## Fundamentals of Metaphysics

What is required to make the world intelligible?

# Objective and Subjective

• One important component of the Common Western Metaphysic is the thesis that there is such a thing as objective truth. ... each of our beliefs and assertions represents the World as being a certain way, and the belief or assertion is true if the World is that way, and false if the World is not that way. ... Our beliefs and assertions are thus related to the World as a map is related to the territory: it is up to the map to get the territory right, and if the map doesn't get the territory right, that's the fault of the map and no fault of the territory.

Van Inwagen, "Objectivity", p. 1

#### **Puzzles**

 What must the territory be like, for it to be possible for the map to 'correspond to' the territory?

 What must the World be like, for it to be possible for our beliefs to 'correspond to' the World?

# Summary table?

Mind	World
Subjective	Objective
Мар	Territory
Proposition	Possible state of affairs
(statement, thought, <u>Gedanke</u> )	
True proposition	Fact (= actual state of affairs)
Internal object (idea, or percept)	Real object
Subjective properties	Natural kinds, universals

### The basic components of the World?

- Propositions
- States of affairs
- Particulars (Objects)
- Properties and relations
- Cause and effect

# E.g. Wittgenstein's *Tractatus*

- 1 The world is everything that is the case.
- 1.1 The world is the totality of facts, not of things.
- 1.11 The world is determined by the facts, and by these being all the facts.
- 1.12 For the totality of facts determines both what is the case, and also all that is not the case.
- 1.13 The facts in logical space are the world. ...

So says Wittgenstein in 1918. Most people probably think instead that the world is the totality of *things*, or 'particulars'.

### Propositions vs. properties

- Propositions and properties are both conceptual, or intelligible, components of reality.
- It seems that they're not independent of one another, but that one should be considered derived from the other.
  - Which one is more basic?

#### Particulars and properties are more basic?

Consider the proposition:

"Cristiano Ronaldo was born in Portugal"

Isn't it a composite of three elements? There are two particulars, *Ronaldo*, and *Portugal*, together with the relation: *x was born in y*.

 So it looks as if particulars and properties are more basic.

# Objection 1

- To make a proposition (or state of affairs) you need more than just a property and a particular. There is also the fact that the particular in question has the property.
- (This is called the *instantiation* or *exemplification* relation.)

• (E.g. the "David Lewis has a beard" example in Loux.)



David Lewis (1941 - 2001), with beard

## Objection 2

 A single proposition can be decomposed in a variety of ways.

- E.g. "Cristiano Ronaldo was born in Portugal"
  - Cristiano Ronaldo was born in Portugal
  - Cristiano Ronaldo was born in Portugal

# Objection 3

 Some propositions don't have particulars in them. E.g.

"Every person has a beard."

– How do you create such a proposition out of properties and particulars?

### Objection 4: Particulars are arbitrary

Consider van Inwagen's example:

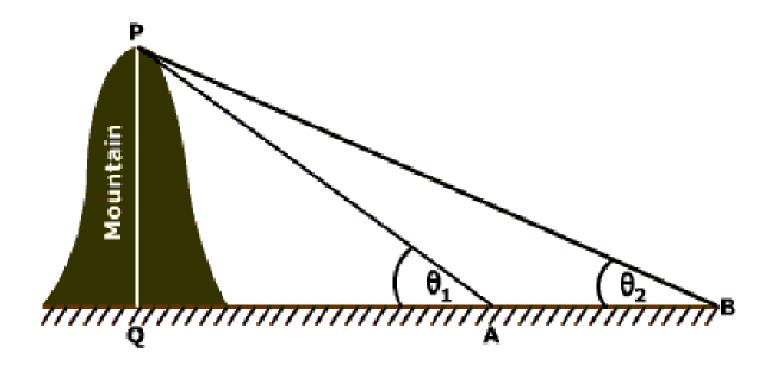
"Mount Everest is 8,847.7 meters high"

The point was raised there that the division of the earth's crust into mountains (and continents, etc.) is rather arbitrary. Such divisions are human constructs, not part of reality.

- In a similar way, perhaps the division of 'the actual world' into separate states of affairs is rather arbitrary as well?
- Perhaps these divisions are also human constructs, due to the fact that our minds have to break reality into pieces that are small enough to fit into our heads?
- (The particular properties we define, such as height, are perhaps somewhat arbitrary as well.)

