



Correction to: Grounding, conceivability, and the mind-body problem

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Correction to: *Synthese* (2018) 195:919–926 <https://doi.org/10.1007/s11229-016-1254-2>

Khudairi (2018) makes a claim about relevance logic which requires correction. The correction to be made concerns the reasons for which $\varphi \& \sim \varphi \rightarrow \psi$ does not hold. The countermodel provided on p. 921 of the article is incorrect.

One reason for which paraconsistency holds in relevance logic is owing to the ban therein of Dilution on both the right and left, such that the following proofs are invalid (see, e.g., Tennant, 2005, pp. 704–706):

A: A

A, \sim A:

A, \sim A: B

A: A

A, B: A

A, \sim A, B:

A, \sim A: \sim B

A second reason is owing to Belnap's variable sharing principle (Anderson & Belnap, 1975, §22.1.3), which states that 'no formula of the form $A \rightarrow B$ can be proven in a relevance logic if A and B do not have at least one propositional variable (sometimes called a proposition letter) in common and that no inference can be shown

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valid if the premises and conclusion do not share at least one propositional variable' (Mares, 2020). Explosion does not satisfy the variable sharing principle.

Finally, the two forms of disjunctive syllogism stated in the text (p. 922), $\forall\varphi, \psi[(\varphi \vee \psi) \wedge \sim\varphi] \rightarrow \psi$ and $\forall\varphi, \psi[[\varphi \wedge (\sim\varphi \vee \psi)] \rightarrow \psi]$, should be separated by an 'and' rather than an 'iff'.

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References

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