

Thereby hangs a Quale<sup>1</sup>*"Everything we call real is made of things we cannot call real"<sup>2</sup>*Prologue

How is it possible that the material world behaves in the way that it does? For that matter, how and why is it the case that there is a world at all? The difference between us humans and other forms of life is that we speculate on such questions and, as far as we can tell, they don't – plants seem to be nothing more than chemical reaction, and animals appear to focus on simple survival. It seems that we alone seek answers to purely intellectual and abstract matters.

But whereas asking a question is easy, answering it is not. Faced with "don't know" we are tempted to make something up. And if you cannot see how something works, a convenient stock answer is to invoke the supernatural. The rest, as they say, is history, which is full of gods, magic, myth, religion and other fairy tale - and this is unfortunate, because such explanations are very difficult to dislodge. Paradoxically, the great weakness of supernatural systems, their reliance on credulous belief, is turned by acolytes into impregnable defence – the more faith required, the more worthy the believer, the more "true" the assertion.

The difference between science and other forms of speculation is that science does not apotheose just any idea into fact by simple dictat. Science has a method. The essence of that method is this: for something to be shown to be the case it must be capable of being tested, and the results need to be consistent with the results of other observations. Knowledge emerges from this empirical process. And scientific knowledge is always, at least in principle, tentative – theory has to fit with observation, not the other way round. Science is dynamic, not static.

By an important corollary, if an assertion cannot be tested, or even conceived of how it could be tested, then nothing can be claimed concerning it. To cite a supernatural explanation is to make an empty claim.

The Greek philosopher Thales rejected supernatural, religious or mythological explanations of natural phenomena; and Aristotle rejected Platonic ideas, arguing that universal truths can be reached by inductive logic. Science is more inclined to follow Aristotle than Plato, but what of those questions that cannot be probed by scientific method, what can we do about them? Surely rational thought can be brought to bear and progress made. If we can tease out the relations of mathematics and geometry by deductive reasoning independently of empirical observation and induction, surely we can employ the same process to good effect elsewhere.

The French philosopher René Descartes had a method. Like Thales, he rejected explanation based on simple authority. The religious authority of his day claimed knowledge by revelation and biblical exegesis; the secular authority, the medieval Schoolmen, themselves ecclesiastically trained, made claims based on similar exegesis of Aristotelian texts. For Descartes this approach was inadequate. He wanted philosophical knowledge to have more solid foundation, the level of certainty to be found in mathematics. But how to achieve that?

Ingeniously, he turned to Scepticism. At its heart, Scepticism refuses knowledge on the basis that all propositions rely on other propositions such that the logic is essentially circular. Truth becomes an unobtainable ideal. In this sense Scepticism is closer to the world of Platonic ideas in which the forms of perfect universals subsist in an alternate reality of which this world is an imperfect shadow. Descartes turned Scepticism into his scalpel and used it to cut away everything which was not certain. The senses can deceive, therefore they must be doubted. We cannot distinguish between our dreaming and waking lives, therefore we cannot conclude that the world exists. An evil demon may have arranged for all our beliefs and even our cognitive faculties to be false. Nothing can be relied upon which cannot be otherwise than true. This is not simple doubt, it is universal doubt – a system of "hyperbolic doubt". What could possibly remain untouched after such bombardment?

The first chink of light is the famous "cogito, ergo sum". I think, therefore I am. Even if I doubt that I exist, I must exist in order to doubt. Even if I am dreaming that I doubt, I must exist in order to dream that I doubt. Even if an evil demon has arranged for my mental derangement. It is impossible to doubt that I exist. Therefore it is certain that I exist.

But, what is doing the thinking? Clearly, not the body, for the body is among the things in the world which it is necessary to doubt. It belongs to the world of sense, and the senses can be deceived. Therefore it is an immaterial substance, occupying no space, that is doing the thinking. So the world consists of two kinds of substances, material and immaterial, physical and mental, body and mind – *extended substance* and *thinking substance*. The Cartesian divide is born. But there is a problem. How can the two substances communicate, and in particular what is the mechanism by which the immaterial mind controls the material body?

## Dualism

Nowadays the substance dualism of Descartes is not generally accepted, although the idea of an immaterial thinking substance is not far removed from the religious concept of an immaterial and possibly immortal soul that many continue to believe in the (mysterious) existence of. The workings of any such entity are of course ineffable and, strange to say, that quality of ineffability is a critical feature offered up by advocates as evidence for their existence. Such proofs, however, are circular and in the absence of falsifiability<sup>3</sup> entirely devoid of merit.

