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## Sāṃkhya-Yoga Philosophy and the Mind-Body Problem

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**Abstract:** The relationship between the physical body and the conscious human mind has been a deeply problematic topic for centuries. Physicalism is the 'orthodox' metaphysical stance in contemporary Western thought, according to which reality is exclusively physical/material in nature. However, in the West, theoretical dissatisfaction with this type of approach has historically led to Cartesian-style dualism, wherein mind and body are thought to belong to distinct metaphysical realms. In the current discussion I compare and contrast this standard Western approach with an alternative form of dualism developed in the Sāṃkhya-Yoga philosophical tradition, where matter and pure consciousness are held to belong to distinct and independent realms, but where the mind is placed on the *material* side of the ontological divide. I argue that this model possesses a number of theoretical advantages over Cartesian-style dualism, and constitutes a compelling theoretical framework for re-conceptualizing the mind-body problem.

### 1. The Mind-Body Problem

When Western scientific investigation began uncovering the physical mechanisms underlying conscious sensory experience, a deep conceptual problem immediately came to the fore. Experimental analysis revealed a systematic correlation between, for example, the frequency of sound waves propagated through the atmosphere and our perception of high versus low musical notes. And the different frequencies of visible light were systematically correlated with our perception of different colors. Furthermore, anatomical research revealed various physiological aspects of our sensory organs that encode these salient features of the environmental stimulus and transmit them through the central nervous system. There was clearly a fundamental association between the environmental stimulus and anatomy of our sensory mechanisms, on the one hand, and our subjective conscious experience, on the other. Yet it seemed entirely mysterious how the one could be equated with or even give rise to the other. How could the sentient, first person, qualitative realm of experience stem from or be identical to physiological activities occurring in the sense organs and brain? The basic nature and characteristics of the two types of phenomena appear to be totally disjoint when viewed in their own terms. This seemingly fundamental disparity remains one of the main challenges to a purely physicalist worldview.

Cartesian-style dualistic ontologies constitute a standard alternative model. According to the version put forth by Leibniz, the two realms are postulated to be separate and independent, but to progress through time in parallel according to a 'pre-established harmony'. This theoretical picture accommodates both the detected correlation between phenomenological

and physical events, as well as the basic intuition that the two realms are nonetheless distinct. Hence when I have the conscious desire to raise my right arm, this event in the mental realm is mirrored by a corresponding event in the physical world and my right arm goes up. So the correlation, although real, is purely contingent, and there is no direct causal link between the two types of substance. As another case in point, Locke (1668) held that the 'simple ideas' or conscious presentations that we experience in apparent response to impingements from the external world, bear no intelligible relation to the 'corpuscular processes' underlying such impingement and bodily response. Instead, the two phenomena are simply stuck together (by God) in a more or less arbitrary manner.

The human body, replete with sense organs, central nervous system and brain, is a normal subsystem of the physical universe, and as such should be fully explained and governed by the standard laws of nature. These laws only advert to what Locke called 'primary qualities', and in principle the time-evolution of the entire physical universe can be accounted for in terms of such qualities. Physical science in general, including molecular biology and neuro-anatomy in particular, does not invoke any 'secondary qualities', such as the delicate scent of a rose or the deep cobalt hue of a desert sky. Instead, all of the scientifically accessible and mechanistically sufficient properties of my brain consist of primary qualities, and in theory at least, one could obtain an exact physical duplicate of my brain if one were to exhaustively replicate its objective primary qualities. Hence it seems consistent with all the facts specifiable in terms of physics, molecular biology, etc., that my brain churns along according to normal electrochemical and anatomical processes and yet is utterly devoid of conscious presentation. Indeed, it doesn't appear to contradict any aspect of fundamental science to hold that only primary qualities exist, which indicates that at our present level of understanding, scientific theory alone cannot answer the question of why this is not a zombie universe, wholly lacking consciousness.

