

Review of: "On Bell Experiments and Quantum Entanglement"

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The author claims to identify two flaws in the Bell inequality experiments. The first is that "the validity of the quantum-mechanical description of the physical world and the legitimacy of the standard interpretation of quantum randomness are taken for granted." This is incorrect. The virtue of Bell's inequality is that it is defined operationally, with no appeal to the quantum formalism. One could perform a Bell experiment without ever having heard of quantum mechanics. One would, however, be left with the challenge of explaining the observed violation. The second supposed flaw arises from the author's rejection of the use of counterfactuals in describing quantum measurements. This is, however, the whole point of supposing a local hidden variable description and is entirely in keeping with Einstein's EPR argument. It is certainly true that one cannot step in the same river twice, but it is entirely sensible to consider what would have happened had one stepped in with the other foot first.