Review of: "Neural Quantum Superposition and the Change of Mind"

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The thermodynamical condition for a system to be in the quantum state, and to sustain a quantum superposition is kT/h << f , where f is the characteristic frequency, and the characteristic lifetime t of the quantum superposition is t=1/f. The highest characteristic frequency in the brain (the highest frequency of neural spikes) is about 100 Hz. Thus, in order to maintain a superposition at least for two neighboring neural spikes (10 millisecond), the temperature must satisfy the following equation: T<< 100 h/k. That means, the temperature must be much less than 5*10^-10 Kelvin. Even though such temperature is reachable in a very few low-temperature laboratories, the brain is functioning around 310 Kelvin, which prohibits to consider the brain function as a quantum system. Many authors commit similar errors in the literature. However, let us cite ***Mahatma Gandhi:*** *An error does not become truth by multiplied propagation.*

Final note: theoretically speaking the paper may still be relevant for some future robotic brains that are imitating human brain function, provided that the neural spikes have much higher frequencies and the temperature is very low.