

# Correction to "Grounding, Conceivability, and the Mind-Body Problem"\*

David Elohim<sup>†</sup>

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

One reason for which paraconsistency holds in relevant 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: 704-706):

$$\frac{\frac{A : A}{A, \neg A :}}{A, \neg A : B}$$

$$\frac{\frac{\frac{A : A}{A, B : A}}{A, \neg A, B :}}{A, \neg A : \neg B}$$

A second reason is owing to Belnap's variable sharing principle (Anderson and 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 valid if the premises and conclusion do not share at least one propositional variable' (Mares, 2020). Explosion does not satisfy the variable sharing principle.<sup>1</sup>

---

\*Published in *Synthese*, 200 (2): 2020.

<sup>†</sup>I changed my name, from Hasen Joseph Khudairi and Timothy Alison Bowen, to David Elohim, in April, 2024. Please cite this paper and my published book and articles under 'Elohim, David'.

<sup>1</sup>Acknowledgements: Thanks to Shawn Standefer for kind and helpful correspondence on the nature of relevance logic.

## Bibliography

Anderson, A.R., and N. Belnap. 1975. *Entailment: The Logic of Relevance and Necessity, Vol. 1*. Princeton University Press.

Mares, E. 2020. Relevance Logic. *The Stanford Encyclopedia of Philosophy* (Winter 2020 Edition), E.N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/win2020/entries/logic-relevance/>>

Tennant, N. 2005. Relevance in Reasoning. In S. Shapiro (ed.), *The Oxford Handbook of Philosophy of Mathematics and Logic*. Oxford University Press.