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Erratum to: Causality as a theoretical concept: explanatory warrant and empirical content of the theory of causal nets

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Erratum to: Synthese
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In Sect. 2.2, "Explaining linking up", we write "In order to explain DEP(X,Y|Z) it suffices to assume ... [the] condition of dependence overlap (DO)[9]: ∃x,z,y: DEP(x,z)∧DEP(z,y).". This is an error. The stronger condition (DT), introduced three paragraphs before, is needed. The corrected sentence must say: "In order to explain DEP(X,Y|Z) we must assume condition (DT) introduced above.[9]" Footnote 9 has to be changed as follows: "*Proof*: As shown in the proof in fn. 8, (DT) and $\Sigma_z P(y|x,z)\cdot P(z|x) = \Sigma_z P(y|z)\cdot P(z|x)$ entail by probability theory $P(y|x) \neq P(y)$. Thus (by contraposition) (DT) and (*) $P(x|y) = P(y)$ entail (**) $\Sigma_z P(y|x,z)\cdot P(z|x) \neq \Sigma_z P(y|z)\cdot P(z|x)$. (*) follows from (C) and the fact that X is not d-connected with Y in X→Z←Y. This gives us (**), which implies $\exists z$: $P(y|x,z) \neq P(y|z)$, i.e., DEP(Y,X|Z). Q.E.D."

The following changes are consequences of this correction: (i) The first two sentences of footnote 10 have to be replaced by "Weaker than (DT) is the condition (DO) of "dependence overlap": ∃x,y,z: Dep(y,z)∧Dep(z,x). (DO) is not a sufficient but a necessary condition for screening off (we are indebted to an anonymous reviewer for pointing this out to us)." (ii) In the paragraph of Sect. 3.2 headed "(3) Intrasitivity

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unfaithfulness", the words "Sect. 2.2" must be replaced by "fn. 10" and "¬∃x,z,y: DEP(x,z)∧DEP(z,y) implies INDEP(X,Y|Z) (see the proof in fn. 10)" by "¬∃x,z,y: DEP(x,z|y)∧DEP(z,y|x) implies INDEP(X,Y|Z)".