

We are not our brain: How to break the spell of the neurosciences

By Science and Nonduality



What are we? A soul? An immaterial mind? A flow of energy? Are we our bodies or neural patterns in our brains? There is an answer to such questions that is compatible both with hard science and with our own insights into conscious experience. But it is not the one currently defended by influential neuroscientists like Christof Koch or internalist philosophers like David Chalmers.¹ The answer is a theory of consciousness I call the Spread Mind² that overturns the currently accepted conceptual landscape in three straightforward steps. But first let us outline the common ground it shares with neuroscience.

One common and accepted point is that we are one and the same with our conscious flow of experience. We exist when we think, feel, desire, perceive. If there were no experience, there would be no people. If we had no experience, we would not exist, even if our bodies were alive and well. They would thus be zombie bodies in a world populated by automata, and though possibly appearing intelligent, in such a scenario no one would really be there, no presently existing person. So to understand what we are we need to understand what our conscious experience is.

Let us set aside all spiritual claims about the nature of experience which often by definition are inconsistent with the empirical evidence that a scientific approach demands. The key question is, what is our experience? What is the thing, in the physical world, that is identical with our experience? Is it a property of the body or is it something else altogether? My goal is to offer an alternative to the prevailing view in neuroscience and in the philosophy of mind that if one is scientific, if one is a physicalist, one must contend

that consciousness is a phenomenon internal to one's body.

Prior to the current scientific age, the general consensus had been that people are different from their bodies; a widely held view was that we have a body rather than being a body. Our everyday language still portrays this original more intuitive notion: we say things like "I have a body" or "I have a brain" instead of saying "I am a body" or "I am a brain." Likewise, we have arms and legs, a heart and lungs, skin and a skeleton. In contrast to this view, medicine and neuroscience have encouraged the increasingly popular idea that we are one and the same with our bodies, or more precisely one with our brains. In basic outline this had been suggested as early as the 1850s among German experimental physiologists and the view gained support with a widespread computational turn inspired by Alan Turing. Scientists and philosophers since at least the 1950s have tended to accept this sort of mind-brain identity and it has been variously articulated in the ensuing decades as the neural correlates of consciousness, as integrated information, and as single neuron activation at the onset of conscious experience. These approaches all support the bold but yet to be substantiated claim of Francis Crick: "Consciousness is nothing but what our neurons do." Hence we are our brains or at least something that takes place inside our brains.

Popular culture has likewise been encouraged by evocative, colored, computer images of brain activities construed as mental activities. Moreover from Wachowski's *The Matrix* and Pixar's *Inside Out* to numerous A.I. and sci-fi television series, the idea that we are one and the same as our brains has been represented graphically and persuasively on the silver screen. And this viewpoint has also found an ally in the convenient computer analogy of software being inside hardware, that is, a digital ghost in the silicon machine. Allegedly the brain is like a computer and neurons are like transistors; they process something construed and reified as information that operates like an immaterial spirit, all the while sounding scientifically respectable. Perhaps the thinking goes that one can hereby retain the hope and dream of human immortality by envisioning the mind being uploaded one day. Amen!

All this merely comes down to fantasy unfortunately with no demonstrable facts in its support. Francis Crick himself was forced to admit that "No one has produced any plausible explanation as to how the experience of the redness of red could arise from the action of the brain." The reason that medicine generally felt obliged to accept mind-body identity, and specifically mind-brain identity, is likely due to its candid commitment to physicalism. This makes scientific sense, but a lack of imagination has reduced things down to just two viable options: either consciousness is an immaterial soul in a dualism that defies science unacceptably or consciousness is one and the same as the brain. Thus medicine, and eventually neuroscience, have embraced the latter view. Yet there are conceptual incoherencies here as well. Contemporary philosophers like Colin McGinn admit that "neural transmissions just seem like the wrong kind of materials with which to bring consciousness into the world" and have gone so far as to announce the unsolvable nature of the mind-body identity problem in principle, the stance of 'mysterians' officially giving up.

