

Lecture 8.

Modality: Possible (and Impossible) Worlds

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Outline

- 1 Modes of Truth and Falsity
- 2 Varieties of Possible Worlds
- 3 (Im)Possible Worlds
- 4 The Philosophy of Possible Worlds
- 5 Suggested Formative Essay Topics
- 6 Reading

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 - **B1** would appear to be contingently true; the people of Britain *could* have voted to remain in the EU in 2016.

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- So **B2** is necessarily true: it could not have been false.

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- Modes of truth and falsity are expressed in English by means of modals. These are either locutions such as 'it has to be the case that', 'it is necessary that', 'it ought to be the case that', 'it could have been the case that', 'it is possible that', 'it is impossible that';

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- (1) Alessandro *could have been* over 6.5 foot.
- (2) *Necessarily*, all bachelors are unmarried.
- (3) 0 *couldn't have been* greater than 43.

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- But **J1** and **J2** are both true, and so the expressions 'John' and 'the tallest person in the room' could be freely substituted for one another in a sentence: if **J1** is true, its truth will be preserved if we replace 'John' with 'the tallest person in the room'.

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(J4) Necessarily, the only one drinking water in the room is a person.
 - And that seems to be false: it could have very well been that, say, the only one drinking water in the room was a dog.

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- But the majority of philosophers think that there is a perfectly good sense to be made of modal discourse and have given a comprehensive account of how we should understand it.
- The driving intuition was provided by G.W. Leibniz - a philosopher we already encountered. Leibniz' idea was that we should distinguish between different kinds of worlds: our own, which realises how things *actually* are; and merely possible worlds, each one realising a different way in which things could have been.

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- Merely possible worlds are alternative bundles or complete ways things are: they are alternatives where what there is or what the details are (or both) differs. Some possible worlds are very similar to the actual world, they differ in small details, other possible worlds are radically different.

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 - Consider sentences **1-4** below:
 - (1) Alessandro is right-handed $\Rightarrow$ Contingently true and possible
 - (2) Snow is black $\Rightarrow$ Contingently false and possible
 - (3) All bachelors are unmarried $\Rightarrow$ Necessary
 - (4) 0 is greater than 43 $\Rightarrow$ Impossible

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- Although they look very similar, they assert very different things. In order for **(1)** to be true, it must be the case that, *at all possible worlds*, the number of planets is even. But surely does not sound right. Why couldn't there be a possible world where the planets are, say, 9 as opposed to 8?

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- **(2)** by contrast asserts something different. In order for **(2)** to be true, it will have to be the case that the number of planets, which is 8, is even at all possible worlds. And that seems right: how could there be a possible world where 8 is odd?

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- Still, one may think that there also are possible worlds in which the laws of nature are different. And in those worlds, it may well be that **P2** is true.

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- And once we allow impossible worlds into the picture, we could draw distinctions amongst them (and so amongst kinds of impossibility).
 - 1 Impossible worlds are ways things could absolutely *not* be.
 - 2 Impossible worlds are worlds where contradictions are realised.
- A contradiction, such as 'an unmarried man is married', will be true in an impossible world of the second kind, but also of the first. For surely, what is contradictory just could not absolutely happen.

- And just like some philosophers draw a distinction between various kind of possible worlds, some philosophers are also happy to draw a distinction between possible and impossible worlds.
- And once we allow impossible worlds into the picture, we could draw distinctions amongst them (and so amongst kinds of impossibility).
 - 1 Impossible worlds are ways things could absolutely *not* be.
 - 2 Impossible worlds are worlds where contradictions are realised.
- A contradiction, such as ‘an unmarried man is married’, will be true in an impossible world of the second kind, but also of the first. For surely, what is contradictory just could not absolutely happen.
- But suppose that ‘Alessandro, if he exists, is a person’ is a metaphysically necessary. A world where Alessandro exists but is a piece of paper will be impossible in the first sense, though not in the second - given that ‘Alessandro is a piece of paper’ is not a contradiction.

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- This view is called *Genuine Modal Realism*.

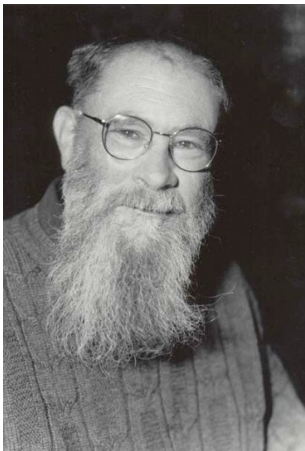
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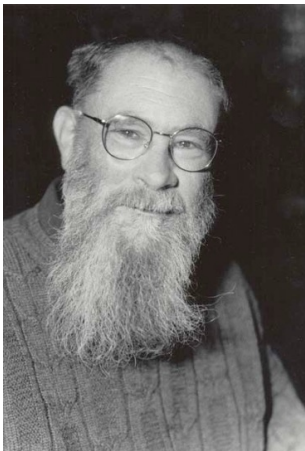
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 - 3 At least some such sentences are true.



