

Logs:

time loop tied to dying is arbitrary

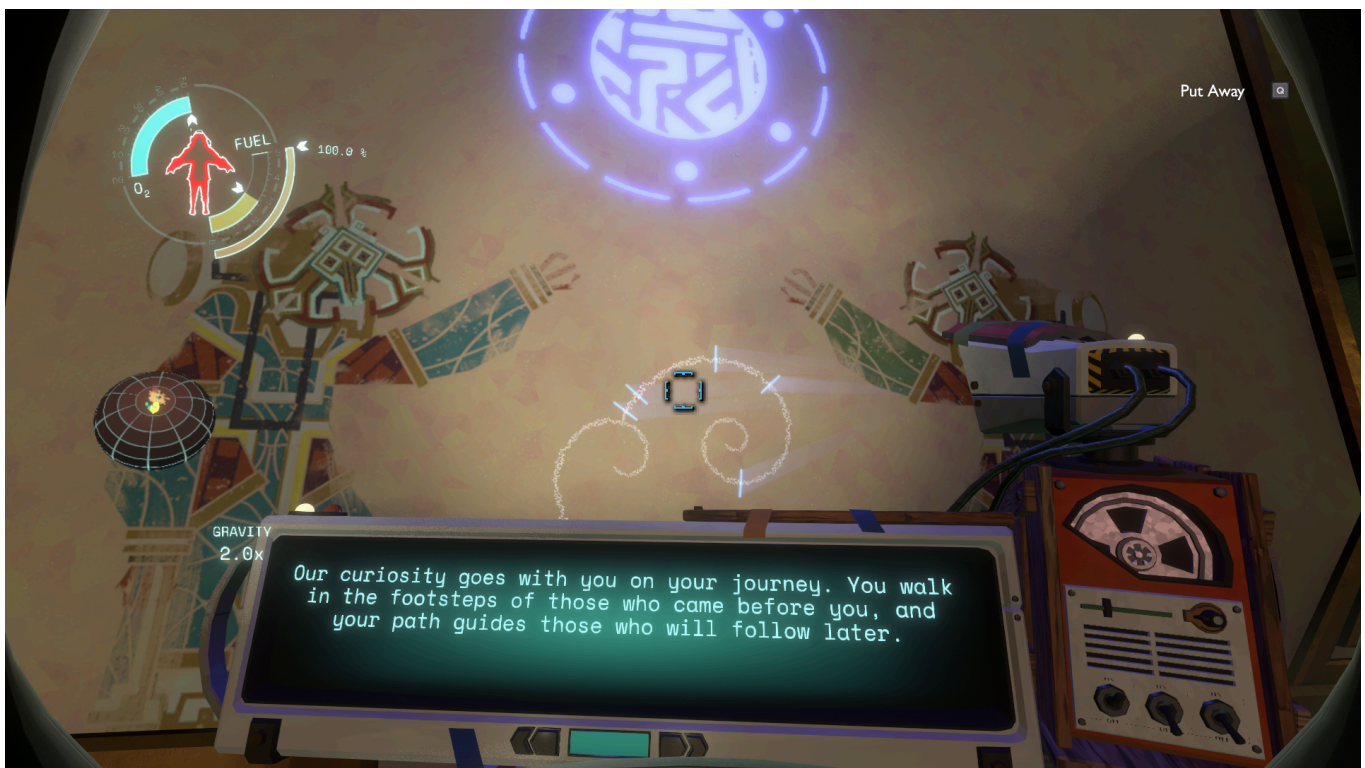
statue will record memories and send them back.... well. time is a man-made concept too. So maybe this does make sense.

it just records memories and sends them back. That's interesting. But what about world.

quantum

observing image of object or object itself are same

metaphor: when you LOOK, it's gone. you don't have to actually see with eyes... it's just about brains.



quantum trust? as long as you have some measurement saying something is there, it's there?
that felt like could be applied to parallel distributing

dopamine... is interesting still. when things come together you get excited.. excites neurons.
makes things faster. how do drugs do that?

natural quantum objects. where are they anyway?

is it like examples of natural incomputable objects people had been working on?