There is nevertheless another solution. It is simple; it has been ignored by most scientists and philosophers; it is an alternative hidden in plain sight. It merges what we know about the physical world with what we experience every day. This is the alternative offered by the Spread Mind. It is a solution that allows that our bodies are crucial — sense doors, nerve pathways, brain activities — but that we are something other than this collection of cells, organs, systems, and brains. According to this view, we are 100% physical and yet we are not our bodies. We express ourselves through the body, but we are not identical with it. We are the world instead that is made of all those objects that, at any moment, our body brings into existence, that our body allows to take place. We are the external objects that are the constituents of the world we experience. We are our experience and our experience is the world we experience.

So, when we compare our body and our experience of the world, we must ask what is closer to our experience, the body or the world? When we focus on our experience, do we come across cells, neural activities, internal organs and energy transfer or do we find objects, people, thoughts and feelings? When I encounter an apple is my experience made of brain waves or is it made of the red shiny round apple? The simple yet surprising hypothesis is that the stuff of our consciousness is the stuff of the world.

The Spread Mind does not diminish the importance of the body which plays an important twofold role. On

the one hand the body brings into existence a world relative to itself and on the other hand it allows such a world to express itself. The senses, nerves, and brain of a body are the conditions that allow a relative world to exist, but such a world is neither the body nor something inside the body. Our consciousness is thus no longer a mysterious phenomenon arising inside the brain. Our consciousness of the world is the world relative to our body. Briefly put, in experience we are the world.

Thus we are physical without being the sense doors, nerve pathways, brain activities: we are not the body nor are we inside the body. The skin is no longer the boundary of the person; the skin is only the boundary of the processes that constitute our body. The person is beyond such a boundary. The Spread Mind is grasped by understanding that:

- 1) experience of an object is being identical with that object,
- 2) every object exists relative to another object which in our case is our body, and 3) every object takes place in relative space and time.

But how could we be identical to external objects? The world appears different to me than it appears to you. Wouldn't mind-object identity mean that we are all the same? How could we account for what is unique about us in a world made of objects? Here we must come to fully appreciate what is entailed by every object being relative to another object. To make it clear we need to turn briefly to the core of Western science and uncover a puzzle that has remained unsolved since the XVII century.

In around 1623, Galileo jump-started the scientific method thanks to a great (yet over) simplification that like all simplifications had its advantages and its disadvantages. Galileo and his followers through history have supposed that the physical world consists of fixed objective properties. On the one hand this simple standpoint allowed science to progress rapidly and enormously; on the other hand it has generated and sustained the mystery of how the world could appear different to each of us. Galileo himself proposed a solution that remains unchallenged: the world of physical objects has objective properties that do not depend on observing subjects while the world of conscious experience has subjective properties that do depend on observing subjects. Such subjective properties — later to be named phenomenal experiences, qualia, secondary qualities, and the like — were believed to reside in the body. They are the stuff conscious experience is purportedly made of.

An apple for example has objective properties such as its roundness and radius, its being still and being red. If someone who is color blind sees it as grayish, it is not because the apple is gray, but because the color blind person has a subjective experience of gray. In turn, when I see the apple as red, it's not because the apple is actually red, but because I have a mental red experience. The colors we see, whether red or gray, are no longer in the apple. Where are they then? Galileo placed colors along with all other sensations in the mind; but then, he did not claim to know either what or where the mind was. Some theories are accepted like old friends of the family that live on and are hardly questioned and just assumed to be right. But this is a case of trying to explain the merely puzzling through what's truly unfathomable. Since Galileo's time our looking for the mind has been our looking for the hidden lair of alleged subjective experiences. And their latest hideout has of course been in the brain. But nobody has ever found our familiar conscious experiences in the brain's complex neuronal activities. Even when caught in obvious error, Galileo's theory and its extensive progeny have always been excused. It is time to question these early moves in the development of Western science.

