Philosophy 125 — Day 21: Overview

- 1st Papers/SQ's to be returned this week (stay tuned . . .)
- Vanessa's handout on Realism about propositions to be posted
- Second papers/S.Q.'s to be assigned next week (to be due at final)
- Agenda: Modality (Unit 3)
  - *De dicto vs de re* modal claims
  - Lewis *vs* Kripke on *de re* modal claims
  - Possible worlds as a tool for nominalizing properties, *etc.*
  - Scrutinizing Lewis' Realism about possible worlds
    - Four basic tenets of Lewisian realism about possible worlds
    - Objections to some of the Lewisian tenets
    - Alternative realist/non-realist accounts (Stalnaker/Rosen)
  - Actualism (Plantinga *et al*)

Brief Review of Modality Stuff Up to Now

- Modal operators are *intensional*: they make non-opaque sentences opaque.
- Many logics of necessity and possibility have been floated over the ages. These logics have disagreed on basic principles (axioms) for modality.
- There was no systematic way of understanding the relationships between these many modal logics. Moreover, there was no extensional semantics for modal claims. And, extensionality is considered a hallmark of logicality.
- Until the middle of the 20th century, which saw the advent of *possible worlds semantics* (*a.k.a.*, Kripke semantics). This provided a unified, extensional semantics for modal claims and modal logics. Translations liekt the following:
  - "Necessarily, p" $\mapsto$ "p is true in every possible world w that is accessible from the actual world" (the accessibility relation depends on context).
- If we assume that *all* possible worlds are accessible from here, then we get back the naive modal logic (which interprets necessity as truth in *all* worlds).

The Possible & The Actual IV: *De Dicto vs De Re* Modality 1

- So far, we've been talking about the semantics and logic of *de dicto* modal claims – claims in which modal operators are applied to *entire statements p*. There is another kind of modal claim, called *de re* (*even more* controversial!).
- Consider the following *de re* claim involving the necessity operator:

  (*i*) The thing Branden is thinking about is necessarily an even number.
- Assuming I am thinking about the number 2, (*i*) is true, because the number 2 is *necessarily* an even number (even-ness is *not* a *contingent* property of 2). But, if we move the operator *outside*, we get the following *de dicto* claim:

  (*ii*) Necessarily, the thing Branden is thinking about is an even number.
- But, (*ii*) is *false*, since it *is* a contingent property of *me* that I happen to be thinking about the number 2 (and, not, say, the number 3). In the *de dicto* claim, the operator has *wide scope*; in the *de re* claim it has *narrow scope*.
- Possible worlds semantics can also be used to understand *de re* modal claims.

The Possible & The Actual IV: *De Dicto vs De Re* Modality 2

- Naively, as propositions can be true or false in various possible worlds, objects can exist or fail to exist in various possible worlds, and in the various worlds where they exist they can have various (differing) properties. To wit:
  - "x is necessarily P" $\mapsto$ "x is P in all possible worlds in which x exists"
  - "x is contingently P" $\mapsto$ "x is P in some possible worlds in which x exists, and x is non-P in some possible worlds in which x exists"
- This provides a possible worlds semantics for claims about essential or necessary properties of objects (*e.g.*, the *kinds* in Aristotelian metaphysics).
- Moreover, we can think of each possible world w as having a "population of inhabitants". And, different possible worlds can have different populations of inhabitants (no overlaps for Lewis, but some overlaps for Kripke).
- Note: there is a key difference between *de re* and *de dicto* translations. In the *de re* case, we must restrict quantification to those worlds in which the object x in question exists. This is unnecessary in the *de dicto* case. Why?

The Possible & The Actual V: Lewis *versus* Kripke on *De Re* Modality

- We said earlier that (naively) we could understand *x*'s being necessarily *F* as *x*'s being *F* in all possible worlds in which *x* exists. For Lewis, this would reduce to *x*'s being a member of $\mathbf{F}_w$, for all *w* in which *x* exists.
- Interestingly, Lewis *rejects* this naive approach to *de re* modality. He does so because he doesn't believe that objects can be identified across possible worlds. In other words, while I exist in the actual world, Lewis would say that I don't exist in any non-actual worlds. This renders the naive approach *trivial*.
- Why does Lewis say this? He is persuaded by the following argument (Loux): Suppose that some individual (call it *x*) exists in each of a pair of worlds, w_1, and w_2. We can dub *x* as it is found in w_1, *x*-in-w_1, and *x* as it is found in w_2 *x*-in-w_2. Now, if w_1 and w_2 are genuinely different worlds, things will go differently for *x*-in- w_1, and *x*-in-w_2. But, if this is so, there are bound to be properties that *x*-in-w_1 has but *x*-in-w_2 lacks. Accordingly, if *x* exists in each of w_1 and w_2, then we have a violation of the *indiscernibility of identicals*. But, the indiscernibility of identicals is true, so our assumption that one object could occupy two different possible worlds must be false.