Well, unfounded superstitious belief is one thing, and Descartes may have taken a wrong turn in ending up with substance dualism, but there are those who say that there remains a problem to be explained. What is there in the physical to explain the mental? Thinking may not be the activity of a special substance, but in what way can it be accounted for by material substance? How is it that my physical body gives rise to a conscious self, a self of inalienable personal experience which cannot be accounted for by the material world? My point of view, being entirely subjective, cannot, by definition, be explained by the objective. Personal experience is ineffable and so impervious to scientific enquiry. Substance dualism may be dead, but property dualism is very much alive.

## Qualia & mind Vs brain – a new Cartesian divide

Qualia is a posh word used to denote instances of subjective experience, the way something is for us. Plural of the singular quale. What bananas taste like to me, my experience of toothache, my response to Beethoven, what I see when I look at the colour we both call “green” – these are all instances of qualia, my qualia. You have your own qualia, even when you call them the same as my qualia. And I can never know the nature of your qualia, although you by contrast can never mistake them.

The brain is physical. Its existence is not in doubt. Neither is it doubted that the brain is responsible for managing and controlling the resources and responses of our physical bodies and their working parts and functions. However, mind is not brain – rather it is a word which alludes to the functions of the brain, particularly those of analysing and interpreting data made available by the senses and memory. Those of a materialist persuasion do not deny the existence of mind but account for it as an emergent property of brain. Others, especially those of a spiritual persuasion, consider that mind is not accounted for by physical explanation, presumably the main objection being that mind is not a physical thing. In recent times non-materialists have turned to the concept of qualia as a primary plank in their argument. Even if in the future, they assert, every conceivable mind state were to be mapped with a corresponding brain state and a causal relation established, there still remains something left out: namely, the way that brain/mind state feels to us. Furthermore, that quintessentially personal experience, being fully subjective, is not capable of being objectively examined. It is unique, private, non-communicable, exotic and ultimately ineffable. As subjects, we are constantly aware of our own state of mind, inner thoughts, feelings, motives and experiences, which we cannot ever be mistaken about. We unerringly know that we have experiences, what they are and what they feel like to us. No-one can doubt, or explain, our qualia. They are the card that trumps every argument the materialist may care to bring to bear.

Some have responded to this challenge by arguing that qualia do not exist<sup>4</sup>, seeking thereby to pull the rug from under it. However, this does not seem to me to be very productive. Obviously, unless we are all uniformly deluded, we do have personal experience and there are ways that things seem to us. There is nothing wrong with the concept of qualia. The fault lies in the conclusions drawn from their existence. It is the logic which is incorrect – there is no need to deny qualia to deny the argument.

If a question has no answer, it may be the question which is at fault. The question “how does the physical give rise to the mental” appears to be just such a riddle, but what does it actually mean? It implies that the mental is another thing of the same type as the physical. But if you were to ask “how does the orchestra give rise to the music” you would be unlikely to be taken to be referring to some insoluble or inexplicable phenomenon. Music isn’t some ethereal thing somehow linked to, but independent of, the orchestra, it is the word for what sound is produced by the orchestra when it performs in a certain way. A comprehensive account of precisely how the music arises from the workings of the orchestra would be difficult and lengthy, but this does not imply that the music is therefore an ineffable immaterial something superadded to the physical nature of the orchestra.

Water doesn’t know to come out of the tap when you turn it on, it comes out as a consequence of you turning it on. The first description is mysterious because the language is inappropriate and the wrong conclusion drawn from the facts. The second description is the right one. The mind/body problem, or mind/brain problem, is illusory as a result of inadequate description and faulty inference. I will try to elucidate some of the ways in which I think the rationale of property dualism has been faulty in its attempts to deny materialism. But overarchingly it is for those of a supernatural persuasion to show how, if anything should be taken as not explicable by materialism, such a scheme actually works and what is the positive evidence for asserting it.

### It's all in the mind

Firstly, let us consider the claim that we are omniscient concerning our qualia and state of mind. This seems at first sight to be axiomatic, but a moment's reflection will show that it simply isn't true. For a start, there would be no need of psychologists if we were all constantly omniscient concerning our own minds. Then, we all know people who are the last to think their character and behaviour to be a certain way – the conceited person does not think himself conceited; the angry person does not think he needs therapy; the insecure person never thinks they are any good at anything. In fact, we know better than they do.