By the 19<sup>th</sup> century, with the work of Helmholtz and others, significant progress had been made investigating the physiological mechanisms involved in sensation. But the ultimate nature of the relation between these mechanisms and the associated conscious experience was still no clearer than in Descartes' day. As above, (non-interactive) dualism asserts that there is no causal connection between mental and physical events. On the generally granted assumption that the universe is a causally closed system, there is no theoretical need to invoke additional factors to predict and explain all properly physical phenomena, including human bodily movements and the underlying neurological activities that initiate and control them. As a proper subset of the physical universe, the upward motion of my right arm can be fully accounted for without appeal to subjective mental factors.

And as with the motions of my limbs, so too with verbal behavior, including reports on my own conscious experiences. Hence when I state that there is a sharp pain in my toe, this episode of verbal performance can in principle be fully accounted for through appeal to purely objective physical events in my toe and central nervous system, eventually leading to movements in my larynx, tongue and mouth resulting in the production of various sonic emissions. The subjective, qualitative feeling of the pain itself, the intense secondary quality with which I have direct first person acquaintance, would seem to have no causal role to play. The sufficiency of objective, third person factors led to Huxley's view that conscious experience must be a mere 'epiphenomenon'. Epiphenomenalism acknowledges the seemingly superfluous causal status of conscious experience in the objective, third person scientific account of brain mechanics and physical behaviour. This theme will be briefly revisited in the final section of the paper.

Huxley eloquently depicts the conceptual problem as to the nature of the relation between conscious experience and physical mechanisms in the passage: "How it is that anything so remarkable as a state of consciousness comes about as a result of irritating nervous tissue, is just as unaccountable as the appearance of the Djinn when Aladdin rubbed his lamp" (Huxley, 1886 p. 170). Following terminology later introduced by Chalmers (1996), the seemingly brute unaccountability that Huxley portrays is now widely known as the 'Hard Problem' of consciousness. As above, the nature of the relation between mind and body induces an entire family of related issues, including the status of mental causation and the place of consciousness in the natural world.

## 2. Cartesian *versus* Sāṃkhya-Yoga Dualism

Cartesian mind-body dualism arose within the foregoing context of scientific advancement and discovery, combined with the older Western philosophical and cultural heritage stemming from Judeo-Christian and Hellenistic sources. Notwithstanding the abundant criticism the text has received over the centuries, Descartes' *Meditations*, in some sense still provides the most definitive, influential and well articulated expression of the presuppositions underlying the modern Western conception of mind. Descartes unhesitatingly identifies the referent of the indexical expression 'I' with *res cogitans*, the thinking substance, and thereby conceives the mind and self as one. For Descartes, thinking substance is of course metaphysically independent of extended substance, which engenders his familiar dualism between mind and matter. Also without hesitation, Descartes takes conscious thought and subjective experience to be unqualified constituents of mental substance, and this particular mode of classification has become so much a part of Western conceptual heritage that the dividing line he draws seems almost self-evident. Surely, if a dualism with matter is to be entertained, then thoughts and subjective presentations belong on the nonmaterial side of the divide?

In contrast to this fairly ubiquitous Cartesian view, the paper will now explore an alternative version of substance dualism advanced by two allied schools of orthodox Hindu philosophy, namely the Sāṃkhya school, and classical Yoga as expounded by Patañjali. These schools draw a metaphysical dividing line not between mind and matter, but rather between matter and pure consciousness, wherein the mind is detached from consciousness and placed on the *material* side of the ontological divide. I think that this alternative metaphysical division constitutes a fascinating and valuable intellectual perspective for contemporary Western thought, and can cast a new light on current discussion concerning the relationship between consciousness, mind and body. Indeed, this Indian metaphysical framework provides a perspective from which to fundamentally re-conceptualize the mind-body problem.

### 2.1. The Sāṃkhya-Yoga View

The Sāṃkhya school is one of the oldest philosophical traditions of India, and many of its ideas are traceable to the Ṛgveda and the early Upaniṣads. Sāṃkhya has a great many theoretical points in common with the later Yoga *darśana* as expounded in Patañjali's *Yogasūtra*, and the metaphysical position discussed in the present paper is part of their shared philosophical framework. Thus the basic dualism between consciousness and matter, as well as more specific allied points, will henceforth be referred to, somewhat generically, as the 'Sāṃkhya-Yoga view.'<sup>1</sup>

According to the Sāṃkhya-Yoga view, the ultimate principle underlying matter is *prakṛti*, the metaphysical substrate supporting all material phenomena.<sup>2</sup> The mind is deemed to be part of

the material world, and hence to be metaphysically grounded in *prakṛti*. The body is also part of the realm of *prakṛti*, and thus mind and body are held to be of the same metaphysical substance. In its most general connotation, the term 'mind' in western philosophy corresponds to the combination or complex of three faculties recognized in the Sāṃkhya taxonomy, namely *manas*, *buddhi*, and *ahamkāra*, whose respective significance will be briefly outlined below.

