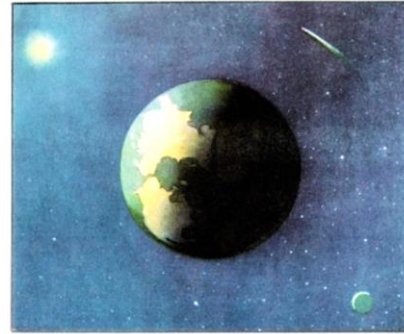


# MIND

'makes the world go round'

Tom Ransom



It wasn't that the feature presentation was disappointing, not at all. In fact, as he looked around the movie theater, no one else even seemed to notice. But what a curiosity that luminous light beam was, roiling the dust in the emptiness above.



For here was a transparent conveyance, seemingly vacant until its *terminal* world encounter, and only then, at that instant, upon *reflection*, was its contents revealed!

He turned and followed the flickering beam back to its radiant source to ponder the projection machinery. And then, just as his thoughts were returning to the movie, they bounded past the screen, through the theater walls, to the sounds of the world outside, and sights beyond... his *mind* could go virtually anywhere! In the cognitive awareness of his 'mind's eye' was a transcendent horizon extending beyond the movie as far as he could fathom. This was the *cerebral* multiplex where the convergence of knowledge and imagination enables us to explore the *omni*-context of our being. He never fully returned. He was turned onto the 'Big picture' from that moment on.

"The more we know the more mysterious it becomes  
that we can and do know." Buckminster Fuller



Mind *is* the mother of all mysteries, can we agree? For truly, before all else, what does it even mean to be "conscious", this waking realization whereupon the entire world appears right before our very eyes? Or so it seems. And what about our curious "intelligence" whereby we would even *think* to ask such a question? For as far as we know the *only* place where that's happening is in our heads, here on Earth. And by the way, *who's* doing the asking? What is this intimate sense of a reflective "self", that not only preoccupies our every waking moment, but over a lifetime, and at last, was the only continuous thing we ever knew?

All, mysteries indeed, even more so because it seems likely they will remain so, forever sealed in a 'fish in the sea' paradigm. For how might one see the entirety of mind while entirely immersed in it? It seems that in order to grasp the whole of mind one would first have to let it go! Impossible, of course.

Or is it? Now granted, if literally "loosing your mind" was necessary in order to find it, few would proceed; and indeed, more than a curious few have been lost in noble pursuit. But what if there was a sound alternative, that is, a way to safely go 'out of your mind' such that subsequently, and therefore, you could see it for the first time. What if it were possible to consciously identify with what mind isn't, such that the whole of what it is, might be readily revealed. Would you proceed? Well, if so, then let's give it a go... but first, one last proviso:

"The mind stretched to a new idea never goes back to its original dimension." Oliver Wendell Holmes Sr.



Ready? Begin by taking a long deep breath, and slowly exhale. And another, inhale, and exhale. Take a moment to center only on your breathing, in and out. Should your attention wander, as it surely will, just recenter and begin again; the more you practice the more *centered* you'll become. That's because to attentively breathe in this manner is to identify with what is most essential to our very being. Don't believe it? Next time you exhale, suppress the impulse to inhale for a moment, and be reminded of what begins to happen. That urgency that finally overwhelms your conscious intent reveals that not only is it most essential, breathing is something prior to mind. The respiratory reflex is an autonomous "brainstem" function—something *other* than mind. From its burning initiation at birth, to that exhausting final exhalation, breathing requires no mind at all.<sup>(1)</sup>

Subsequently—everything *else* must be mind!

Now, if this revelation doesn't astound you, it will. For it claims that *everything* subsequent to our autonomous functions is a matter of mind. That necessarily includes the entire experiential world of our senses, which is, after all, the *post* production product of our conscious 'upper' brain. The truth is, the cerebral cortex, where coherent sense is made of what our senses are sending, creates a world-*in*-mind so fully integrated that these two are virtually one and the same.

This is not to suggest, however, that no 'world at large' exists, for mind goes on to provide the means and methods by which everything 'out there' is discovered. From flickering fires and cave paintings dancing, to exploring new worlds over oceans, to astronauts dancing on the moon, mind has enabled our expansion far beyond that required for mere survival. We've designed atom smashers and space telescopes to survey the most inner atomic and outer galactic realms extending our conscious awareness over some *forty* orders of magnitude<sup>(2)</sup>. By reflecting on the past and imagining the future mind also enables us to seemingly navigate an invisible continuum of time.

Mind presents a cerebral *mindscape* where our sensory perceptions form the tangible topography of the 'world at large'; an unbounded meta-physical mindscape with a virtually unlimited potential for expansion.