### Arguments for anti-realism

- 1. It is a human fiction, one that has gained currency because it serves certain social needs, that a certain portion of the earth's topography can be marked off and called a "mountain."...
- You can't drop a weighted rope from the peak of Mount Everest to the ground and then measure the rope with a meter stick and call the result the height of Mount Everest. We therefore have to use a special instrument called a theodolite to measure the height of Mount Everest. ...



One way to measure the height of a mountain.

### Response:

These points are correct, but so what?

 Suppose (just for convenience) that God exists, so that the 'actual world' is God's (perfect and complete) understanding of the world – the "God's eye view".

- Does God have the concept of Mount Everest? Or of height? Maybe not.
  - But wouldn't he understand these concepts of ours?

# E.g. Is Pluto a planet?

Humans:

We're trying to figure out whether or not Pluto is a planet. Can't you tell us?

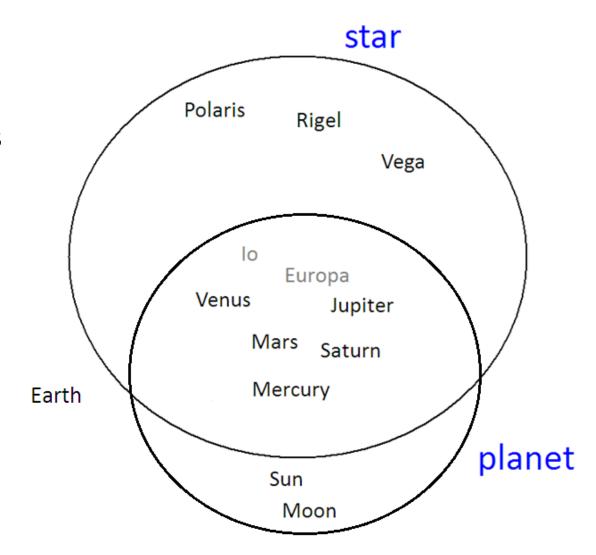
God:

I'm afraid that 'planet' is your concept, not mine. You'll just have to decide what 'planet' will mean.

However, God surely approved of the changes that have occurred to the meaning of 'planet' when the earth became a planet, and the sun and moon ceased to be planets, this was a step towards reality.

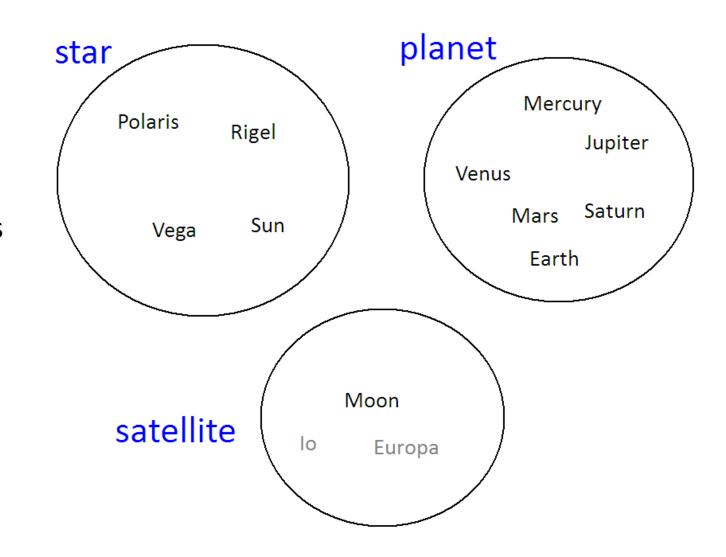
### Classification changes

Celestial bodies for Ptolemy



### Classification changes

Celestial bodies for Copernicus



#### Natural kinds

- Some human concepts are more 'real' than others, in the sense of better capturing the real divisions in nature.
- These 'natural kinds' are said to 'carve nature at the joints'.
- The old concept of a planet, as a heavenly body that moves through "fixed stars", certainly isn't a natural kind.

# What is truly objective?

- Arguably, then, the only truly objective reality is the actual world, "the totality of facts".
- The division of the actual world into "bite size" facts may be a human construct?
- The division of a fact into particulars and properties may be a further human construct?
- Nevertheless, given our language and the categories it creates, the World then determines whether or not a given proposition is true or false.

### Are propositions objective?

- Frege says that propositions are objective and mindindependent, in order to avoid 'psychologism'.
- But what of the cases where two different beliefs represent the same possible state of affairs? Or no possible state of affairs?
  - (Frege didn't have much to say about states of affairs. For him, the Bedeutung of a sentence was its *truth value*, since only the truth value of a sentence is invariant under substitutions of co-referring names. But in fact the state of affairs is also invariant.)

