Comments on `The question of completeness and locality in Liddy's hidden variable theory'

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Lehr (1985) has appealed to the work of Suppes and Zanotti (1980) to prove that the hidden-variables theories presented in Liddy (1983, 1984) are incomplete according to a definition he gives of completeness. However, a cursory reading of Liddy (1983) will show that no attempt was made to satisfy such conditions, particularly that of conditional statistical independence. Furthermore Lehr has confused the conditional correlation in Liddy (1983) with the unconditional correlation of Suppes and Zanotti (1980). Lastly the results of Suppes and Zanotti (1980) can be shown to be uninteresting as they apply only to a trivial class of hidden-varibles theories—those in which the conditional expectations are independent of the hidden-variables! This follows trivially from the wholly reasonable axiom 5 and the inexplicable axiom 7 of Suppes and Zanotti (1980).

Nonetheless I do concede that the hidden-variables theories that I presented are unviable. They do not, as I claimed, satisfy my inequality (20) in Liddy (1984). It can also be shown that no theory of the kind presented in Liddy (1984) can satisfy equations (3), (10), (19) and (20).

References

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