

Consciousness considered like light as a universal medium-free function.

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A short and speculative philosophical essay proposing consciousness as a singular function of both observation and memory creation that like light, that does not require a medium in which to propagate, is free of a medium.

"Time is but memory in the making."
-- Vladimir Nabokov

"Our theory is that consciousness developed with the evolution of episodic memory simply - and powerfully - to enable the phenomena of remembering."
-- Andrew Budson. -- *Consciousness as a Memory System, Cognitive and Behavioral Neurology*

"If I am going to have an account that fully explains what's going on when a scientist measures a system in quantum physics and deals with entanglement and all these other things, what if it turns out that that account must appeal to consciousness? Does consciousness then become part of physics? If it does, then — in a way — the debate between physicalists and dualists dissipates because the physical has just absorbed consciousness. But the dualists would have won in the sense that consciousness doesn't reduce to any of these other things. That is what they've been claiming for a few centuries..."
-- Angus Menuge

In the last century we saw a simplifying of "light and aether" into only light and of "space and time" into space-time and even our three-dimensional reality into possibly a two-dimensional holographic universe. Not to mention separate Grand Unification Theories where fundamental forces are unified like electro-magnetism and the Standard Model. Now in any experiment or observation we have, basically, objects, as identified by light, in a background of space-time, as measured by a conscious observer. In this *existential triad* we find our observer using a brain with a conscious mind using biologically stored memories and concepts for observations, interpretations, learning, and understanding. Thus, in our context or discussion of unification, is there possibly an aspect of the observer or consciousness leg of the triad that also requires an existential simplification that we are missing?

Our reality with light and space-time, full of variety and scarcity, has had living organisms over millennia develop and adapt vision with eyes for survival and fitness in a reality full of light defining objects, and predators. Perhaps we have a similar "history" regarding organisms and brains? In essence, rather than brains evolving into complex systems where consciousness emerges, perhaps we have Nature or gene pools again evolving to "utilize a tool" that already exists? Like light, that does not wave in some medium, perhaps consciousness is some function already in existence, or existing everywhere, that Nature has eventually developed a means to utilize? Consider this in regard to neuroscience experiments involving the mind-body problem or out-of-body experiences by Dr Olaf Blanke in Switzerland and Dr Henrik Ehrsson in Sweden or research on near-death-experiences by Dr. Peter Fenwick.

We normally consider conscious experience as inputs (observations) that are experienced in a "now" moment and then stored in our neurons as memories of the past. Perhaps our model here while so contemporary to our every waking moment, is, actually, an over-complication? Like our analogy to light, are conscious moments and memories actually a single process that is agnostic to any medium? Experiments and anatomical changes have shown how memories are stored and retrieved from specific brain regions, but is the process of a conscious "now," or even a conscious memory recall, actually a process of utilizing an already present mechanism? Consider this in regard to proposals for a single universal logic gate. Is that mechanism even external to our brains and potentially tapped? Just as light moves through air or an empty vacuum and

can be absorbed and exist as wave or particle given context, is consciousness an ever-present phenomenon that is simpler in form, with the mechanism of an observation action or experience and a memory action actually a single mechanism i.e., an experience-memory: expory? We see here also a possible analogy to the popular idea of panpsychism. Is reality then thus an "ocean" full of space-time, light, and exporys? Are experiences and memories thus "stored" in themselves like light or are they "stored" in the very fabric of the Universe itself? Might the observed Dark Energy expansion and accelerated expansion of our Universe be actually driven by the exponential growth of conscious experiences?

Does the Fundamental Theorem of Calculus also give us a hint of this idea of a singular reversible function of experience and memory? Consider it as an analogy where we see rates of change (derivatives) as inverses of areas under curves (integrals). Is the rate of change analogous to an existential write-to-disk speed or a measure of input "now" experience with area under a curve analogous to an amount of memory for the observation or a retrieval amount of a stored memory?

How might this idea of an expory function fit into a probabilistic world of quantum mechanical experiments? How might this idea affect efforts to unify a continuous General Relativity vision of gravity via curved space-time with probabilistic and entanglement driven Quantum Mechanics? Might this idea help finally put conscious observers into the description of the Universe that contains them?