Then again, you may consider toothache to be felt in the tooth, but you would be wrong. It may be that the offending lesion is in the tooth in question, but the pain is not. There may be a causal link between the lesion and the experience of pain, but they are separate from each other– in fact the experience we call pain is a construct of the mind. This assertion is lent weight by the fact that it is not uncommon for the pain to be felt to be in the wrong tooth, and the phenomenon of referred pain is well documented. And what of the phantom pain felt to be located in amputated limbs?

The personal nature of our experiences does not grant either omniscience or immunity from error concerning them.

### Privacy

Defenders of qualia make much of their private nature. It is contended that our unique point of view is not only an essential feature of their definition but also a critical factor in the argument that qualia show materialist explanations of consciousness to be incomplete.

It is admitted that nobody but the subject can have the actual experience in question. However, many of these are not in any way secret. It is not difficult to deduce the nature of somebody else's experience from their behaviour. True, these deductions can be wrong or inaccurate in degree – I may be able to tell that you have toothache from your behaviour, but not precisely how much it hurts or what it feels like to you.

However, the secrecy, or privacy, of qualia does not imply that they cannot be fully elucidated by materialist explanation. If I were to write a memorandum in secret and place it in a secure vault impervious to any and all scientific or other enquiry, it would not thereby become ineffable, merely inaccessible.

The way that I know my own state of mind and experiences is the same as the way that you know them: by empirical observation and analysis. The only difference is that I have more data than you do.

### Ineffable or intangible?

In drawing up the balance sheet of my business I would need to schedule its assets and its liabilities. They would of course match, but that does not concern us. Consider the assets. What might they consist of? Well, I'm likely to employ a number of tangible things, perhaps premises that I trade from, machinery, office equipment and furniture and so on. I'm likely to employ some money – if I have it in cash, it too will be tangible; if I have it in the form of a bank balance it is no longer tangible: now it is a debt due from the bank. However, we remain comfortable with the concept since we are so used to it. Could there be other assets which benefit the business? Certainly a successful business is likely to benefit from the skills and experience of its workforce, its knowhow, the goodwill of its customers and suppliers, the motivation of its employees, the value of its brand or trade name. None of these are tangible, but they are all clearly assets which benefit the business in the same way as physical items do – sometimes more so.

Let's pick on one of these intangible assets, say customer loyalty. What exactly is that loyalty from which the business benefits? You might describe it as a disposition of customers to buy from you rather than from your competitors. It is a word which describes the past experience of their behaviour and its extrapolation into the continuing future. It can be affected by many things one of which is likely to be the level of service given to customers and the efforts made to make their trading experience with the business remunerative. I can build loyalty by working on those things which deliver satisfaction to my customers. That satisfaction is intangible, but it is not ineffable. Neither is it private. And neither is it inexplicable in the terms of materialism. It is in fact fully and publicly understood and fully responsive to objective analysis and explanation. Nothing is left out, nothing is ineffable. Loyalty is simply an abstract rather than a concrete noun. It is a word which describes a propensity to a certain type of behaviour and, although only you know what your loyalty feels like to you, it has in fact been generated by me – the asset it represents is mine, not yours.

### The interconnectedness of all things<sup>5</sup>

What do we mean by a “shoal of fish”? Do we imply that there are the fish and then additionally the shoal of fish? Of course not. “Shoal” is simply a collective noun convenient to refer to the fact of a number of fish all acting together in close proximity and behaving and responding in similar ways. The fish are tangible, the shoal is not. You cannot reveal the shoal by removing all the fish. The behaviour of the fish, while indicative of a shoal, is not separate from the fish, not ineffable and not immaterial.

If you were asked to list all the components of a car and proceeded to do so to the complete satisfaction of an expert in car mechanics, how would you respond if a philosopher criticised you for leaving out “motion”? You might object that motion is not a component but rather it is a consequence of the components of the car operating together. But, the philosopher may say, “you cannot explain the motion of the car simply in material terms – nowhere is it listed in the parts schedule and nowhere is it to be found. Even if you were to trace the full history of every state of the engine over time you still would not find anything corresponding to motion. It is ineffable and inexplicable. Any objective description of the car leaves something out”.

Mind is a convenient collective noun for the operations of the brain. Like the fish, if you removed the brain, no mind would be left in sharper relief. It is intangible, but not ineffable. It does not appear on the bill of materials of brain states because, like the car and its consequent motion, it is a product of the interconnectedness of brain states. Similarly the progress of any game of chess is not described in the rules of chess, but there is no extra immaterial unexplained something required to understand it or account for it. Reductionism is almost a rude word. How can we be mere mechanism? But materialist explanation does not posit mere mechanism, but organised mechanism. The change of adjective is crucial – in the same way as it is essential to note in Darwin’s theory of evolution that it is mutations which are random, but the subsequent natural selection is not.

