

Review of: "On Bell Experiments and Quantum Entanglement"

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Potential competing interests: No potential competing interests to declare.

The reviewer has found the logic of falsifying Bell experiments interesting. It may be true that in Bell experiments “quantum superposition” is taken for granted and the results of the experiments are known before they have been performed. Therefore the reviewer does not take sides on the validity of the Bell experiments.

So the following comments are mostly on the EPR paradox itself. The EPR effect was recognized as a non-local correlation by Bohr and Pauli who had died before the Bell theorem appeared. The reviewer fully agrees with Bohr and Pauli in that the quantum superposition is valid. In fact, “Principle of superposition” is the chapter 1 of Dirac's textbook, “The Principles of Quantum Mechanics”. The author appears to regard the problem as conceptual, but the principle of superposition is a basis of the mathematical structure of quantum mechanics. If the author renounces the principle of superposition, he will have to construct an alternative mathematical theory to quantum mechanics. This is not like the measurement problem in quantum mechanics, which is a matter of interpretation. So the reviewer disagrees with the author on quantum superposition.

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