- Kripke and others who reject the conclusion of this argument (for reasons we will discuss below) offer the following way out. They say, we can think of properties as *world-indexed*. On this view, x can have the property being F-in-w, and fail to have the property F-in-w': *two different properties*.
- *E.g.*, Socrates might be courageous-in-$w*$ but fail to be courageous-in-w'. This does not imply that one object has and fails to have one and the same property, so it poses no violation of the indiscernibility of identicals.
- This avoids violating the indiscernability of identicals. But, on this view, what does it mean to say that my height could have been different? That for some w', my height$_{w'}$ is different than my height$_{w*}$? Is this a difference in *height*?
- Moreover, on this view, we can no longer *extensionally* distinguish having-a-heart$_{w*}$ and having-a-kidney$_{w*}$. If these properties are *world-bound*, then they have the same extension in *all* worlds (*no* extension outside $w*$).
- And, how can objects have properties *contingently*? Intuitively, having a property P contingently is to have P in some worlds but to lack $\boldsymbol{P}$ (not some *other* property) in other worlds, which is impossible on this proposal.

- Which do you think is the more unintuitive consequence? S.Q.
- Kripke *et al* point out some odd consequences of Lewis' approach. On Lewis' approach, when I talk about properties I have *necessarily*, I am really talking about properties *P* that *I* have in $w*$, and that *different people* have in w'.
- But, how are the properties of *other people* relevant to properties of *me*? When I deliberate, I want to know what *I* should do, not what *other people* should do. So, why do I care what happens to my *counterparts* who do *X*?
- If I'm deliberating about whether to bring an umbrella to work, I think about what would happen "to me" in various circumstances, were I to bring it. If it were to rain, I'd remain dry, if not, I'd be unnecessarily weighed down, *etc*.
- Say, *actually*, it does not rain, but I bring my umbrella. In some sense, I wish *I* hadn't brought *my* umbrella. But, on Lewis' view, this is wishing that *my counterpart* hadn't brought *his* umbrella. What's *that* got to do with *me*?
- But, Kripke has us wishing that we hadn't *brought-our-umbrella-in-w'*. This also seems strange, since it's the lack of *the very same property* (*having brought our umbrella*) we want, not some *other* property (if there be such).

- Lewis' story about counterparts (as opposed to "persons leading double lives" in different possible worlds simultaneously) is similar to his story about perdurance (as opposed to endurance) of persons within worlds through time.
  - Something *perdures* iff it persists by having different temporal parts, or stages, at different times, though no one part of it is wholly present at more than one time . . . it *endures* iff it persists by being wholly present at more than one time.
  - Perdurance corresponds to the way a road persists through space; part of it is here and part of it is there, and no part is wholly present at two different places. Endurance corresponds to the way a universal . . . would be wholly present wherever & whenever it is instantiated. Endurance involves overlap: the content of two different times has the enduring thing as a common part. Perdurance does not.
  - Endurance is to be rejected in favour of perdurance. We perdure; we are made up of temporal parts, and our temporary intrinsics are properties of these parts, wherein they differ one from another. There is no problem at all about how different things can differ in their intrinsic properties.
- On this view, we "identify things through time" only by *relations of similarity* between temporal parts. For Lewis, the same is true of "trans-world identity".