### Subjective Vs Objective

What does it mean to say something is big? Unless you are a Platonist, you will answer not that it shares in “bigness”, but rather that it is larger than would be average for its type. In other words, it is big in relation to something smaller. Words like big have no objective meaning – rather they are relational. Yet the lack of objective definition does not in any way impair or devalue words like “big” – the concept “objective” simply does not apply to them. To say that a subjective view cannot be objectively explained is a piece of literal nonsense, about as meaningful as to say that apples are not pears.

It does not take a great intellect, philosophical or otherwise, to see that nothing can refer directly to itself. The eye cannot see itself, the finger cannot point to itself. The eye can only see itself in reflection – but indirect sensing does not turn the eye so perceived into an illusion, ineffable or otherwise. Similarly, my objective view is not capable of directly encompassing your subjective view (or vice versa for that matter) – but that does not make subjectivity any more or less ineffable than objectivity, any more than big is to small.

### What is this “I” of which you speak?

In English it is not possible to construct a meaningful sentence without a subject – you cannot simply say “think, therefore exist”. You could of course say, “this body thinks, therefore it exists”, but that would be cumbersome. Pronouns help – “I think, therefore I exist”. But what is that “I” – what does it grammatically stand in for? The temptation is to consider that it stands in for the conscious self. However, much of thinking is unconscious and, furthermore, conscious thinking relies on a multiplicity of unconscious processes, many of them nothing to do with the brain which we identify with conscious mind. The “I” can just as validly be taken to stand in for the complex of the unconscious and, moreover, given that the conscious represents only the tip of the iceberg of that complex, it would be more reasonable and just.

Consciousness is of course a conundrum. But it simply means awareness, responsiveness to stimulus. Lots of things are conscious in that way, from starfish to security lights. It is self-consciousness which is the paradox. How is it that we are aware that we are aware? And surely that “I” points to the seat of that self-awareness, the very same that experiences qualia. However, do we really credit that there is an us inside us experiencing ourselves experience? And if so, what drives that inner homunculus – does he also have his own inner homunculus to grant him self-awareness? If yes, we have the paradox of infinite regression; if no, we have the paradox of an unconscious self granting a conscious self. Neither is satisfactory. Despite how it may seem to us, when matters are considered in this way, the insight that there is no inner us is the less absurd of the two notions. It is a mistake to talk of what it is like to be a bat<sup>6</sup> – there is only being a bat. It is the whole bat that is the subject, not something inside the bat with a point of view of what it is like to be the bat that it is inside. Consciousness, like the pain of toothache, is a construct of the mind. Perhaps, after all, the great irony of Descartes’ reflections is that it is consciousness itself which is the illusion to be doubted.

### The alien within

We consider ourselves to be in control. The “I” inside is definitely in the driving seat. Yet we are all familiar with “not being ourselves” when we are ill or facing unusual demands or circumstances. If we are no longer ourselves at these times, then who are we? And it is not just changes in our “physical” selves or material circumstances which can so readily impinge on the “I” inside: we are also vulnerable to mental derangement, both acutely in emotional outburst (we talk of “losing control of ourselves”) and in cases of chronic mental illness. Then again, who are we when hypnotised? Or asleep? Do we have qualia in our dreams (while divorced from sensory input)? And do we consider our minds to be the passive servant of our intentionality? Can we then control our phobias, resist our habits, readily change our “personality” and “character”?

Minds, like spell check routines, are constantly suggestive based on the presumption of past experience. Minds are not static but continually self-reorganising, interacting with memory and acquired disposition. Like river flow forming river bed, experience engenders autonomously directed behaviour. Brains are passively moulded by learning, experience, and circumstance, the collective consequence of which is mind, character, personality, behaviour and disposition; and mind is self-programmed brain – which is the one in control. There is no agency; there is no other. There is no inviolate, invulnerable self separate from physical brain/mind/body, and if there were, how would it communicate? We are singular, not multiple.

### A matter of interpretation and description

It is reasonable to suppose that no two individuals in the audience at a performance of a Beethoven symphony, say his much admired 9<sup>th</sup>, will share exactly the same reactions to it throughout. In this way each experience is unique. However, it may be similarly observed that no two individual performances of that symphony, even by exactly the same orchestra and under the baton of the same conductor in the same venue will be identical either. Now suppose that Beethoven’s composition stands in for the object of experience: which of the above stands in for the subject – is it the performance, or is it the audience?