*Manas* (which is often translated directly as 'mind', though it is only a single facet of the 'mental triplex') is viewed essentially as an organ, the special organ of cognition, just as the eyes are the special organs of sight. Indeed, *manas* is held to be intimately connected with perception, since the raw data supplied by the senses must be ordered and categorized with respect to a conceptual scheme before various objects can be perceived as members of their respective categories, and as inhabiting a world characterized by the systematic and distinguishable attributes normally perceived. This imposition of conceptual structure on the chaotic field of raw sensation is one of the basal activities of *manas*, and forms the distinction between brute sensation (*nirvikalpaka*) as opposed to differentiated perception (*savikalpaka*). Hence ordinary perceptual experience is already heavily conditioned by the activities of *manas*, and *manas* is thus sometimes referred to as the sixth organ of sensation.

In addition to its perceptual activities, *manas* is held to be responsible for the cognitive functions of analysis, deliberation and decision. It is closely allied to *buddhi*, which is somewhat roughly translated as the faculty of 'intellect' or 'reason.' *Buddhi* is a subtler and more powerful faculty than *manas*, and is responsible for the higher level intellectual functions, which require intuition, insight and reflection. The Indian *buddhi* is in some ways comparable to the Greek *noûs*, while *manas* is responsible for lower level discursive thought and analysis. But *buddhi* is still regarded as a manifestation of *prakṛti*, albeit the most subtle and refined form which material substance can assume. The combination of *manas* and *buddhi* roughly correspond to what is meant by the objective or 'impersonal' mental faculties in western philosophical discourse. In addition, Sāṃkhya-Yoga recognizes a third component of mind, *ahamkāra*, which is the ego or phenomenal self. *Ahamkāra* appropriates all mental experiences to itself, and thus 'personalizes' the objective activities of *manas* and *buddhi* by assuming possession of them. The combination of these three faculties is referred to as *antahkarāṇa*, the 'inner instrument,' which approximately comprises the individual mind-self of the western philosophical tradition.

But on the Sāṃkhya-Yoga account, the realm of *prakṛti* or matter is held to be inherently unconscious, and is thereby incapable of producing consciousness as an effect. The manifestations of *prakṛti* are always objects, and it is argued that objects can never transform themselves into subjects. Thus at the heart of this dualistic position is the notion that mind-material is not capable of generating consciousness out of unconscious ingredients. Subjective awareness is seen as a distinct ontological category, and in principle it cannot be derived from the stuff of which objects are made. So, in sharp contrast to the current orthodox western view, Sāṃkhya-Yoga philosophy holds that the Hard Problem of consciousness cannot, in principle, be solved within a physicalist framework. And in sharp contrast with Cartesian dualism, the mind and the cognitive activities it sustains are held to be intrinsically unconscious, since *manas*, *buddhi* and *ahamkāra* are all manifestations of *prakṛti*.

According to the Sāṃkhya-Yoga view, the dynamics of *prakṛti* are governed by the interactions of the three *guṇas*, which are the three basic types of constituent of physical substance. The three *guṇas* are *sattva*, *rajas* and *tamas*, which correspond roughly with

'transparency and buoyancy,' 'energy and activity,' and 'inertia and obstruction.' All physical phenomena are believed to consist of unstable mixtures of these three types of constituent, and the instability of these mixtures is responsible for the evolution and transformations of the material world. Thus the conceptual processes sustained by the mind are governed by the mechanical and unconscious interplay of the *gunas*, and to this extent, mental phenomena are viewed in purely 'physicalistic' or mechanical terms. The unfolding of thought-forms is an integral part of the evolution of *prakṛti*, and mental processes are simply the result of appropriate transformations of unconscious material substance.

