, nosology, treatment and even in, but less so, descriptive psychopathology. Further, where systems theory claims that the system constitutes more than the sum of the components of the system, the parallel claim for extricative pluralism is that the product of the variables constitutes a person. Another parallel is the central place of the "system" and the "person" by virtue of which the variables relate respectively.

In tandem with the logical primacy of the person, practice and history also put the person (patient) first. Practically, the patient comes first in the assessment, treatment and research practice of psychiatry, rather than the different epistemes (biological, psychological, or sociological bases of knowledge) that inform us about the patient. Psychiatry is thus practically directed at the assessment and treatment of the patient rather than the assessment and treatment of merely a brain, a body or a mind. Historical primacy of the patient can also be claimed because psychiatric patients of today suffer essentially from the same psychiatric disorders as patients did before the subject's biology, psychology and sociology originated.

Contrapuntal to the logical, practical and historical primacy of the patient is the epistemological relation between

psychiatry and its contributory subjects (eg biology, psychology, sociology). The question concerns the potential redundancy of psychiatry, namely whether neurology and/or psychology could cover the field of psychiatry. Surely, such redundancy would depend on many other factors, but what is relevant here is whether the field of psychiatry extends beyond its contributory epistemes. This review has suggested that the product of the variables, and thus the product of the contributory epistemes, entails more than simply the sum of the contributory epistemes. This is so by virtue of the person, and thus by virtue of an epistemology of psychiatry that is about more than the contributory epistemes. Therefore, psychiatry can preserve its logically primary place with an epistemology of its own that defies reductionist claims that psychiatry is "nothing but" the contributory epistemes put together. This logical primacy, however, does not disavow psychiatry's dependence on its contributory subjects.

Furthermore, the review illuminates the process in which knowledge is gained in clinical practice and research about the person and his/her extricates. When assessment, treatment or research is focused on one (or more) of the contributory epistemes, or in other words directed at knowing more about the body (or brain) or mind or social relationships then our knowledge of the patient increases owing to the directly proportional relation between the specific episteme and the patient. Moreover, an enquiry into a specific episteme selectively excludes other epistemic properties of the patient.

However, the most is known about, or done for (in the case of treatment) the person when all these variables (or factors) are brought into the equation. Moreover, the intimacy of these variables as reflected in their being derivative extricates is in harmony with the growing empirical evidence that led to the statement in the introduction to the DSM-IV (p. xxi), namely that "there is much 'physical' in 'mental' disorders and much 'mental' in 'physical' disorders".<sup>25</sup>

### Conclusion

In light of the problems that monism and dualism entail for psychiatry, this review has argued for an extricative pluralism that accounts for both the intimacy and the distance between mind and body where mental and bodily ascriptions are viewed as derivatives of the primary concept of a person. The review concurs with Strawson's primacy of the person and a plurality of extricates that are inclusive of (but not confined to) a mental and physical grouping of extricates.

The patient, rather than a mind or a body, has been logically and historically at the centre of psychiatric practice. This implies that psychiatry has its own epistemology, which is logically primary in relation to its contributory subjects (biology, psychology, sociology, etc).

### References

1. Kendler KS. *A psychiatric dialogue on the mind-body problem*. *Am J Psychiatry* 2001; 158:989-1000.
2. Waterman GS, Schwartz RJ. *The mind-body problem*. *Am J Psychiatry* 2002; 159:878-879.
3. Schimmel P. *Mind over matter? II: implications for psychiatry*. *Austr New Zealand J Psychiatry* 2001; 35:488-494.
4. Karlsson H, Kamppinen M. *Biological psychiatry and reductionism: empirical findings and philosophy*. *Br J Psychiatry* 1995; 167:434-438.
5. Goodman A. *Organic unity theory: the mind-body problem revisited*. *Am J Psychiatry* 1991; 148:553-563.
6. Wallace E. *Mind-body: monistic dual aspect interactionism*. *J Nerv Mental Dis* 1988; 176:4-21.
7. Searle JR. *The Rediscovery of the mind*. Cambridge: MIT Press, 1993.
8. Lennon K, Charles D. *Introduction*. In: Charles D, Lennon K, editors, *Reduction, explanation, and realism*. Oxford: Clarendon Press; 1992.
9. Davidson D. *Essays on actions and events*. Oxford: Clarendon Press; 1980: 214.
10. James W. *Essays in radical empiricism. A pluralistic universe*. Gloucester: Smith; 1967.
11. Kendell RE. *The distinction between mental and physical illness*. *Br J Psychiatry* 2001; 178:490-493.
12. World Health Organization. *The ICD-10 Classification of Mental And Behavioural Disorders*. Geneva: World Health Organization 1992: 60-69.
13. Spitzer RL, First MB, Williams JB, Kendler K, Pincus HA, Tucker G. *Now is the time to retire the term "organic mental disorders"*. *Am J Psychiatry* 1992; 149:240-244.
14. Szasz TS. *The myth of mental illness*. *Am Psychol* 1960; 15:113-118.
15. Harré R. *Physical being*. Oxford: Blackwell, 1991: 15.
16. Campbell J. *The reductionist view of the self*. In: Charles D, Lennon K, eds, *Reduction, explanation, and realism*. Oxford: Clarendon Press; 1992.
17. Churchland PS. *Neurophilosophy*. Cambridge: MIT Press; 1986.
18. Haldane ES, Ross GRT. *The philosophical works of Descartes*. Cambridge: Cambridge University Press; 1973.
19. Nagel T. *The view from nowhere*. Oxford: Oxford University Press; 1986.
20. Popper KR. *Conjectures and refutations*. London: Routledge & Kegan Paul; 1978.
21. Strawson PF. *Individuals: An essay in descriptive metaphysics*. London: Methuen; 1959: 89, 101-102.
22. Sykes JB, editor. *The Concise Oxford Dictionary*. Oxford: Clarendon Press; 1983: 272, 281, 645.
23. Popper KR, Eccles JC. *The self and its brain: An argument for interactionism*. New York: Springer; 1977.
24. Cussins A. *The limitations of pluralism*. In: Charles D, Lennon K, eds, *Reduction, explanation, and realism*. Oxford: Clarendon Press; 1992.
25. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4th edition. Washington DC: American Psychiatric Association; 1994.