But, you might complain, this is a trick question which avoids the issue. It is the performance of the score which provides the object of experience. A layman might consider the score to be the piece, but the musician will say that the score does not become music unless interpreted – tempi, dynamics and phrasing may be indicated by the composer but can only be implemented in actual performance, which will vary.

What, then, of our qualia? We can describe our experiences, but only in the performance of actually experiencing them are they completed and brought into existence. But what is that process of experiencing? Surely it is a solo inner performance of ascribing significance which we find meaningful to us. And that process will vary from individual to individual – and it will also vary between individual experiential events in the same individual. No two performances are ever exactly the same.

When the orchestra performs its Beethoven something is created which supervenes what Beethoven composed and also what the orchestra physically does. What is that something? Is that what is meant by qualia? And if so, in what way is it separate from either the composition or its performance?

When I look at a landscape from a particular vantage, perhaps on a nice sunny day, it will no doubt evoke in me particular impressions, thoughts and emotions. If I then have the misfortune for it to cloud over and break out into thunderstorm it is likely that my opinion of my vantage will change and my mood, not to say my behaviour and response, will alter. The landscape has not changed (although the weather has). It may even be the case that, in contemplating the view on a nice sunny day, I recollect another time when at the same spot I suffered from just such a deluge and I may find my opinion of the current experience changing as a result.

Where does all this get us? Well, firstly it is clear that whatever is meant by qualia they must involve interpretation of sensory data since the subjective experience is not to be found either in the mere data itself or in the mechanisms for collecting it. Indeed, since the latter are not conscious they cannot on their own be capable of delivering conscious experience, and qualia by definition involve experience.

Secondly, an object of experience may be described in various ways all of which can be simultaneously valid despite being quite different. The notation for the score of Beethoven’s 9<sup>th</sup> does not resemble either the actions of the players in performing it or the sound thereby produced, but they all tend to the same thing. Why should our internal translation on experiencing it not simply be the same thing described in yet another way and no more ineffable. The subjectivity of our inner interpretations and descriptions is no more unique than any of the other interpretations and descriptions.

### The saga of Mary the brilliant colour scientist

This famous thought experiment is designed in defence of qualia and consequently in denial of materialist explanation of consciousness. Mary has been artificially secluded from the experience of colour but provided with every possible knowledge concerning colour in the world outside to the extent that she becomes the greatest possible authority on colour and colour vision. She is then set free into the real world and exposed to colour for the first time, whereupon she exclaims “Aha, so that is what colour is really like; now I know what it is like to experience colour”.

The claim is that Mary has learned, by her own experience, by attaining her own qualia, something she was previously ignorant of despite being the greatest possible authority on colour – and therefore qualia are not explained by materialist view of the world. However, this bizarre parable is clearly false. Obviously Mary cannot be the greatest possible authority on colour if there is some knowledge concerning it which she lacks and which is so readily available – she has simply not been provided with a vital piece of the knowledge necessary for her to be the putative authority. On attaining the missing knowledge she is now the greatest possible authority and not before. Furthermore, all that has happened is that she has now understood colour in a different language, namely that of sensory experience rather than that of linguistic description. Would the pedlars of Mary’s tale consider that relating knowledge of colour to her in French rather than English would tell her something new, and if so, that this also would be something incapable of material explanation?

And anyway, even supposing that Mary, on experiencing colour, gains something ineffable which cannot be accounted for by brain states, what is it supposed that her previous expert knowledge while secluded consisted of? On the same logic are these not also ineffable and unaccountable by brain states? Must we conclude that nothing is explicable by brain states – in which case, what is the function of the brain?

### Perfect green<sup>7</sup>

There is a difference between feeling and knowing. Only I can feel what I feel – you can only feel what you feel, even if it is the same feeling or very similar. However, knowing what I feel is not the same as feeling what I feel. Knowing is a process of attaching significance – and that is precisely the same process whether it be knowing that I have toothache or knowing that it is raining. The way that I know things about myself is the same way that I know anything about anything at all. There is no special privileged manner in which I have knowledge of myself, only privileged access to data which yields knowledge of myself.

Since only I know the level of discomfort due to my toothache, I have to tell you in order for you to know. Actually, you probably already have a good idea from my behaviour, but let’s assume that I am required to communicate to you an even more precise knowledge than you can discern for yourself. According to the theory of qualia, my task is impossible: no amount of description in words will impart to you what my toothache feels like to me. How do we manage faced with such insuperable difficulty?