"There is no aspect of reality beyond the reach of the human mind." Stephen Hawking



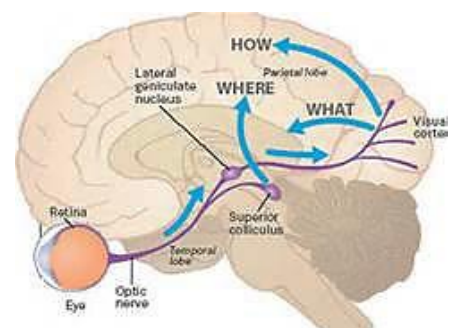
Perhaps the considerable notion that the world we perceive is all a matter of mind just seems too far-fetched to fathom. So let's bring it closer to home. Let's return to the light beam in the movie theater and proceed by analogy to ponder the 'projection machinery'. Here on Earth each of us awakens every day to the feature presentation of our resident star—the Sun. At the source of this solar projector is a thermonuclear detonation that's been radiating energy for billions of years.



Spherically expanding at the speed of light, the solar radiation, in the form of oscillating electromagnetic waves, propagates through space forever—unrealized, unless and until a terminal encounter whereupon its contents are revealed. In the case of our planet, sunlight first encounters a magnetic field, then an atmosphere, before finally terminating at the Earth's surface. But as with the movie theater screen, this isn't the end—this is where everything begins.

When waves of sunlight terminate they are variously reflected, refracted, and absorbed, and along the way, *energize* everything. Light is where all the action is. It sends matter into motion instigating chemical synthesis. It makes life possible. It projects everything we see, and much more we can't see. The effective solar bandwidth, if not truly infinite, is surely greater than we know. What we do know is that without starlight there would be no warmth, no habitable worlds, and no conscious observers like ourselves. Without solar energy the Universe would be no more than a cold, dark scatter, of tightly bound "baryonic" matter.

Now when sunlight strikes the surface of the Earth and rebounds, that which enters our eyes is focused onto a retinal array of photoreceptors, then relayed to the brain for processing. Though direct sunlight is a blinding conveyance of every possible wavelength, refreshing *trillions* of times a second, that which our brain finally receives has been reduced to a sparse flicker of occluded snapshots. That's because our visual processing system is a biological bundle of electrochemical constraints. The retinal array is selectively very limited,<sup>(3)</sup> and relatively slow, refreshing only several times a second.<sup>(4)</sup> The neurotransmitter relays within the brain are then each limited by their own refresh rates, resulting in a total "refractory" lag of nearly a second, from the time light enters our eyes until we consciously make sense of it.



What all this means is that the tangible world of our perceptions is the derivative of an acutely limited, intermittent, highly processed sampling of what's really 'out there', and ever less than what exists just beyond our immediate senses. The miracle of mind is that somehow, from these mere snapshots of external stimulus, our brain is able to produce a seemingly continuous conscious 'reality'. What actually exists however—reality prior to our processed perception of it, is something else altogether: It's entirely electromagnetic! The brain is an interpreter, a biological "transducer", turning the oscillations of the Sun's electromagnetic "field" into our *perception* of a 'world at large'. We see an evolving dynamic display that's been fine tuned for millions of years, every generation becoming ever more perceptive, ever more conscious<sup>(5)</sup>, all in continued service to the success of our species.<sup>(6)</sup>

"The stuff of the world is mind stuff." Arthur Eddington



Still don't believe that the world you perceive is entirely a creation of mind? After all, reasoned conjecture can only take one so far. In order to properly proceed requires an experiment be performed to verify that this proposal corresponds to 'real world' evidence. And fortunately, we don't have to wait to put our conjecture to the test, as the required experiment has already been performed. It's one of the defining experiments of "quantum field theory" which is the current scientific explanation of how and why energy and matter behave as they do.

In what's called the "double-slit" experiment a particle emitter is placed on a laboratory platform before a screen with two fine slits in it. Those unfamiliar with this demonstration may choose to take a few moments to go to the link below.<sup>(7)</sup> For those familiar, what the experiment demonstrates is that observed results *differ* from results unobserved; what appears "particle-like" when observed is "wave-like" when unobserved. Apparently, the very process of perception *in itself* enigmatically determines what is actually 'out there'.

What this experiment is demonstrating, therefore, is that *prior* to perception the phenomenology of this moment *is* that of an entirely wave-like, "global", electromagnetic field. As shown, only when observed, during a refractory phase—upon reflection, does the projected "wavefunction collapse" revealing the contents of a particle-like, "local", here and now.<sup>(8)</sup> The experiment thus verifies our conjecture: Prior to our perception of it, the 'world at large' is an electromagnetic field, subsequently—everything else must be mind!

"I prefer to think that the Moon is really there even if I'm not looking at it." Albert Einstein



We began our pursuit of mind by identifying what it wasn't, in order to comprehend the whole of what it is, and yet, in trying to envision the whole of it, appear to have overlooked its most intimate, innermost mystery—ourselves. For what is this purely subjective, continuous sense, of a reflective being within? Though seemingly self-evident, many in the cognitive science community doubt that it really exists at all!<sup>(9)</sup>

So, to finish this brief endeavor let's lastly consider ourselves, and whether this apparent presence might be of mind, other than, or not at all. And to do so let's return to the revelatory subject of centered breathing. While this practice in itself couldn't be simpler—recenter whenever attention wanders, something profound is curiously implicate in the process. For if the conscious act of recentering returns a 'wandering mind' to some central, unitive state, then this is possible only if such a state of *unity*, in some sense, was *other* than mind.