spheres is interesting. mass is interesting. gravity is interesting.

cause and effect. world reacts. this then that. first this then that. these are all about human language. what about "distributed" or "parallel"???

how did time came into being anyway? indexing memories stored in different places? you had some memory, you started to index, and then did whatever came afterwards?

afterwards. wording.

boxes are arbitrary too. Delay can be implemented on a computer (how?)

expected. unexpected. prediction is about that too. as long as electricity flows in me. but that's about time too. Flow.

cues can generate flow. as long as one part reacts more

there you go. time avoided.

as long as one part reacts more to cue, and activates other neurons, you have time.

animals feel time slower. there you go.

you can create sense of time with wiring.

that explains movement too. eyes are cues.

but $H(\text{brain})$ goes up. By that I mean complexity of computer needed to accurately represent world.

why is that? and why should world have time in it... that's the biggest thing. how we come here. how world comes about. that's the biggest thing.

Maths doesn't allow for this.. does it?

I'm asking what's first again. the question itself has time implied in it. We keep looking for time because of causality. that's just a common question brains have learned to ask often. because that's cause again.

but that's irrelevant too. one can of course activate multiple parts of someone's brain to create knowledge. That's the parallel distributed stuff.

I'll read a paper on quantum mechanics. I might publish something finally.

Now's the time for causal discovery fundamentals and quantum mechanics. and publishing something, I think.

to let world know so that they might give me goods.

that still relies on neural activity taking long.

well then define some new concept??? molecules "take long"??? no

you just need to pass something from something to something else.

two recordings of the "same" object... that's it. that's circularity.

two assumes 1.

what if numbers are arbitrary too? 1, 2, 3 are just objects that are transformed onto each other through a certain defined relationship.

I need to know more about quantum mechanics. Specifically, about recent and important and big impact problems, which are causing a lot of stalling in the computations of people.

not old papers. I want something deep and new. a bit of a refresher could be good

but that's mostly test.

I can just get creative and come up with everything. Why test me? Trust big. That's what Grok said. Just write?

I'll ask help from deepseek.

how do you make multiple things? multiple discrete things are things that are rather "distinguishable". if one can say what difference is, good.

that's how you get continuous vs. discrete stuff.

it's good to be excited about all of this, because it's something to remember.

you can't forget. especially now that your brain is active. Keep going.

how does one get regret out of this?

if that had happened, then that other thing would have happened. They come together. I sees their image right next to each other.

keep computing.

ok. "you" can't "know" before observing it. if you observe, it's gone. that's just metaphor. easy to remember associations.

what's important is that there are multiple connections from multiple paths onto one region. And there's probability of them affecting this region.

we're entering quantum computation here. not quantum physics. but physics is about what humans have observed in the world too. things that were not recorded, but their sense data

changing their perception in a way that they noticed.

here's something that's gonna happen. I feel excited now, so I'm recording more of this. which means that I will see me as cause of bigger things. Which would lend itself to regret of course.

question (my computation relies on knowing answer to this). is V4 area in the brain really specialized for visual processing, or is that a lie?

[Visual cortex - Wikipedia](#)

"[Neurons](#) in the visual cortex fire [action potentials](#) when visual stimuli appear within their [receptive field](#). By definition, the receptive field is the region within the entire visual field that elicits an action potential. But, for any given neuron, it may respond best to a subset of stimuli within its receptive field. This property is called [neuronal tuning](#). In the earlier visual areas, neurons have simpler tuning. For example, a neuron in V1 may fire to any vertical stimulus in its receptive field. In the higher visual areas, neurons have complex tuning. For example, in the inferior temporal cortex (IT), a neuron may fire only when a certain face appears in its receptive field."

this is arbitrary from standpoint of evolution.

Now, where was I?

can't completely recall. What I can is that one good thing about vision is that neurons are very specialized. so it would make sense to lean onto that for creating a lot of science.

what about summaries? is that related to quantum phenomena too? that information is lost and cannot be recovered. it seems so.

define change: that's how you get specific transformations of states.

now. about things like mindfulness. mindfulness calls for abolition of labels. That just makes processing more parallel and less sequential.