Well, in ordinary life we don’t need absolute precision for reliable communication. If that were the case, we simply would not be able to operate. Similarly, we run our lives on a basis of pattern recognition – if it looks like a tiger, then we don’t wait for greater precision before running off lest it eat us while we’re deliberating. It is the same way our brains deal with pretty much everything and it takes unwelcome effort to force ourselves to think differently. In short, we run on presumption and habit, where both are determined by past experience more than present circumstance. By default, we make the present fit the past because it is quicker that way and if we have survived the past long enough then we are usually not too far wrong. But we are adaptable when forced – new habits can be formed when change of circumstance insists.

But with all this presumption are we all living a counterfeit existence? How do I know, when I look at the colour that I call green, that I am seeing the same thing as you do when you look at the colour that you call [the same shade of] green? According to the theory of qualia neither of us can ever know. Given that there are therefore things about the world that we can never know, does that wrap it up for science and materialistic explanation of the world? Well, it depends on what you mean by “know” – if you insist that knowledge must be certain then we can never know anything at all which is not already a tautology, and possibly not even that. However, if you agree that knowledge is a guide to future experience and need only be probable then we can continue the discussion. I would only note at this point that it is only because what we call knowledge is not certain (only very, very probable) that we are able to operate at all<sup>8</sup>. But the main point is that it does not actually matter whether my green qualia are the same as your green qualia: the fact that both are stimulated by the same object, which is a constant, and refer to it by the same (indexing) word is sufficient. It would actually be surprising if our qualia were exactly equal – after all, my eyesight is unlikely to be exactly the same as yours. And maybe we don’t even agree on whether or not we like the colour green (well, that particular shade anyway).

### "All You Zombies –" <sup>9</sup>

What if there were a copy of my body but with no consciousness? Wouldn't that show that consciousness is something superadded to the physical and inexplicable in materialist terms? But this is silly. A parked car does not lack an added phlogiston of motion, it simply isn't moving. And if my zombie were a faithful copy then it necessarily would have consciousness. The zombie defence is like saying what if all the same books were in the library but not in order, wouldn't that prove cataloguing to be something superadded to the physical .....

### Ockham's razor<sup>10</sup>

When faced with something they don't understand, people are prone to invent stories. We no longer fear the wrath of a bewildering menagerie of gods, one for each factor in our lives and the environment. We no longer believe in vitalism, that mysterious non-physical life force animating living entities and distinguishing them from the inanimate. But old habits and suspicions die hard.

However, the lack of an explanation for something does not authorise the substitute of any explanation whatever. People are fond of saying "you cannot prove a negative", even though they proceed with their daily lives on exactly that premise (for example, "I will not get run over crossing the road today"). Simple assertion is not sufficient – evidence and reason are required. A certain rigour is necessary when considering matters.

Many things which are essentially simple result nevertheless in complexity. Computers are merely binary – each element can be in one of only two states: either voltage is or is not present. This fact does not prevent complexity and sophistication on a staggering scale arising from that simplicity. A library consists merely of books and shelves, but the order in which the books are placed on the shelves is what makes it a library rather than a simple heap of books. The books could be organised in a different yet still meaningful way which would yield a different experience, but we would still call it a library. Organisation is intangible but not ineffable; it is not material but nevertheless fully explicable in material terms – indeed, it could not be meaningfully explained in any other terms.

Properties emerge when things interact with each other, but those properties are not independent of those things. Such properties are relative or consequential, not absolute or integral. But it is a mistake to conflate relative with subjective – being larger than a mouse is a relative property, but it is an objective fact that an elephant is larger than a mouse. Qualia arise from the interaction of our minds with the world through the medium of our senses - but this does not make the world subjective, only our view of the world. But our view of the world is a relational property, dependent on the interaction of world and mind. Both the world itself and our view of the world remain objective facts. How the world seems to you is subjective and accessible only by you, but the fact that it seems a certain way to you is an objective fact and therefore fully open to scientific enquiry and material explanation. The only mystery is that the way it seems to you is written in a language that only you comprehend. It is not necessary to comprehend that language in order to explain the fact that it has been written; and the writing of that language is a part of the material world, not some ethereal counterpart to it beyond the reach of material science. Qualia exist, but are not a stumbling block to materialism. Mind can be deduced from behaviour and is a resultant property arising from the interaction of the material brain and all its history of experience with the material world.

Your shadow can be perceived but does not independently exist – it is not material, but can only be explained in material terms. Your reflection in a mirror does not indicate an elusive exterior counterpart to complement an equally immured inner self. Neither are real. Your reflection, like your shadow, is a consequence of the material world and fully understood by the science of physics. The precise way in which your consciousness arises is not yet so comprehensively documented, but it is not inconceivable that the project is beyond possibility – after all, science has sequenced the human genome, which would have been considered impossible in Descartes' time.

