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# Humean laws do not supervene on their instances

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## Abstract

Despite the frequency with which one sees the claim made by Humeans about laws of nature, in this talk, I argue that laws do not supervene on the Humean ‘mosaic’ (see Lewis, 1986; 1994) – the tapestry of local particular matters of fact that make up a world. Briefly, the objection to the claim is that, for any given mosaic and particular law that supervenes on that mosaic, there will be a duplicate mosaic (that is, another world) that differs from the original mosaic only in so far as there is a singular additional, contravening instance to the particular law. For example, for a world in which the mosaic is comprised of all Fs that are Gs, we can imagine a world exactly alike, differing only to the extent that there is a singular additional F that is not a G. Though the supervenience base of the law exists in that duplicated world – in so far as the full mosaic of the first world also exists in the duplicated world – given the additional contravening instance, the law does not hold in the duplicated world. Such duplicate-plus-contravening-instance worlds will necessarily exist for any given combination of mosaic and law, given the Humean principle of recombination. If the mosaic exists, and the law does not hold, then the claim that the law supervenes on the mosaic (in so far as supervenience is understood as covariance across worlds) is demonstrably false. Though this problem is not exactly a novel one – Shumener (2019) raises a related objection, and Miller (2015: 1321) discusses this problem as it pertains to a related problem concerning the apparent explanatory inadequacy of Humeanism – its gravity has not been fully appreciated as a fundamental problem for the Humean account of laws. After presenting the problem, I explore putative responses to the problem and argue that all available solutions will require resources that simply outstrip the Humean’s budget, requiring them to commit to entities that fatally undermine the motivations for the position in the first place. Briefly, the Lewisian response derived from Lewis’ account of truthmaking for negative existentials (Lewis and Rosen, 2002) is that we can provide palatable truthmakers for negative existentials that, in conjunction with a conjunction of the intrinsic local particular matters of fact that make up the mosaic, might provide a suitable subvenience base for laws (the negative existentials concerning the non-existence of contravening instances). This solution, I argue, will not work as it requires a commitment to extrinsic relations; such extrinsic relations place restrictions on recombination (in so far as an entity’s standing in an extrinsic relation demands the existence of the other relata of that relation) which stand at odds with the underlying principles behind Humeanism.

Ultimately, I conclude that this problem could represent an example of a promising class of objection to Lewisian modal reductionism that proponents of metaphysical grounding might want to expand upon, in so far as it focusses on the failure of modal reductionism to account for phenomena, and, being made in terms the Humean would agree upon, is less easily responded to.

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## References

- Shumener, E. (2021). Humeans are out of this world. *Synthese*. 198: 5897-5916.
- Miller, E. (2015). Humean scientific explanation. *Philosophical Studies*. 172. 5: 1311-1332.
- Lewis, D. K. & Rosen, G. (2002). Postscript to "Things qua Truthmakers": Negative Existentials. In Hallvard Lillehammer & Gonzalo Rodriguez-Pereyra (eds.), *Real Metaphysics: Essays in Honour of D. H. Mellor, With His Replies*. New York: Routledge. pp. 39-42.
- Lewis, D. K. (1994). Humean supervenience debugged. *Mind*. 103. 473-490.
- Lewis, D. K. (1986). *On the Plurality of Worlds*. Malden, Mass.: Wiley-Blackwell.

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