

# Review of: "On the Bell Experiment and Quantum Foundation"

Eugen Muchowski

Potential competing interests: No potential competing interests to declare.

The author tells us:

“Let us try to recapitulate. The Bell experiment has to do with two actors Alice and Bob who cannot communicate during the experiment. They both make dichotomous decisions on their settings of some apparatus, and they both observe dichotomous responses. For any actor who tries to understand these responses, according to the theory, his mind must be limited: He is simply not able to keep enough variables in his mind at the same time.”

The fact that the actor is overwhelmed cannot be the reason that QM violates Bell's inequality. Bell's inequality is violated by QM regardless of whether there is a model in the actor's brain. There must be a physical reason for this that is independent of the actor's brain capacity. One such example can be found in "Muchowski, E., On a contextual model refuting Bell's theorem. EPL 2021 134 (10004)". In it, the indistinguishability of entangled photons is the cause of the behavior.