The neodualism of mind Vs brain is simply a rebranding of Cartesian substance dualism, and the same objections apply. Nor is property dualism any more useful – what could it possibly mean? When things act in combination matters are different from when they are isolated – well, why shouldn't they be? After all, in combination there are more factors to take into consideration so it would be surprising if there were no consequence. I will behave differently on my own to when I am with you, and differently again when with someone else. It is not indicative of some deep mystery that when you combine oxygen with hydrogen you get a product which exhibits properties unlike either of the ingredients – neither gas feels wet, but that is because they are not water: water is the word for how they are in combination. Properties result from many factors and may emerge according to circumstance. The parts of a car, when isolated, do not exhibit motion – yet motion is not added when they are combined, the property of motion simply emerges as a result of their combination and operation. Why should mind be any different? Go sharpen that razor!

## Summary

So, what are the points made in this paper? I'll try to summarise without simply repeating.

1. I take a materialist position as opposed to what for the sake of argument I will call a "spiritualist" position. That is, I do not consider it reasonable to suppose that there is anything in the world beyond what we call matter.
2. It is however important to distinguish this from what you might call a "reductionist" position which might attempt to deny the validity of any view of the world except one that sees us and everything else in it as mere bill of materials, a simple list of components themselves consisting of other bits and pieces. That would be absurd, and would deny the use of language itself as a descriptive and perceptive tool and our ability to understand, analyse, predict, plan, respond and act. It is true that a tiger consists of what we identify as chemical elements and compounds, but it would be foolish to consider this particular grouping of such to be no different from the equivalent quantity held in various test tubes, especially when they are collectively running at you and looking hungry.
3. I have been at pains to demonstrate what I consider to be flaws in the reasoning of those who take a non-materialist stance, whether that be personified (as it were) by the agency of one or more deities – the "unmoved movers" of classical thought – or the more pervasive concept of some special animating spirit or force, conscious or otherwise, inhabiting either the universe itself and/or somehow cohabiting with the individual. I see no puppet masters moving puppets, or any evidence or even likelihood that there should be any such thing. What I see is overwhelming evidence of the precise opposite – and a need for an explanation (or theory, if you like) of how such things as qualia, mind, and for that matter, life itself are able to be the case without resorting to spiritualist causation. Indeed, I find non-materialist explanations to be somewhat of a regressive cop out – it is no use simply saying that the answer is some mysterious concept: that is not an explanation, it is an admission of a lack of explanation and gets us no further forward. It's no use saying for example that god created the universe and then imputing a myriad of attributes and intentions to that god. That is a house of cards on no foundation kept up by simple imagination. Such explanations are distracting rather than helpful.
4. It seems to me that much of the fault lies in misunderstanding through the use (or even, abuse) of language. Failure to see that words like "mind" are descriptive of attributes rather than referring to a concrete entity; inferring special, even mystical, status as a result of relative words like "subjective" and drawing fanciful conclusions; extrapolating from the personal nature of experience to an inability to explain the fact of that experience – the adjective "personal" qualifies the nature of experience, but that does not entail that it therefore must also qualify any explanation of the nature of that experience. The text of my paper amplifies these and other points.
5. So, easy to find fault with the argument of others, but what is my explanation? Well, it is a simple one. I assert that there is only what we call matter, but that all these things come about as a result of particular organisations of matter. That organisation is not the matter itself, but neither is it something else independent of matter or in any way acting on it. It is a way of being which results in the things we experience that we call qualia, mind, life, and so on. We no longer require there to be a spirit of the well, river or stream – why should we require it for (admittedly more complex) entities such as mind, experience and life? I say that such things are neither matter nor (except figuratively) spirit. Rather they are organised matter. In other words it is the various ways in which matter is combined and organised which brings about the consequences that we observe and experience in the world, including ourselves. It is what Aristotle means by "telos", "potential" and "final cause" – not that things have a destiny as such, but that the way that things are (or, as he would have it, their "form") results in the consequence of their progress and history.
6. And as an addendum, since the point is often raised, I see no requirement for intentional agency or purpose. I am not saying that such agency is necessarily inconceivable (in other words that it couldn't be imagined), but I am saying that not only is it not a necessary factor but that it is not even reasonable to suppose that it is and that there is no evidence to support any such theory. It is quite possible for things to come to pass as a result of entirely passive factors – there are few who would insist on any intentional agency to explain the phenomenon of rain, and, as Darwin has shown, even the evolution of life itself can be explained without the need for prior design or designer.

I hope that's helpful.