## Are propositions objective?

- As I mentioned in the second reading, *propositions* don't need to be objective, in order for logic to be objective.
- Basically, the Ps and Qs of logical laws can be understood as states of affairs rather than propositions, as exactly the same rules apply.
- E.g.  $\neg (P \land Q) \Leftrightarrow (\neg P \lor \neg Q)$
- Then the logical laws concerning states of affairs will be normative for human thought, just as truth is normative for belief.

"If being true is thus independent of being recognized as true by anyone, then the laws of truth are not psychological laws, but boundary stones set in an eternal foundation, which our thought can overflow but not dislodge. And because of this they are authoritative for our thought if it wants to attain truth."

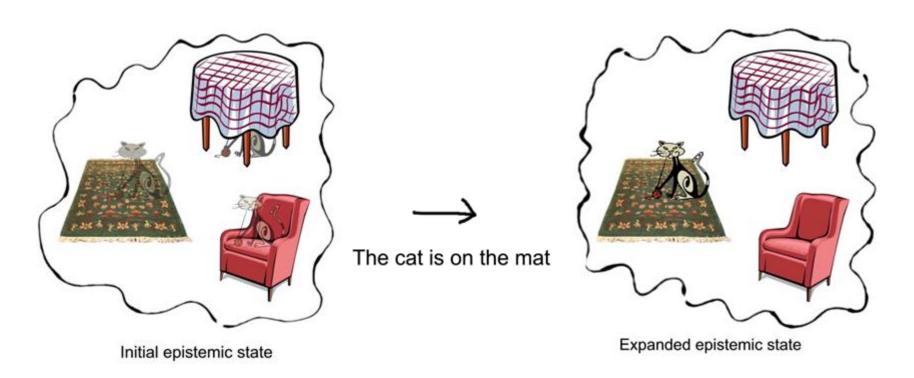
(Frege, *Grundgesetze der Arithmetik*, 202)

• Even if propositions are psychological, realists can retain Frege's view that logic consists of objective facts that human thought must conform to.

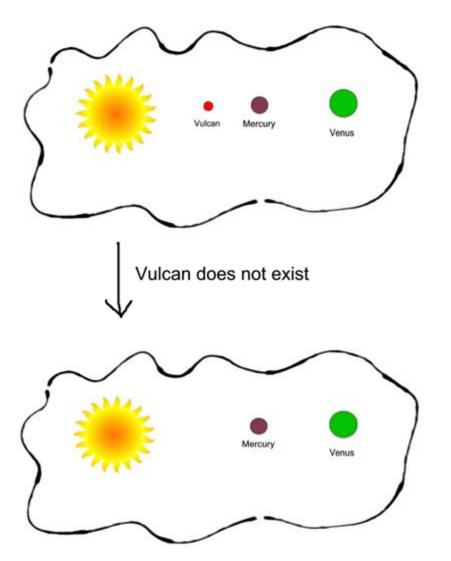
### Internal objects and belief states

- If someone believes that Hesperus and Phosphorus (the evening star and the morning star) are distinct planets, then these sentences express different beliefs:
  - Hesperus has no moon
  - Phosphorus has no moon
- What then to 'Hesperus' and 'Phosphorus' *mean* in these sentences?
- The meanings are surely components of their 'subjective world', or 'epistemic state'. Aren't they internal objects then?

### Internal objects and belief states

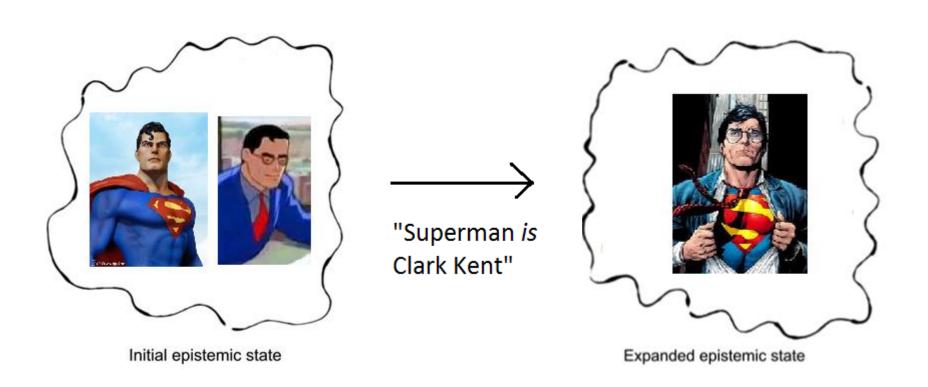


#### Claims of non-existence



Subjective world of Le Verrier, 1859

# Identity claims



# Summary table

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#### Is realism excessive?

