

## Lecture 2

### Concrete Modal Realism & Abstract Modal Realism

#### 1. Review

##### Concrete modal realism:

***W* is a possible world** iff...

*W* is a maximal mereological sum of spatiotemporally related objects.

- actuality is indexical
- objects are world-bound.

##### Objection from parsimony.

**Response:** Qualitative versus quantitative parsimony

A substantial part of Lewis' argument in favour of concrete modal realism consists in his arguments *against ersatzism* (or **abstract modal realism**).

#### 2. "Paradise on the Cheap"

This family of theories has been given a number of different labels: **abstract modal realism**, **ersatzism**, and **actualism** to name a few.

Theories that fall under this category share in common the following commitments:

- Everything that exists is actual. (Hence 'actualism'.)
- Our world is the only one that is *actualised*.
- Merely possible worlds exist. (Hence this is a form of realism.)
- Merely possible worlds are *abstract* existents. (Hence 'abstract modal realism')

##### i. **Everything that exists is actual.**

This amounts to a commitment that our world and its contents are all that there is.

##### ii. **Our world is the only one that is *actualised*.**

There is something distinctive or special about our world compared to other merely possible worlds. Only our world is *actualised* (i.e. only our world is such that, according to *W* *p* is true iff *p*).

##### iii. **Merely possible worlds exist.**

It is this commitment that makes theories in this category *realist*. These theories will accept the truth of sentences like 'There is a possible world where penguins have three feet'.

##### iv. **Merely possible worlds are *abstract* existents.**

All of the theories in this category agree that possible worlds are not concrete (contrary to concrete modal realism).

#### 3. Varieties of Abstract Realism

- Sentences
- Propositions
- States of Affairs
- Properties
- Pictures
- Abstract Simples

We'll focus on two of the more common candidates: **sentences** and **states of affairs**.

##### SENTENTIALISM

On this view, possible worlds are **maximal consistent sets of sentences**.

A set of sentences is **consistent** iff  
all its members can be true together.

A set of sentences is a **maximal** consistent set iff,  
for all atomic sentences *p*, either *p* or  $\neg p$  is a member of the set.

Given this, we can now understand possibility and necessity in terms of the members of these sets of sentences.

$P$  is **possible** iff  $P$  is a member of **some** world (i.e. set of sentences)

$P$  is **necessary** iff  $P$  is a member of **all** worlds (i.e. sets of sentences)

#### -Plausibility-

- Can do a lot of the world concrete realism could do.
- Preserves the useful possible-world semantics for modal claims
- Does not inflate our ontology

#### -Problems-

##### (1) Irreducible Modality

It looks like we cannot cash out **consistency** without appealing to modality.

- To be consistent, recall, was for it to be *possible* for the members of the set to be true together.

What about **syntactic** consistency?

A set of sentences is consistent just in case there is no way to derive a contradiction from its members (given FOL derivation rules).

Problem: there is reason to think that there are **metaphysical impossibilities** that are logically possible.

E.g. ' $b$  is red all over and  $b$  is green all over.'

Could we add axioms to our syntactic system?

Problem: Need to add axioms for *every non-logical impossibility*.

- This demands infinitely many '**bridging laws**'
  - The sententialist will never be able to provide them all without saying something like 'A is an axiom just in case A is non-logically necessary'.

##### (2) Expressive Power

The "worldmaking language" cannot be expressively powerful enough to express all of the possibilities that we wish to countenance.

- It seems like it is possible for there to be **distinct yet indiscernible possibilities**.
- It seems like it is possible that there are **alien properties**—i.e. properties that do not exist at the actual world (and so, for which we have no words).

##### STATES OF AFFAIRS (CF. STALNAKER, PLANTINGA)

On this view, possible worlds are **maximal consistent states of affairs**.

A state of affairs is **consistent** iff  
it is possible that it obtains.

A state of affairs  $S$  is **maximal** iff,  
for every state of affairs  $S^*$ ,  
either it is impossible that  $S$  obtain and  $S^*$  does not  
or it is impossible that  $S$  and  $S^*$  obtain.

Given this, we can understand possibility and necessity in terms of truth at maximal consistent states of affairs:

$P$  is **possible** iff  $P$  is true at some maximal consistent state of affairs.

$P$  is **necessary** iff  $P$  is true at all maximal consistent states of affairs.

Finally,

$P$  is **true at a maximal consistent state of affairs** iff necessarily, if  $S$  obtains then  $P$ .

**-Plausibility-**

- Respects actualism
- Makes worlds epistemically accessible to us
- Does not depend on any particular language to generate worlds.

**-Problems-**

**(1) Irreducible Modality**

It's immediately clear that this account of possible worlds is non-reductive. It invokes notions of possibility several times (see: definitions of maximal consistent states of affairs, and of obtaining).

**(2) "Magic"**

Call the world that represents actuality  $S_1$ .

$S_1$  stands in a special relation with the actual world (since it represents how the world is); Lewis calls this relation the **selection relation**.

The selection relation could be one of two different kinds of relation: **internal** or **external**.

A relation is **internal** iff it holds in virtue of the intrinsic natures of its relata.

A relation is **external** iff it doesn't hold in virtue of the intrinsic natures of its relata.

**External?**

Problem: Intrinsic features of the actual world necessarily depend on the actual world standing in an external relation R to  $S_1$ .

R: [ $p$  is true at our world iff our world selects  $S_1$ ].

This, Lewis argues, is **magical**. How can standing in this external relation compel the existence of, say, only bipedal penguins?

**Internal?**

Problem: It's mysterious how we could have knowledge of that relation.

E.g. Our world selects  $S_1$  iff there are, say, bipedal penguins.

If selection is an internal relation, then there must be something **internal to  $S_1$**  that makes it the case that this relation holds. A **representational property**.

How could we come to know about this property?

- Not **acquaintance**.
- Not **analysis** of what this representational property is.

E.g.

$P$  is the property of representing that there are bipedal penguins iff Necessarily, if  $S$  has  $P$  and  $S$  is selected then there are bipedal penguins.

This is merely "a **theory-schema**, which any number of different theories could fit" (175).