1. With apologies to Shakespeare, *As you Like It*
2. Niels Bohr, 1885 – 1962, reflecting on Quantum Mechanics
3. Karl Popper – a theory is irrelevant if there is no conceivable way it could be shown to be false
4. Daniel Dennett, *Quining Qualia*, 1988
5. With due obeisance to the incomparable Douglas Adams, and *Dirk Gently*
6. Thomas Nagel, *What is it like to be a bat?*, 1974
7. Blackadder – the search for the Philosopher’s Stone:-
 

**Lord Percy:** *I’ve done it, my Lord! I’ve discovered how to turn things into gold! Pure gold!*

**Blackadder:** *You have? Show me!*

**Lord Percy:** [takes lid off melting pot, and Baldrick, Percy and Blackadder are bathed in a green glow] *Behold!*

**Blackadder:** *Percy....it’s green.*

**Lord Percy:** *Yes, my Lord!*

**Blackadder:** *Now, look, Percy, I don’t mean to be pedantic or anything, but the colour of gold....is gold. That’s why it’s called gold. What YOU have discovered, if it has a name, is some....Green.*

**Lord Percy:** [removes lump of Green from pot] *Oh, Edmund....can it be true? That I hold here, in my mortal hand, a nugget of purest Green?*

**Blackadder:** *Yes indeed, Percy, except that it’s not really a nugget but more of a splat.*

**Lord Percy:** *Yes, my Lord. A splat today, but tomorrow, who knows, or dares to dream....*
8. The conclusions of deductive logic are certain, but only because they do not assert anything not already contained in the premises (one or more of which are usually the conclusions of inductive argument). The conclusions of inductive logic are not certain, only probable – but as a result they do achieve fresh knowledge. The knowledge that all men are mortal is derived from the observation that everyone ever known to have lived has proved to be mortal – this does not show with certainty that immortality is impossible, but there are few who would deny that assertion. If we did not accept probability as a working substitute for certainty we would cease to know pretty much anything and be unable to operate. Scientific method relies heavily on empirical observation and inductive logic, but those who cavil over the technicality of certainty versus probability, or who alternatively seek to classify science as somehow requiring faith in the same way as religion, are misguided and should examine the conduct of their own daily lives to discover their error. Knowledge does not guarantee certainty of future experience, rather it represents a guide to future experience. Lack of certainty does not invalidate knowledge, it enables it.
9. The title of Robert A. Heinlein’s famous 1958 science fiction story about the paradox of time travel
10. William of Ockham, 1287 – 1347, “*Entities must not be multiplied beyond necessity*”. He had in his sights the medieval concept of individuation. According to this principle, my human nature is what makes me human, but I also possess something to distinguish it as my particular human nature lest I be otherwise the same as any other possessor of a human nature. This something is my “haecceity”, or “thisness”. I might also possess such items as “whenness” and “whereness”. According to this principle entities of relation quickly multiply – “likeness” for example: if I build a house similar to many other houses a real entity of likeness is brought into being for each one, adding to all those already there. Ockham’s insight was to say that accidents of relation are not real but descriptive.

**Thereby hangs a Quale**

Nottingham Philosophy Club presentation

I wrote this piece against the idea that there is anything extra in the world beyond the ordinary preserve of physics. I see supernatural explanations as not merely unconvincing but unnecessary, a serious impediment to understanding and a roadblock to progress.

More specifically I refute the claims made by some in the recent philosophy of mind that the phenomenon of consciousness is itself a compelling argument that material explanations of the world do not suffice.

Good news, it's only 9 pages, not 12 as I thought! Having re-read it after putting it forward at our meeting last month I felt it too difficult to come up with a half page introduction for this meeting, and too onerous to read it all out - and a precis would not do justice to the detailed argument in the piece. So, that's why it was circulated early and I hope you've all been able read through it in advance.

You will see from the date that I wrote this some years ago and I wondered if, on re-reading it, I might have wished to do anything different and perhaps tinker with it. But I find that I'm overall still content with it and anyway I can't be bothered to fiddle with it. And in any case, it's what I felt at the time and it leaves me free, after a distance of half a decade, to make observations on my own piece in the discussion, which will be a novelty!

If you find the date strange, as I recall I had a bout of flu between Xmas and New Year and wrote this to keep myself occupied while recuperating since I didn't feel up to celebrating! So any confusion in the writing or the logic you can put down to delirium rather than inebriation.

That's pretty much all I intend to say by way of introduction since everything else I might have said is in the piece somewhere. So this has been more of a forward than an introduction, but I hope it has been of some help to get us started.