

Modal Realism: The Radical^{1 2}

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David Lewis is *not* extreme *enough*. Spatialize his modal realism.

LEWIS' "MAD DOG" MODAL REALISM claims that there are possible worlds and possible things exist as concrete entities as our actual world and things around us. A world is a maximal sum of spatio-temporally connected. No world is metaphysically privileged: actuality is just indexical.⁴

MANY "INCREDOULOUS STARES" have criticized him.⁵

TOO EXTREME? NOT EXTREME ENOUGH! How to rescue Lewisian modal realism? Instead of milding down⁶, I would make Lewisian modal realism more extreme.

LEWIS IS NOT THAT CRAZY for following naturalistic (?) traditions. In total, Lewisian modal metaphysics offers a *good deal*: a "paradise for philosophers" for a reasonable price.

1. Utility. Possible worlds explain modal phenomena and others.^{7 8}
2. Quinean ontological commitment. We should admit the existence of possible worlds because our best theory requires thier existence.
3. Reduction. Possible worlds reduce modality and many other notions into concreta.
4. Theoretical parsimony. Possible world request only concreta.

SPACE FOR WORLDS? Anything Lewis needs for modality is concrete i.e. spatio-temporal things. Then, it seems natural to think about the inter-worlds space: where possible worlds spread through. Furthermore, Lewis features many spatial notions such as the famous sphere when he gives a truth condition for counterfactual conditionals.⁹

THE SPHERE IS JUST A WAY OF SPEAKING. Lewis' theory features a lot of spatial notions among possible worlds such as his famous sphere. Lewis, however, avoids Quinean commitment to such inter-worlds spatial structure. Rather, Lewis confesses the sphere is just a way of speaking¹⁰ and attempts to paraphrase his sphere theory into similarity.

¹ For The American Philosophy Forum.

² The latest version of this handout will be available on my website: endoshimpeiendo.github.io

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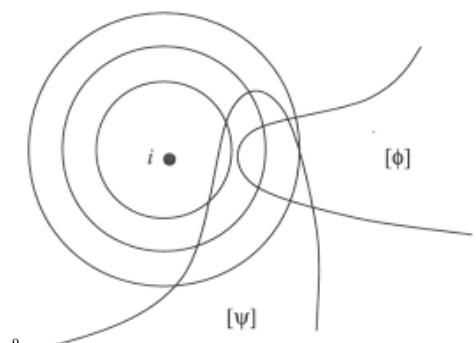
⁵ David Lewis. *On the Plurality of Worlds*. Blackwell, Oxford, 1986

⁶ Shimpei Endo. Contemporary Debates on Possible Worlds. *Japanese Student Research Notes of Philosophy of Science*, 1(1):135–144, 2018

⁷ Richard B Miller. Moderate Modal Realism. *Philosophia*, 28(3):3—38, 2001

⁸ David K Lewis. *Counterfactuals*. Basil Blackwell, 1973

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Vladan Djordjevic. Similarity and cotenability. *Synthese*, 190(4):681–691, 2013

¹⁰ "Our system of spheres is nothing but a convinient device for carrying information about the comparative similarity of worlds". [p. 48]

Why? Lewis thinks like this: In Lewisian framework, similarity is not necessarily symmetrical for its indexical nature.¹¹ His point of introducing the spatial notion is to utilize the analogy between similarity and distance.¹² But distance, at least in space what Lewis has in his mind,¹³ needs to be symmetrical: $d(x, y) = d(y, x)$ for any x, y . "Why bother?"¹⁴

LEWIS' DOUBLE-SPEAK TROUBLES. This "double-speak" of Lewis would call many objections to him. How do we know what is happening in such different worlds disconnected to i.e. inaccessible for us? Why not island universe?¹⁵

DO NOT GIVE UP. Non-symmetric metric (quasi-metric) space is a thing. Interesting and intuitive examples include: directed graphs with Manhattan distance (imagine driving downtown Osaka), a clockwise path on S^1 , distance with weight (like slope).

DEMO.

1. *Epistemic objections* ask how we do know things going on in such isolated universes.

Reply. We can know modal claims thanks to information travels through the inter-world space.

2. *Island universe objection.* Lewisian framework prohibits split worlds. But, they ask, does this presuppose some modal restriction (i.e. possible forms of worlds) on worlds? What happened to Lewis' reductive ambition?

Reply. We can formulate a world splitted in a spatial space as a world still an unified thing in a modal space.

WRAPPING UP.

1. Lewis is not too crazy; he is not crazy enough.
2. Formalizing non-symmetrical similarity in spatial terms (i.e. distance), due to which Lewis give up the inter-worlds space, is possible, plausible and productive.¹⁶
3. Neo-Lewisians should overcome criticisms to the original Lewis by providing rich spatial options.

¹¹ Read $j \leq_i k$ as " j is more similar to i than k is. The fact that j is similar to i does not promise i is to j because similarity is determined

¹² "If we measure similarity numerically, and make uninhibited use of the analogy of similarity 'distance' between worlds to spatial distance between places, we are liable to make a much more serious and questionable assumption: that the degree of similarity of i to j equals the degree of similarity of j to i ."¹⁷ [p. 51]

¹³ A metric distance d satisfies
(i) $d(x, y) = 0 \Leftrightarrow x = y$, (ii)
 $d(x, z) \leq d(x, y) + d(y, z)$, and (iii)
 $d(x, y) = d(y, x)$.

¹⁴ "But why bother? The appeal of a numerical similarity measure comes from the analogy between similarity 'distance' and spatial distance. To the extent that the analogy breaks down, the point of having a numerical measure is lost." [p. 52]

¹⁵ A world which spatially-split in to two parts. This objection further asks: Don't you smuggle primitive modality in your explanation of possible worlds? See and

Phillip Bricker. Island Universes and the Analysis of Modality. In G. Preyer and F. Siebelt, editors, *Reality and Humean Supervenience: Essays on the Philosophy of David Lewis*. Rowman & Littlefield, 2001; and Scott A Shalkowski. The Ontological Ground of the Alethic Modality. *The Philosophical Review*, 103(4), 1994

¹⁶ Lewis would have initiated conceptual space approach in 1980s before

Peter Gärdenfors. *Conceptual Spaces: The Geometry of Thought*. The MIT Press, 2000

References

- [1] Phillip Bricker. Island Universes and the Analysis of Modality. In G. Preyer and F. Siebelt, editors, *Reality and Humean Supervenience: Essays on the Philosophy of David Lewis*. Rowman & Littlefield, 2001.
- [2] Vladan Djordjevic. Similarity and cotenability. *Synthese*, 190(4):681–691, 2013.
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- [4] Peter Gärdenfors. *Conceptual Spaces: The Geometry of Thought*. The MIT Press, 2000.
- [5] David Lewis. *On the Plurality of Worlds*. Blackwell, Oxford, 1986.
- [6] David K Lewis. *Counterfactuals*. Basil Blackwell, 1973.
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