IB Metaphysics & Epistemology Metaphysics of Modality

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Epistemic

Moral

Physical

Logical

Metaphysical

Lecture 1 – Short Handout Introduction & Concrete Modal Realism

1. Introduction

Modal statements invoke possibility and necessity.

"Was that a bird?"

"I'm not sure, it **could have been** a plane..." "You **can't** just steal from people like that!"

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"Travelling faster than light is impossible."

"Necessarily, either P or $\neg P$."

"If you had left earlier, you would have been on time!"

"The glass is fragile."

"If an animal is a dog, then it **must** be a mammal."

"I could have been an astronaut."

Why care?

- (i) Many are ordinary claims.
- (ii) They are relevant to several different philosophical concepts and debates.

2. Modal Claims and Possible Worlds

It is **possible** that p IFF p is true at **some** possible world

It is **necessary** that p IFF p is true at **all** possible worlds

- Possible worlds => alternative ways things could have been

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3. <u>Some Important Distinctions</u>

Before we can carry on to the main question of this course, there are a few distinctions to cover. It will be useful to have these to hand in the rest of our investigations.





Epistemic Modality

"It could have been a plane" expresses...

"For all I know, the object was a plane."

OR

"My evidence is consistent with its being a plane."

Problem case:

A. Either it is necessary that Goldbach's Conjecture is true, or it is necessary that it is false. (METAPHYSICAL)

B.It is possible that Goldbach's Conjecture is true and it is possible that it is false. (EPISTEMIC)

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Argument:

- 1. Either all of the worlds are ¬GC-worlds or they are GC-worlds.
- 2. Suppose they are all ¬GC-worlds.
 - 3. So, there is no world at which GC.
 - 4. So, there is no GC-world my evidence cannot rule out.
 - 5. So, Proposition B is false.
- 6. Suppose they are all GC-worlds
 - 7. So, there is no world at which ¬GC.
 - 8. So, there is no ¬GC-world my evidence cannot rule out.
 - 9. So, Proposition B is false.

10. Therefore, Proposition B is false.

De Re and De Dicto Modal Claims

Necessarily, all humans are mortal. $\Box \forall x(Hx \rightarrow Mx)$ De dicto modality

All humans are **necessarily** mortal. $\forall x(Hx \rightarrow \Box Mx)$ De re modality

Definitions:

A formula of the form $\Box \Phi / \diamond \Phi$ exhibits modality **de dicto** iff there is neither a free variable nor a name within the scope of the modal operator.

A formula of the form $\Box \Phi / \diamond \Phi$ exhibits modality **de re** iff there is either a free variable or a name within the scope of the modal operator.

"Necessarily, the number of planets is even" could express...

- 1. At all possible worlds, the number of planets is even. (de dicto)
- 2. The number of planets is such that, at all possible worlds that number is even. (de re)

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4. Intro to Concrete Modal Realism

Roughly: Possible worlds are just like our world.

W is a possible world iff...

W is a maximal mereological sum of spatiotemporally related objects.

Spatiotemporally related \rightarrow related in time and space.

Mereological sum \rightarrow made up of parts.

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

- 1. W is a mereological sum
- 2. For any x and for any y, if x is a part of W and y is part of W, then x is spatiotemporally related to y
- 3. For any x and for any y, if x is a part of W and x is spatiotemporally related to y, then y is a part of W

On this view...

- Actuality is indexical

There is nothing special about this world with respect to the others

- Objects are world-bound
 - Nothing exists at more than one world