The Possible & The Actual VI: Possible Worlds as a Tool for Nominalization

- In recent years, realists about possible worlds (especially, David Lewis) have found clever ways to use possible worlds for the purpose of *nominalizing other* sorts of discourse, concerning universals, propositions, *etc*.
- Armed with possible worlds (we'll scrutinize the nature of these below) *plus set theory*, Lewis "nominalizes" universals, propositions, and other abstract entities. The trick is to define universals, propositions, *etc.* as *sets*. These sets will contain particulars, possible worlds, and/or sets thereof, but nothing else.
- For Lewis, a property P is just a very large set *of sets of concrete particulars*. In each possible world w, there will be a set $\mathbf{P}_w$ of concrete particulars that are P in w (*i.e.*, P's *extension in* w). The property P is just the big set, which contains all of the smaller sets $\mathbf{P}_w$ as members: $P = \{\mathbf{P}_1, \mathbf{P}_2, \ldots, \mathbf{P}_n, \ldots\}$.
- As for propositions, they are also just sets, but they are sets *of possible worlds* (not sets *of sets of* concrete particulars, like properties are). Specifically, a proposition p is just a set of *p-ish* possible worlds. Intuitively, the p-ish worlds are just the worlds in which p is true. But, this is not the official line.

- Lewis wouldn't want to say that *p* is the set of worlds in which *p* is true, since this would not *eliminate* propositions. Instead, Lewis takes a world's being *p*-ish as a *primitive* or *ontologically basic* feature of a world, and he uses this primitive aspect to segregate worlds into the *p*-ish and the non-*p*-ish.
- On this account, the actual world $w*$ is ⟦snow is white⟧-ish, and ⟦George W. Bush is President of the U.S.⟧-ish, and these are primitive features of $w*$. "Necessarily *p*" is true iff the set of *p*-ish worlds has every possible world as a member. And, "Possibly *p*" is true iff the set of *p*-ish worlds is nonempty.
- Problem: Lewis's account implies there can be *only one necessary truth* ⊤, since a necessarily true proposition is just *the set of all possible worlds*. But, it seems strange to say that "2 + 2 = 4" expresses *the same proposition as* "4 + 4 = 8." Also, there can be only one necessary falsehood ⊥ (the null set).
- There are some virtues of Lewis' approach to properties. Since it is not confined to *actual* extensions, it gives the intuitively right answer that having a heart (*H*) and having a kidney (*K*) come out as *distinct properties*.

- To see this, note that, despite the fact that $\mathbf{H}_{w*} = \mathbf{K}_{w*}$, there will (intuitively) be worlds w in which $\mathbf{H}_w \neq \mathbf{K}_w$. So, H and K will be different sets $\therefore H \neq K$.
- But, how does Lewis' account of properties handle abstract reference, generally? We want claims like "White is a color" ("W is a C") to come out necessarily true. How can Lewis' theory of properties accommodate this?
- If C is a *kind of property*, then, for Lewis, it will be a *set of properties*. This, for Lewis, makes C a set of sets of sets of individuals. Picture this as follows:

$$\text{Color} = \{\text{White}, \text{Blue}, \ldots\} = \{\{\mathbf{White}_{w*}, \mathbf{White}_w, \ldots\}, \{\mathbf{Blue}_{w*}, \mathbf{Blue}_w, \ldots\}, \ldots\}$$

- So, "White is a color" will come out true, since W is a subset of C. And, presumably, *this* will be true in all possible worlds (set theory is *necessary*!).
- What about "Courage is a virtue"? Does Lewis' modal approach allow us to avoid Loux's '*ceteris paribus* clauses'? S.Q. Moreover, how might Lewis handle Quine's trickier example "These two species are cross-fertile"? S.Q.
- Problem: Lewis' account of properties implies that properties which are exemplified by the same individuals in all possible worlds are *identical*. But, being triangular and being trilateral do *not seem* to be *identical* properties.

The Possible & The Actual VII: Scrutinizing Lewisian Possible Worlds 1

- Lewis' Realism about possible worlds rests on the following four tenets:
  1. Possible worlds *exist*. Other possible worlds are just as real as the actual world. They may not "actually exist," if "actually existing" requires something to exist *in* the actual world, but they do, nevertheless, exist.
  2. Other, non-actual possible worlds are *the same sort of thing* as the actual world: concrete, mereological wholes containing "I and my surroundings". They differ from ours "not in kind, but only in what goes on at them." We call ours 'actual' only because it is the one we happen to inhabit.
  3. The *indexical* analysis of the adjective 'actual' is correct. " 'Actual' is indexical, like 'I' or 'here' or 'now': it depends for its reference on the circumstances of utterance . . . the world where the utterance is located."
  4. Possible worlds cannot be reduced to something more basic. "Possible worlds are what they are and not another thing. It would be a mistake to identify them with some allegedly more respectable entity, *e.g.* a set of sentences of a language" – they're "respectable entities in their own right."