For those who would dismiss this insight as merely a rhetorical contrivance, know that the profundity of this *experience* has been formally recognized for millennia, remains revered by many, can be refined with practice, and is readily accessible to everyone. What one turns to in this centered "meditative" state, in the seeming absence of mind, is the singular unity of everything under the Sun.<sup>(10)</sup> And as to the innermost mystery of this reflective self within? Wouldn't be surprised to find this too is the same one in all of us.

"For how would actual unity or entity have any existence,  
and how would scientific knowledge be in existence,  
unless there was a certain one in all things." Aristotle



"The acceptance of a really existing material world,  
we all find in the end, is mystical and metaphysical."  
Schrödinger

Two monks were arguing about a flag.  
The first observed the flag was moving.  
The second thought the wind was moving.  
"Not the wind, not the flag" replied a third,  
"Mind is moving." Zen Parable



- 1) Babies born without a brain can still have fully functional respiratory systems.
- 2) Curiously, human beings are poised midway between the physical magnitude extremes.
- 3) Of the electromagnetic frequency spectrum, we visually perceive less than .004%.  
<https://www.energy.gov/nnsa/articles/visible-light-eye-opening-research-nnsa>
- 4) The eyes refresh every ~200 ms. during reflexive eyeball movements called "saccades".
- 5) Consciousness may be an epiphenomenon of the brain's electromagnetic field. (McFadden)
- 6) Mind is an inevitable evolutionary adaptation because comprehension enhances survival.  
In seeking the most coherent path forward, mind naturally becomes ever more conscious.
- 7) <https://www.youtube.com/watch?v=A9tKncAdlHQ>
- 8) It's only during the refractory interval of perception that duration is introduced—events unfolding over time, and meaningful patterns emerge revealing the contents of the Universe.  
Were it not for the process of conscious reflection how would the Universe be realized?
- 9) Dennett, Blackmore, and Harris (see below).
- 10) We're each part and parcel of *one* electromagnetic moment. That resident 'ringing' you'll find in the meditative state is the 'white-noise' of your cerebral neural network, an electromagnetic field in harmonic unity with that of our resident star.

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## Addendum

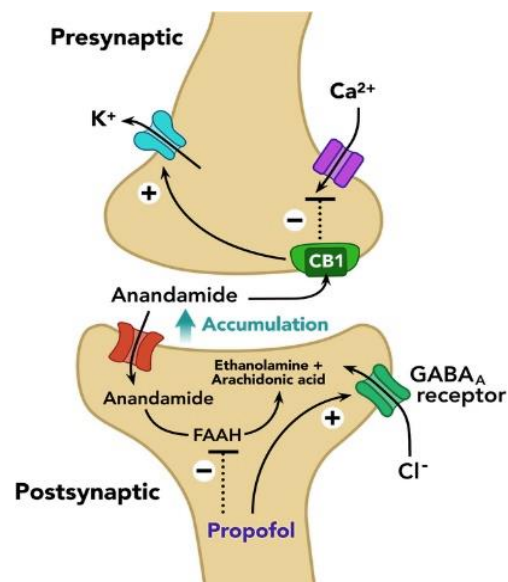
### An afterword concerning Cannabis

Well, if you've happened this far we're not quite finished. There's an additional mind pursuit we haven't explored—the experience of getting "high". Seriously, if you haven't tried cannabis you may be missing a golden opportunity to enhance your conscious awareness. And now that this medicinal mind-herb is finally emerging from the dark ages of a most unfortunate misunderstanding, there's no better time. Are you ready? Well, if so, then let's give it a go... but first, again, one last proviso:

'The mind stretched anew  
never returns to its original dimension.'



Begin by inhaling some cannabis vapor, and slowly exhale. And again. While you may not experience much at first, over time a subjective sense of "turning on" will begin to appreciate. Here's why: When cannabis is consumed its resinous cannabinoids enter your bloodstream and proceed to the brain. While most chemical compounds are then bypassed along the "blood-brain barrier", the cannabinoids enter because they closely resemble an endogenous neurotransmitter named anandamide. Biologically this compound is a "retrograde" transmitter meaning it migrates from the post-synaptic axonal cleft to expectant receptors on the pre-synaptic side. This migration amounts to a *potentiation* of the brain's entire pre-synaptic network, and over time, cannabis conditions these receptors.



Whereas most cerebral stimuli are introduced via the soma and sensory nerve channels and then processed selectively in the brain's various dedicated lobes, cannabinoids enter by way of the bloodstream and thus have a *global* psychoactive effect. Beyond being generally pleasurable, this global axonal potentiation provides an enhanced "cognitive parallax" to one's normal perceptual awareness. That cannabis sativa, a garden-variety herb, can serendipitously alter the refractory attributes of the human brain and thus shift our perceptions, such that we are consciously reflecting in an enhanced global state, is truly a most fortuitous finding. But you won't know what this means until you see for yourself, afterall...

No two people have the same world in mind.