Consciousness, on the other hand, is held to belong to a different ontological category altogether. Consciousness is placed in the realm of *puruṣa*, the absolute, unconditioned self, which in some respects is comparable to Kant's noumenal self. *Puruṣa* is described as pure and undifferentiated awareness, and it is held to be immutable and inactive, to be formless and without parts or limiting characteristics. *Puruṣa* is the metaphysical principle underlying the individual person, and closely corresponds to the *atman* of the Vedānta school.<sup>3</sup> *Puruṣa* is held to exist in complete independence of the material realm, and so the basic dualism in the Sāṃkhya-Yoga metaphysics is between *puruṣa* and *prakṛti*, between consciousness and matter. On this account, mind belongs to the world of matter, while the self belongs to the realm of pure awareness, and thus the mind and the self are ontologically distinct. Movement and form are characteristics of matter, and they are also characteristics of thought, which is a manifestation of matter, while consciousness is held to be intrinsically formless and unchanging.

What then is the relationship between consciousness and matter, and how are conscious mental events possible? According to the Sāṃkhya-Yoga model, thought processes and mental events are conscious only to the extent that they receive external 'illumination' from *puruṣa*. Consciousness is standardly compared to a light, which illuminates the specific material configurations or 'shapes' assumed by the mind. It is the subtle 'thought-material' of the *buddhi* which allows mental events to appear conscious, because the refined *buddhi* substance is transparent to the light of consciousness. Thus conscious thoughts and perceptual experiences take place when *buddhi* receives representational forms, both perceptual and conceptual, from *manas*, the organ of cognition. *Buddhi* is held to consist of a preponderance of the 'transparent' *sattva guna*, and thus the representational forms it receives from *manas* are capable of becoming translucent with the light of consciousness. So *buddhi* receives cognitive structures from *manas*, and conscious 'light' from *puruṣa*, and in this manner, specific mental structures are capable of being illuminated by an external source, and thereby these structures are able to appear conscious. But consciousness itself is entirely independent of the particular thought structures it happens to illuminate.

Consciousness as such is not directed towards these objects, it has no intention to illuminate the limited material structures in question, and it is completely independent of the mental phenomena upon which its light happens to fall. As such, *puruṣa* shares some key properties in common with the pure consciousness or *cit* of Vedāntic thought, and in this regard Karl Potter's exposition of the latter is relevant:

... whereas ordinary awareness not only has an object but also requires it as the occasion for that specific piece of awareness or judgment, pure consciousness has no more relation to its objects than does the sun that shines on everything without being in the least affected by or dependent on things. (1981, p. 93).

The translucent quality of *buddhi* distinguishes thought-stuff from the gross material objects of thought and perception, which ordinarily contain a preponderance of the 'dark' or opaque *tamas guna*. Thus only the thought material of *buddhi* is capable of conscious illumination, rather than the entire material realm, since a preponderance of the *tamas guna* renders the external objects of the material realm opaque to the light of consciousness. Hence representational structures, rather than the objects represented, are capable of conscious illumination, which is why minds appear sentient while stones and tables do not. Only the subtle stuff of the mind is a suitable medium for receiving conscious illumination, and thus it is minds which are the loci of awareness in the natural world. But there simply is no *res cogitans*, no conscious thinking substance in Descartes' sense. It is material substance which thinks, and it is the self which makes these thoughts conscious.

### 3. Some Advantages of the Sāṃkhya-Yoga View

The first point to note in this regard is that the Sāṃkhya-Yoga view immediately avoids one of the most serious pitfalls of Cartesian dualism, since on the Indian account, mental causation does not violate physical conservation laws. By including the mind in the realm of matter, mental events are granted causal efficacy, and are therefore able to directly initiate bodily motions, including verbal behavior. And, conversely, material structures and forces are able to have genuine *mental* effects, as required by normal accounts of, say, the flow of information involved in perceptual awareness of the environment. The representational content of sensory experiences can now be treated as straightforward consequences of the physical environment's causal impingements upon the sense organs and brain. This is because, in contrast to standard Western dualism, there is no longer a causal/ontological gulf separating mind from matter. Hence two glaring aspects of the mind-body problem which plague Descartes' model are thereby elegantly resolved.