"How could there be truths totally independent of minds or persons? Truths are the sort of things persons know; and the idea that there are or could be truths quite beyond the best methods of apprehension seems peculiar and outre and somehow outrageous. What would account for such truths? How would they get there? Where would they come from? How could the things that are in fact true or false—propositions, let's say—exist in serene and majestic independence of persons and their means of apprehension? How could there be propositions no one has ever so much as grasped or thought of?"

Alvin Plantinga, "How to be an anti-realist", *Proceedings and Addresses of the American Philosophical Association*, Vol. 56, No. 1. (Sep., 1982), pp. 47-70.

# Correcting the terminology ...

• "How could there be states of affairs totally independent of minds or persons? States of affairs are the sort of things that thoughts represent; and the idea that there are or could be states of affairs quite beyond the best methods of apprehension seems peculiar and outre and somehow outrageous. What would account for such states of affairs? How would they get there? Where would they come from? How could states of affairs exist in serene and majestic independence of persons and their means of apprehension? How could there be states of affairs no one has ever so much as grasped or thought of?"

"It is true, there could be a metaphysical world; the absolute possibility of it is hardly to be disputed. We behold all things through the human head and cannot cut off this head; while the question nonetheless remains what of the world would still be there if one had cut it off."

from Nietzsche's *Human, All Too Human*, s.9, R.J. Hollingdale translation.

#### States of affairs are "beliefs in the sky"?

- An easy objection to this realist view is that "possible states of affairs" look very much like beliefs, and "actual states of affairs", or "facts", look very much like true beliefs.
- Surely all we're doing here is (as Kant said) projecting the structure of our minds onto the world. States of affairs are "beliefs in the sky".
- (Rather like the way that God, according to some, is just an imaginary Daddy in the sky.)

#### States of affairs are divine beliefs?

• [God] is the source of what reality there is among possibilities. This is because God's understanding is the realm of eternal truths, or the realm of the ideas on which such truths depend. Without God's understanding there would be no reality among possibilities. . . .(Leibniz, Monadology, #43.)

"Even if there were no human intellects, there could be truths because of their relation to the divine intellect. But if, *per impossible*, there were no intellects at all, but things continued to exist, then there would be no such reality as truth." (Aquinas, *De Veritate Q. 1*, Article II, Reply).

"the nature of a circle, and the fact that two and three make five, have eternity in the mind of God" (Summa Theologiae Ia, q. 16, a. 7, obj. 1 and reply).

#### States of affairs are divine beliefs?

- Robert Adams calls this "Augustinian theism" and notes that it allows us to accept two things that both seem reasonable, but also otherwise incompatible:
  - (I) Possible states of affairs are discovered, not made, by our thought. They would still be there if none of us humans ever thought of them.
  - (2) Possible states of affairs are so much like propositions (belief contents), that they must depend on some sort of mind.

## Nominalism about states of affairs

• Loux: ... the general tenor of nominalist criticisms of propositions will not surprise us. We find the familiar charges of bloated ontologies, baroque metaphysical theories, and bizarre and mysterious abstract entities. We meet as well complaints about "two-world" ontologies and the epistemological problems they generate. ...

 One problem: How could concrete beings like us have epistemic access to abstract things like states of affairs?

### Can we do without states of affairs?

 Wouldn't Frege's fears of psychologism then be fully realised?

"But this conception pushes everything into the subjective, and if pursued to the end, annihilates truth."

## Are states of affairs causal?

- Shouldn't we say that facts at least can be causes and effects?
- For example, the spherical shape of the earth is an actual state of affairs (a fact).
- And this fact has effects that we can observe, such as Polaris having a lower elevation as one travels south.
- (Non-actual states of affairs don't seem to be causes and effects though. What caused Harper to win yet another general election in 2015? What are the effects of his reelection?)

- So our knowledge of non-actual states of affairs seems more problematic than knowledge of facts.
- What do we even know about non-actual states of affairs?

- E.g. *There being life on Venus* is a possible, non-actual state of affairs?
- Venus not being identical to Venus is not even a possible state of affairs? (says Kripke)

# **Necessity and Possibility**

Philosophers today love to talk about modality.
Usually in terms of 'possible worlds'.

 A 'possible world' is a maximal possible state of affairs.

- A necessary proposition is one that is "true in" (a logical consequence of) every possible world.
- A possible proposition is one that is true in at least one possible world.