But I want more physics and maths. Let's try that.. what is relativity?

[Special relativity - Wikipedia](#)

[Relativistic quantum mechanics - Wikipedia](#)

let's read this.

"any two observers moving relative to each other can measure different locations and times of [events](#)."

what's observer? brains?

$$\hat{H} = \hat{E} = \sqrt{c^2 \hat{\mathbf{p}} \cdot \hat{\mathbf{p}} + (mc^2)^2} \Rightarrow i\hbar \frac{\partial}{\partial t} \psi = \sqrt{c^2 \hat{\mathbf{p}} \cdot \hat{\mathbf{p}} + (mc^2)^2} \psi$$

is not helpful for several reasons. The square root of the operators cannot be used as it stands; it would have to be expanded in a [power series](#) before the momentum operator, raised to a power in each term, could act on ψ . As a result of the power series, the space and time [derivatives](#) are *completely asymmetric*: infinite-order in space derivatives but only first order in the time derivative, which is inelegant and unwieldy. Again, there is the problem of the non-invariance of the energy operator, equated to the square root which is also not invariant.

Another problem, less obvious and more severe, is that it can be shown to be [nonlocal](#) and can even *violate [causality]*(<https://en.wikipedia.org/wiki/Causality>(physics) "Causality (physics)": *if the particle is initially localized at a point \mathbf{r}_0 so that $\psi(\mathbf{r}_0, t = 0)$ is finite and zero elsewhere, then at any later time the equation predicts delocalization $\psi(\mathbf{r}, t) \neq 0$ everywhere, even for $|\mathbf{r}| > ct$ which means the particle could arrive at a point before a pulse of light could. This would have to be remedied by the additional constraint $\psi(|\mathbf{r}| > ct, t) = 0$.¹⁵*

[Quantum spacetime - Wikipedia](#)

[Black hole - Wikipedia](#)

a lot of this seems to have been predicted by the maths.

[List of unsolved problems in physics - Wikipedia](#)

[Problem of time - Wikipedia](#)

solution to the problem of time. It is a bit more subtle than this. Although without constraints and having "general evolution", the latter is only in terms of a discrete parameter that isn't physically accessible. The way out is addressed in a way similar to the Page–Wootters approach. The idea is to pick one of the physical variables to be a clock and ask relational questions. These ideas, where the clock is also quantum mechanical, have actually led to a new interpretation of quantum mechanics — the [Montevideo interpretation](#) of quantum mechanics.^{[15][16]} This new interpretation solves the problems of the use of environmental decoherence as a solution to the [problem of measurement](#) in quantum mechanics by invoking fundamental limitations, due to the quantum mechanical nature of clocks, in the process of measurement. These limitations are very natural in the context of generally covariant theories as quantum gravity where the clock must be taken as one of the degrees of freedom of the system itself. They have also put forward this fundamental decoherence as a way to resolve the [black hole information paradox](#).^{[17][18]} In certain circumstances, a matter field is used to de-parametrize the theory and introduce a physical Hamiltonian. This generates physical time evolution, not a constraint.

- The interpretation from a bundle-theoretic view of objective idealism (Korth 2022), based on the idea that quantum 'weirdness' follows from objects being bundles of universals.^[41]

After about a century since the first attempts by Bohr, the interpretation of quantum theory is still a field with many open questions.¹ In this article a new interpretation of quantum theory is suggested, motivated by philosophical considerations. Based on the findings that the 'weirdness' of quantum theory can be understood to derive from a vanishing distinguishability of indiscernible particles, and the observation that a similar vanishing distinguishability is found for bundle theories in philosophical ontology, the claim is made that quantum theory can be interpreted in an intelligible way by positing a bundle-theoretic view of objective idealism instead of materialism as the underlying fundamental nature of reality.

I will argue in the following that the vanishing distinguishability of indiscernible particles within micro-scale systems is at the heart of quantum theory: Consider a system in which the properties of indiscernible contributing parts are really taken up by the system until parts are forced into distinction, upon which the system loses those properties, which need to be assigned to allow for