Some further elaboration of the foregoing issue is perhaps in order. On the Cartesian view, subjective presentations or 'ideas', as structured objects, are held to belong to the non-material realm. But, at the same time, they are held to represent external material objects and states of affairs. This leads to an immediate and very serious difficulty, since if the two spheres are metaphysically independent, then it is highly unclear how events in the mental realm could be related to or systematically represent objects in the material realm. Thought becomes separated, by an ontological chasm, from the external objects of thought, and the inner world of subjective experience threatens to become a solipsistic bubble. Hence one of the most serious defects of the Cartesian framework, the reverse aspect of the problem of mental causation, resides in the fact that outside inputs from the environment, such as sound waves and electromagnetic radiation, can have no real affect on *res cogitans*, and the ideas entertained by thinking substance are hence ontologically and causally detached from their corresponding objects in *res extensa*.

On the Sāṃkhya-Yoga view, the mind is impacted by various forms of external stimuli, which give rise to internal structures that mirror various key aspects of the external world. These internal structures are instantiated as modifications of the material *manas*, which in turn represent salient aspects of the environment. This picture possess a significant advantage over Cartesian dualism, because, since the mind is *material* it can receive physical stimuli from the outside world, and undergo appropriate internal modifications, without invoking troublesome interactions between disparate substances. So, on this model, the representational content of thought is carried in the unconscious physical configurations of the mind, and certain of these patterns or configurations become illuminated by an external

and undifferentiated awareness, resulting in the phenomenon of particular conscious thoughts and subjective experiences.

Thus, in contrast to Cartesianism, the Sāṃkhya-Yoga framework isolates the problem of consciousness at a more exact and focussed level. It is the conscious, subjective aspect of visual perception which underlies the Hard Problem and serves to motivate the introduction of a distinct metaphysical category, not the causally induced representational structure of perception, since it is theoretically feasible that the latter can be explained in terms of unconscious mechanisms, of generally the same sort that would be applied in the case of robotic 'vision' or even CCTV cameras. The deep philosophical problem in the case of human perception lies not in the explication of representational content or structure, but rather in the fact that this bio-mechanically induced structure is imbued with conscious awareness. Thus Descartes' dualism of mind and matter, wherein conscious presentations *qua* structured objects are placed in the purely non-material realm, embodies an unhappy conflation of theoretically distinct features, and it thereby creates a causal abyss which insulates perceptual experience from the material objects which are perceived. It is consciousness, rather than content, which provides the most compelling impetus for dualism.

Thus the Sāṃkhya-Yoga division is based on a more perspicuous distillation of the salient components of subjective experience, where the world of qualia, the 'Cartesian theatre' of conscious presentation, is analysed as a mixture rather than as a realm of pure substance. The representational content of qualia is due to the respective material structures or patterns which comprise them, while conscious illumination is external, and ontologically independent of structure. Conscious illumination of structure is made possible by the particular composition of the pattern, wherein the transparent material of thought-stuff enables the light of *puruṣa* to enter. Thus representational content is comparable to the geometrical patterns of a stained glass window, which exist independently of their illumination by the sun. The illuminated patterns are a composite, consisting both of structured glass, which is analogous to the thought-shapes assumed by *sattvic buddhi*, and of luminescence, which is the consciousness of *puruṣa*. In this manner, qualia are seen as composite phenomena, and, in the case of perceptual experience, there is no ontological gap separating representational objects from the objects represented. Instead, it is the underlying conscious illumination, common to all experience, which defines the metaphysical boundary line between subject and object.

As a closing point in this section it should be observed that the Sāṃkhya-Yoga approach yields a much more streamlined metaphysical picture than the Cartesian model. Western non-interactive dualism requires a systematic *correlation* between the physical and mental realms. For example, a particular causally efficacious brain state corresponding to, say, my desire to raise my right arm, must exist independently in *res extensa*, and this state is then paralleled in *res cogitans* by the subjective conscious thought that I want to raise my right arm. However, the Sāṃkhya-Yoga view induces no such metaphysical duplication. There is the causally efficacious material-mind state of wanting to raise my right arm, which is illuminated by the undifferentiated light of pure consciousness. Parallel and redundant *immaterial* mental states, mirroring their physical correlates, are no longer needed.