## Knowledge of counterfactuals

- Non-actual states of affairs are needed for counterfactuals, it seems. E.g.
- Had Trudeau supported Bill C-51, Harper would have won the election.

 For some philosophers (e.g. David Lewis), causation is very close to counterfactual dependence: "If C hadn't occurred, then E wouldn't have occurred either."

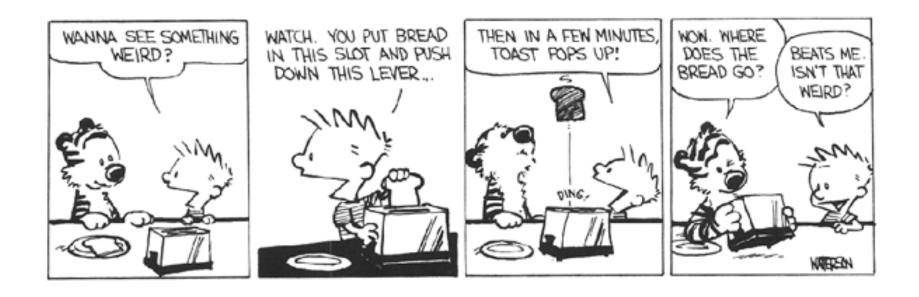
# What turns a state of affairs into a fact?

 Facts seem to have an extra ingredient of 'concreteness', when compared to non-actual states of affairs. What is this? Is it a property?

#### Descartes' idea of substance

"But as I speak these words I hold the wax near to the fire, and look! The taste and smell vanish, the colour changes, the shape is lost, the size increases ... But is it still the same wax? Of course it is; no-one denies this. So what was it about the wax that I understood so clearly? Evidently it was not any of the features that the senses told me of; for all of them—brought to me through taste, smell, sight, touch or hearing—have now altered, yet it is still the same wax. ...

... I am forced to conclude that the nature of this piece of wax isn't revealed by my imagination, but is perceived by the mind alone."



- The idea of a substance, or object, as a thing that continues to exist even while its properties change, is considered an innate idea by rationalists.
- After all, we have sensory ideas of the *properties* of the wax, but do not perceive the substance itself.

# 'Bundle' theories of objects

 "A thing (individual, concrete particular) is nothing but a bundle of properties."

 See e.g. James van Cleve, Three versions of the bundle theory, Philosophical Studies 47 (1985) 95-107.

# Objections

- 1. "If a thing were nothing more than a set of properties, any set of properties would fulfill the conditions of thinghood, and there would be a thing for every set. But in fact there are many sets without corresponding things e.g., the set {being an alligator, being purple}.
- 2. If a thing were a set of properties, it would be an eternal, indeed a necessary, being. For properties exist necessarily, and a set exists necessarily if all its members do."

# Bundle Theorists Reply ...

- "Sophisticated defenders of the bundle theory do not say that a thing is nothing but a bundle of properties; they say that it is a bundle whose elements all stand to one another in a certain very important relation. Let us call the relation *co-instantiation*.
- The informal explanation of co-instantiation is generally this: it is the relation that relates a number of properties just in case they are all properties of one and the same individual. ...

# Objection to the reply

- ... This makes it sound very much as though coinstantiation either is or is derivative from a relation that properties bear to an entity in some other ontological category, namely, the category of individuals or things, in which case the bundle theorist's analysis would be circular.
- He must therefore insist that the informal explanation is merely a ladder to be kicked away, and that coinstantiation is really a relation among properties and nothing else."

## Substance and creation

- Imagine God getting ready to create the world.
- He chooses its properties (shape, size, etc.)
- But, so far, the world is just a concept, an idea in God's mind. What is required to make it real?
- "Even if there is only one possible unified theory, it is just a set of rules and equations. What is it that breathes fire into the equations and makes a universe for them to describe? The usual approach of science of constructing a mathematical model cannot answer the questions of why there should be a universe for the model to describe. Why does the universe go to all the bother of existing?" (Stephen Hawking, A Brief History of Time.)

# The puzzle of real existence

- Consider a physical system whose behaviour must satisfy some equation of motion. In that case, each solution to the equation represents a possible history of the system, but only one of these is actual. Now, what quality of this actual history distinguishes it from the myriad of possible histories? Two things are obvious here:
  - 1. This quality of concreteness or 'real existence' is not something that can be expressed mathematically.
  - Physics as a subject has nothing to say about real existence, in the sense that physicists don't write papers about it, or construct theories of it.