The Spread Mind goes back to the roots of science and takes a different path forward. The world is not a collection of objective properties appearing to us through a veil of subjective appearances. The world is one, and it is all made of the same stuff. What is this stuff? The basic idea is that all physical properties are relative — size, velocity, shape, color, weight, and so on. They are all relative to other physical objects. Crucially, they are not subjective, which would entail that they are relative to a subject, but relative instead to other objects. Thus, there is no need to consider subjective-objective dichotomies. Each physical entity is what it is relative to another physical entity. In this manner the physical world maintains its immanent status and yet the physical world is much richer than Galileo had at first supposed.

A few examples will fill out this account. First consider velocity, which every schoolboy knows is a relative property. Suppose a Ferrari sports car is speeding down the highway at 100 miles per hour while a modest

Ford is moving similarly but at a velocity of 60 miles per hour. The Ferrari relative to the Ford has a relative speed of 40 miles per hour. Hence the sports car is moving both at 100 mph and at 40 mph. Which of the two velocities is the real one? Is 100 mph an objective velocity and 40 mph a subjective velocity? Of course not. They are neither objective nor subjective, but are both relative physical properties — relative to the ground and relative to the other vehicle — velocities that are physical though not absolute.

Now consider color. Take a computer LCD screen showing a uniform white background. Observed from one meter away, to standard trichromat eyes it looks white. However, a red blind person would not be able to see the red component of the light emitted by the screen. The other two components are blue and green, and so they would see the screen as that blue-green cyan combination. If green blind, the screen would likewise appear to be a red-blue magenta. Also, if one approaches the screen, when less than 1 cm away they will see what the screen is made of — namely, an array of red, green and blue lights. Is the screen white, cyan, magenta, or multicolored? Given that the screen has different colors depending on which physical system it interacts with, there are no objective colors, but only relative colors. Just as there is no absolute velocity, so there is no absolute color. All color is relative to the appropriate physical system.

So, we can generalize the notion that there are no fixed physical properties. Every property, and thus every object, is relative. The screen is not absolutely white, but white relative to an eye capable of picking up in equal measure red, blue and green lights. It does not just appear cyan-ish or magenta-ish to color blind people; it actually is cyan and magenta to them. Cars don't go 100 mph, but go 100 mph relative to the ground and 40 mph relative to another car. In the same way, all the familiar properties, of the world, even size or shape or weight, are not absolute but relative. A tree is maybe a few meters tall relative to a designated 'meter' stick placed alongside it, and the tree might seem huge and flourishing when seated underneath it but small and scrawny when seen from further up the mountain, and the tree would be a lot lighter on the moon.

The world is not a monolithic bundle of absolute objective properties, but a multiplicity of relative properties coming into existence whenever there is interaction between an object and another object. Therefore Galileo's idea of an objective physical world that we perceive by means of multiple subjective experiences is revealed to be the oversimplification it has always been. The world is a collection of relative properties. Such a wealth of relative physical properties allows us to locate our unique place of experience in the external world. The world I am identical with is not an inner subjective world, but the external world as it comes into existence relative to that particular object that is my body. Each body brings into existence a different universe relative to itself. We live in a relative multiverse. It is in such a multiverse that we can discover what we are.

Abandon the idea that we are separate from reality. Give up the perhaps flattering but odd and untenable notion that we are subjects amidst objects. We are not different from the world; we are objects too; we are no metaphysical exception. The traditional boundary between internal and external does not mark the separation between us, our experience, and the world. It marks more humbly the separation between our bodies — sense doors, nerve pathways, brain activities — and the surrounding environment. But we are neither our bodies nor are we inside them. We are the world that exists relative to our bodies. Our consciousness is such a world. Our mind is spread to be a world.

1. Per Snaprud, "Consciousness: How we're solving a mystery that is bigger than our minds," New Scientist, 20 June 2018.
2. Riccardo Manzotti, *The Spread Mind: Why consciousness and the world are one*, OR Books, 2017, (www.thespreadmind.com)

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