So, in a variety of respects, the ancient Sāṃkhya-Yoga version of substance dualism provides a more felicitous dividing line between substances than does the Cartesian parsing of mind and matter. Descartes' picture of consciousness and the mind has had a tremendous influence

on the development of Western thought; to a large extent it still defines the terms in which the mind-body problem is conceived, and it colors many contemporary notions of mental content, representation and causation. Thus the alternative Sāṃkhya-Yoga view is worthy of serious philosophical attention. A far wider range of cognitive phenomena are made available to naturalistic explanation, simply because the mind is included in the physical world. But, at the same time, the unique and autonomous status of conscious subjectivity is preserved. By conceiving the problem along subtly different lines, the Sāṃkhya-Yoga view already solves some of the critical difficulties which would haunt a naturalized version of Descartes' model.

#### **4. The Hard Problem of Consciousness**

In opposition to dualism, physicalism maintains that all mental phenomena, including propositional attitudes such as beliefs and desires, as well as episodes of conscious experience, are ultimately physical in nature. Thus all mental phenomena are held to be either literally identical to physical processes such as brain states, or else directly 'supervene upon' or are 'emergent from' such states. But the Hard Problem of consciousness puts very serious pressure on such a view. As discussed at the outset of the paper, physics accounts for the universe strictly in terms of objective primary qualities, and hence has no need of (and seemingly no theoretical space for) subjective first-person experience. Electro-chemical processes in the cerebral cortex, on the one hand, and the qualitative experience of the blueness of the sky, on the other, seem utterly distinct.

This has led some 20<sup>th</sup> century philosophers, such as Kripke (1973), to argue that physicalism is false, and that conscious phenomena belong to a separate metaphysical category.

According to Kripke's paraphrase, Descartes argued that the mind is distinct from the body, since the mind could in principle continue existing without the body. But Kripke quite rightly observes that the argument could go in the other direction just as well: mind and body are distinct because the body could have existed without the (conscious) mind. Thus he considers the possibility of a 'zombie' universe, one that is *physically* identical to ours, replete with materially indistinguishable human bodies and brains, but where there is no conscious experience. As mentioned previously, this possibility is consistent with scientific theory and all available empirical evidence. So, *via* a sophisticated modal argument based on the principle of necessary identity, Kripke concludes that mind and brain cannot be identical. Instead, *a la* Locke and Leibniz, a merely contingent correlation happens to obtain in the actual world.

Other philosophers, such as Nagel (1973) and Levine (1983), hold that, although the Hard Problem does not directly entail that physicalism is false, it does show that we do not currently have the theoretical resources to understand or explain *how* it could be true – a major advance in our conceptual framework would be required to fully explicate how conscious experience can be subsumed by physical theory. Hence Nagel argues that asserting that 'mind = brain' at the current time is like saying 'mass = energy' to someone in ancient Greece. The ancient Greek wouldn't have the beginning of a clue as to *how* the statement might be true, because the ancient Greek would lack the theoretical and mathematical resources required to formally interconvert the two. So, although true, 'mass = energy' would be just a brute stipulation. And according to Nagel, we're in the same position right now with respect to physicalism.

But is the situation not *worse* than Nagel's analogy suggests? 'Mass = energy' is still a normal case of scientific explanation: the terms on either side of the equation both refer to objective physical phenomena, to primary qualities. And as Nagel himself claims at the start of his paper, such standard cases of scientific understanding and successful reduction seem to shed no light on the relation between mind and brain. Here we are trying to equate something objective, quantitative and scientifically normal on the one side (brains), with something subjective, qualitative, and empirically quite *abnormal* on the other (first person conscious experience). In this respect, the Hard Problem of consciousness seems historically unparalleled.