The Possible & The Actual VII: Scrutinizing Lewisian Possible Worlds 2

- Tenet (1) is consistent with thinking of possible worlds as "ways things might have been". But, tenet (2) seems inconsistent with this way of thinking about possible worlds. If possible worlds are ways things might have been, then the actual world should be *the way things are*, not "I and my surroundings".
- That is, we can think of possible worlds as (i) existing, (ii) things that truth is defined relative to, and (iii) things our modal claims quantify over, *without* thinking that they are *concrete* objects (or made up of concrete objects) like the actual world is. [Stalnaker's slogan: "the way the world is ≠ the world"]
- One might *think* that (3) implies (2), by implying that actuality is *world-relative* – that our world is actual relative to itself, but all other possible worlds are actual relative to themselves too, and so there is no "absolute perspective" from which non-relative judgments of actuality can be made.
- But, this reasoning is mistaken. (3) is merely a *semantical* tenet about how to understand indexical terms. (2) can have strong *metaphysical* implications.

- If one thinks (as Stalnaker does) of "the actual world" as being synonymous with "reality", then (2) can be false (and it's plausible to think it is), even if (3) is true. One can be a solipsist (one who accepts the *metaphysical* claim that *only they exist*) even if one accepts the indexical *semantics* for "I". Stalnaker: "…fictional characters are as right, from their point of view, to affirm their fullblooded reality as we are to affirm ours. But their point of view is fictional, and so what is right from it makes no difference as far as reality is concerned."
- So, one can accept (1) and (3) without accepting (2). One can, in addition, accept (4) without accepting (2). That is, one can take possible worlds as (1) existing things and (4) *ontologically basic* and *ineliminable* from our best theory of the world *without* taking them to be (2) *just like the actual world*.
- Stalnaker's alternative realism says possible are *different kinds of things* than the actual world. One natural move is to take them to be *abstract* entities. This would be consistent with accepting (1), (3), and (4), while *rejecting* (2).
- van Fraassen (a non-realist) works with "possible world stories". Similarly, Rosen endorses a *fictionalist* approach to possible worlds. Links on website.

The Possible & The Actual VIII: Actualism 1

- Many philosophers (including Stalnaker) balk at the idea that non-actual possible worlds are "just as real" as the actual world. They think of "the actual world" as *synonymous* with "reality". For them, the actual world constitutes an absolute or privileged perspective on matters of "real existence".
- *Actualists* see many problems with *possibilism* (the view that there exist non-actual, possible worlds or situations). First, they see various *technical* problems with the variety of set-theoretic possibilism Lewis endorses:
  - There can only be one necessary truth and one necessary falsehood.
    - $[\![2 + 2 = 4]\!] = [\![3 \times 6 = 18]\!]$, and $[\![2 + 2 \neq 4]\!] = [\![3 \times 6 \neq 18]\!]$
  - Necessarily coextensional properties (and propositions) are *identical*.
    - Triangularity = Trilaterality
  - Sets do not seem to be the kinds of things that we can have propositional attitudes with respect to, or that can be the bearers of truth-values.
    - Is believing that $3 \times 6 \neq 18$ the same as "believing the null set"?

The Possible & The Actual VIII: Actualism 2

- Some responses to the the technical problems. First, the problem of necessary truth/falsehood: that there can be only one of each. This problem needs to be clarified a bit. *Which sense* of necessity is supposed to be involved here?
- What's the problem with saying that if it is *logically impossible* for propositions a and b to have different truth-values, then $a = b$?
- The example involving $[\![2 + 2 = 4]\!]$ and $[\![3 \times 6 = 18]\!]$ is, arguably, not a counterexample to *this* principle. If one doesn't include the laws of arithmetic with the laws of logic, then there is no counterexample here. OK, what about:

$$[\![x = x]\!] = [\![p \text{ implies } p]\!]?$$

- It's not so obvious to me that *these* express different propositions. A similar point can be made about properties. If it is *logically impossible* for P and Q to have different extensions, then what's wrong with saying that $P = Q$?
- Stalnaker discusses these issues at length in his book *Inquiry*.