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I believe, and so do you, that [...] there are many ways things could have been besides the way they actually are. On the face of it, this sentence is an existential quantification. [...] I therefore believe in the existence of entities that might be called 'ways things could have been'. I prefer to call them possible worlds

Lewis, D. (1973). *Counterfactuals*, p. 84

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- One way for things to be is for the table to be white. That's the way things are. But another way for things to be - a way that they are not, as a matter of fact - is for the table to be painted green. And so on for the other colours. So, there are many ways things could have been.

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- But to say that there are (many) Fs is to say that (many) Fs exist. So (many) ways things could have existed. But ways things could have been are just possible worlds. So (many) possible worlds exist.

There are countless other worlds, other very inclusive things. Our world consists of us and all our surroundings, however remote in space and time; just as it is one big thing having lesser things as parts, so likewise do other worlds have lesser other-worldly things as parts. The worlds are something like remote planets; except that most of them are much bigger than mere planets, and they are not remote. Neither are they nearby. They are not at any spatial distance whatever from here. They are not far in the past or future, nor for that matter near; they are not at any temporal distance whatever from now. They are isolated: there are no spatiotemporal relations at all between things that belong to different worlds.

Lewis, D. (1986). *On the Plurality of Worlds*, p. 2.

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- Lewis thinks that we should accept it because of the benefits it would bring. In particular, Lewis thinks that Genuine Modal Realism is philosophically fruitful in that it affords us a powerful explanatory theory.
- Thus, according to Lewis realism about possible worlds is worth the ontological cost.

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- A true reduction of modal discourse is an analysis of modal propositions given in non-modal terms. Possible worlds are a good start to provide the required reduction, by explaining modal truths in terms of truth in a possible world. But for the reduction to be complete, the notion of truth in a possible world must itself be non-modal.

*It is easy to get into a frame of mind according to which modal notions should not be taken as 'rock bottom', ontologically speaking [...] I can see that this coloured thing is extended, and indeed that all coloured things I have examined are extended, but where is the necessity, that coloured things **must** be extended? Part of the puzzlement here is of course epistemic [...] But there is a particularly metaphysical puzzlement here as well. In metaphysics one seeks an account of the world in intelligible terms, and there is something elusive about modal notions. Whether something is a certain way seems unproblematic, but that things might be otherwise, or must be as they are, seems to call out for explanation.*

Sider, T. (2009). Reductive Theories of Modality, p. 184.

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- For example, 'donkeys might have talked' is true if, and only if, there is a world donkeys are a part of and they talk in there.
- The proposed analysis of the modal claim 'donkeys might have talked' is perfectly non-modal.

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- Thus, a sentence is possible if, and only if, it is true at some ersatz possible world.
- But this characterisation of an ersatz possible world makes use of the notion of possibility. Therefore, a possible worlds analysis of modality that makes use of ersatz possible worlds in this way is not a true reduction.

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- One option is to follow Lewis and go Genuine Modal Realist.
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- One option is to follow Lewis and go Genuine Modal Realist.
Alternatively, we could accept that modal discourse is not fully reducible and just live with it.
- In the first case, we might expect that others will respond with incredulous stare; in the second case, we'd be giving the game away and admit that modality could not be fully explained in non modal terms.

Suggested Formative Essay Topics

- Lewis' Genuine Modal Realism seems to offer a true reduction of modal discourse to non-modal one. Should we follow Lewis or accept that modality is not fully analysable in non-modal terms?

Reading

Essential Reading

- Sider, T. (2009). Reductive Theories of Modality. In The Oxford Handbook of Metaphysics. Oxford: OUP, pp. 180-208.
- Lewis, D. (1986). On the Plurality of Worlds. Wiley-Blackwell. Oxford: OUP. Sections 1.1 and 1.2

Further Reading

- Nolan, D. (2013). Impossible Worlds. Philosophy Compass, 8: 360-372.
- Stalnaker, R. C. (1976). Possible Worlds. Nous, 10(1): 65-75.
- Kripke, S. (1980). Naming and Necessity. Oxford: Blackwell. Preface: pp. 1-21.