Jackson (1982) is another philosopher who, like Kripke, utilizes the Hard Problem to argue that physicalism is not just theoretically intractable, but literally false. According to his celebrated Knowledge Argument, there's more to reality than mere physical information can convey. Accordingly, he contends that physicalism is false because it is incomplete – in principle it cannot explain or account for qualia. Instead, Jackson advocates a version of Huxley's epiphenomenalism – he argues that qualia are metaphysically real, but *causally impotent* with respect to the physical world. He holds that qualia are a non-physical effect of a physical cause, *viz.* certain brain processes. The brain processes themselves are causally efficacious in the physical realm and are highly conducive to our survival, but qualia are a causally impotent, non-physical side effect. Qualitative states may seem to cause physical events such as bodily movements, but only because *both* the bodily motion and the conscious experience have a common physical cause; namely an underlying brain process. Thus the experienced sequence of events unfolds *as if* conscious thoughts and desires were playing a role, but this perceived unity between conscious mind and physical body is due, not to a divine harmony between distinct metaphysical realms, but rather to a shared underlying cause.

It is salient to note that, in common with Jackson's dualism, the purely conscious aspect of human experience is also rendered epiphenomenal on the Sāṃkhya-Yoga account. The representational content of thought is carried in the unconscious physical configurations of the mind, and certain of these patterns or configurations become illuminated by the external and undifferentiated awareness of *puruṣa*, resulting in particular conscious thoughts and subjective experiences. But consciousness and the illuminated mental processes are entirely independent. Formless and immutable consciousness plays no causal role in the transformation of mental structures, but rather is a passive 'witness' to some small portion of these transformations. The representations and structural transformations that characterize mental contents and processes are part of the normal time-evolution of the physical universe. Some of these happen to be illuminated by an outside, non-physical source of consciousness, which itself does no work and does not alter the physical realm in any way.

In this regard, the Sāṃkhya-Yoga view can accommodate many of the claims of physicalism with respect to key aspects of the mind-body problem, such as mental causation and mental representation, and it eliminates the unappealing metaphysical redundancy required by both Cartesian dualism and Jackson's 'floating world' of immaterial qualia. But in response to the

Hard Problem, the Sāṃkhya-Yoga view adheres to the basic tenet that subjectivity and consciousness cannot arise from unconscious ingredients, and hence physicalism is intrinsically incapable of solving the problem. Instead, the issue is addressed by postulating pure consciousness as a distinct and autonomous substance.

Of course, dualism of any sort is seen by many as an unsatisfactory final solution. In general, monism is a more elegant philosophical stance, which is no doubt one of the intellectual attractions of physicalism. The main rival to physicalism in this respect is some form of monistic idealism, where consciousness rather than matter is taken as the fundamental reality. And whereas the Hard Problem constitutes a perhaps fatal impediment for physicalism, there is no analogous reciprocal difficulty for idealism. It is deeply mysterious how conscious experience could possibly arise from objective and unconscious physical components, but it seems relatively unproblematic that the *appearance* of material reality might stem from consciousness itself. If consciousness is taken as the primary substance, then there isn't a parallel obstacle in explaining the empirical evidence upon which the scientific hypotheses concerning the physical universe are founded. Hence some version of consciousness-based monism, such as that advocated by Advaita Vedānta philosophy, may ultimately provide a more compelling resolution to the mind-body problem than either physicalism or substance dualism.

Notes:

1. By using the label 'Sāṃkhya-Yoga' philosophy, I do not mean to endorse the view that the two schools are essentially the same, nor that Yoga is simply an applied or practical component grafted onto Sāṃkhya theory (see, e.g. 'Yoga and Sāṃkhya: The Important Differences', Larson, 2008). Instead, I merely wish to discuss some theoretical points which the two schools have in common, though I have tended to use predominantly Sāṃkhya terminology.

2. In the ensuing discussion, the terms '*prakṛti*' and 'matter' will be used roughly as synonyms, even though this is not strictly correct, if matter is construed in terms of the 'particles' which make up physical objects. *Prakṛti* is the metaphysical principle which underlies physical manifestations, although for expository convenience I will often equate the physical world with *prakṛti*.

3. It should be noted, however, that Sāṃkhya-Yoga recognizes a multiplicity of distinct *puruṣas*, i.e. one for each self, while Vedāntic thought tends to view the atman as ultimately singular. Hence on the former account, there is a numerically distinct *puruṣa* associated with each material mind-complex.

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