

### **What is not seen does not exist**

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After reflecting on what **Anton Zeller, Nobel Prize in Physics 2022, proposes. That there is only what we can see, seems to me a very interesting ANTISOLIPSY position.** It is important to mention that solipsism is a philosophical current that maintains that the only thing that really exists is one's own mind and its experiences. According to this philosophical current, everything we perceive from the outside world, including other human beings, only exists in our consciousness. In other words, solipsism posits that we cannot be sure of the existence of anything outside of our own consciousness.

Conversation between **Rabindranath Tagore and Alberto Einstein.**

It is worth mentioning that as **early as 1930 the eminent scientists and philosophers Rabindranath Tagore and Albert Einstein had discussed these issues. Tagore was of the position: that the world is a human and subjective experience, while for Alberto Einstein: the world is an objective human experience.** In other words, for Tagore, things and humans exist thanks to the fact that there are others who see them, while for Einstein things and humans exist by themselves, despite the fact that others do not look at them.

### **RPE Paradox**

Possibly this conversation between **Tagore and Einstein inspired the thought experiment conducted by Einstein, Boris Podolski and Natan Rosen in 1935.** In which it is established that by modifying the state of one particle it is possible to modify the state of the other at a distance instantaneously, **violating the principle of locality and contradicting the theory of relativity.** For this reason, this proposal is known as the EPR paradox in honor of these scientists, since they are the initial letters of the authors' surnames.

Later it was proposed that it is possible to measure this influence of one particle on the other, thanks to the superposition and quantum entanglement of the particles, which allows us to know the position and state of the other particle instantaneously, thanks to the uncertainty principle proposed by **Werner Heisenberg in 1927. On the other hand, in 1964 John Bell proposed that the influence of one particle on the other occurs through an energetic teleportation mechanism and not a mace, which implies the transfer of information and energy from one to the other. This does not violate the principle of locality and the theory of relativity.**

**Thomas Young and the double slit.**

Interestingly, these proposals could explain the pioneering experiment of the double slit carried out in 1801 by Thomas Young, in which it is established that particles behave differently when they are observed, that is, when they have a superposition and an entanglement with the observer. A proposal that has been taken by neurosciences to explain human behavior, when an individual interacts with another and the difference in behavior, when he is alone or accompanied, that is, when he has a superposition and social quantum entanglement.

In addition, in this experiment it was shown: how light is in two quantum states in the form of a wave or energy and in the form of matter as **proposed by the wonderful Robert Hooke, intellectual enemy of Isaac Newton, whom by the way he defeated in that discussion about the nature of light.**

**The overlap and intertwining can be seen.**

Returning to Anton Zeilinger, although subatomic particles cannot be seen, their entanglement and superposition can be **measured through different techniques: 1) correlation between the properties of photons, 2) through mathematical tests that allow correlations to be verified, 3) through quantum tomography, a technique that allows the quantum state of entangled photons to be reconstructed, and 4) through the wave function that allows wave visualization of two photons entangled in real time.**

It is in this way that Anton Zeilinger's phrase breaks with philosophical-scientific solipsism and allows us to confirm that we can see the world and its existence by itself, and that it does not necessarily depend on human experience as the poet and creator of hinduism Rabindranath Tagore had said.

**In order to exist, it is not necessary to be appointed.**

Finally, I consider it important to mention that these advances in quantum **physics also contradict the proposal of the philosophers, George Steiner and Ludwig Wittgenstein, that if something is not named it does not exist, on the contrary, according to these premises,** things and living beings exist by themselves, in different quantum states and in many worlds superimposed and intertwined with other things. with other consciences and with other individuals.

**Consciousness as a physical and quantum phenomenon**

This knowledge and revolutionary proposals of quantum physics open the possibility that consciousness is a quantum phenomenon according to Stuart Hameroff and Roger Penrose and that **consciousness is an experience that goes from being subjective as proposed by William James, to an objective event of brain functioning that we can soon measure with quantum tools.**

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