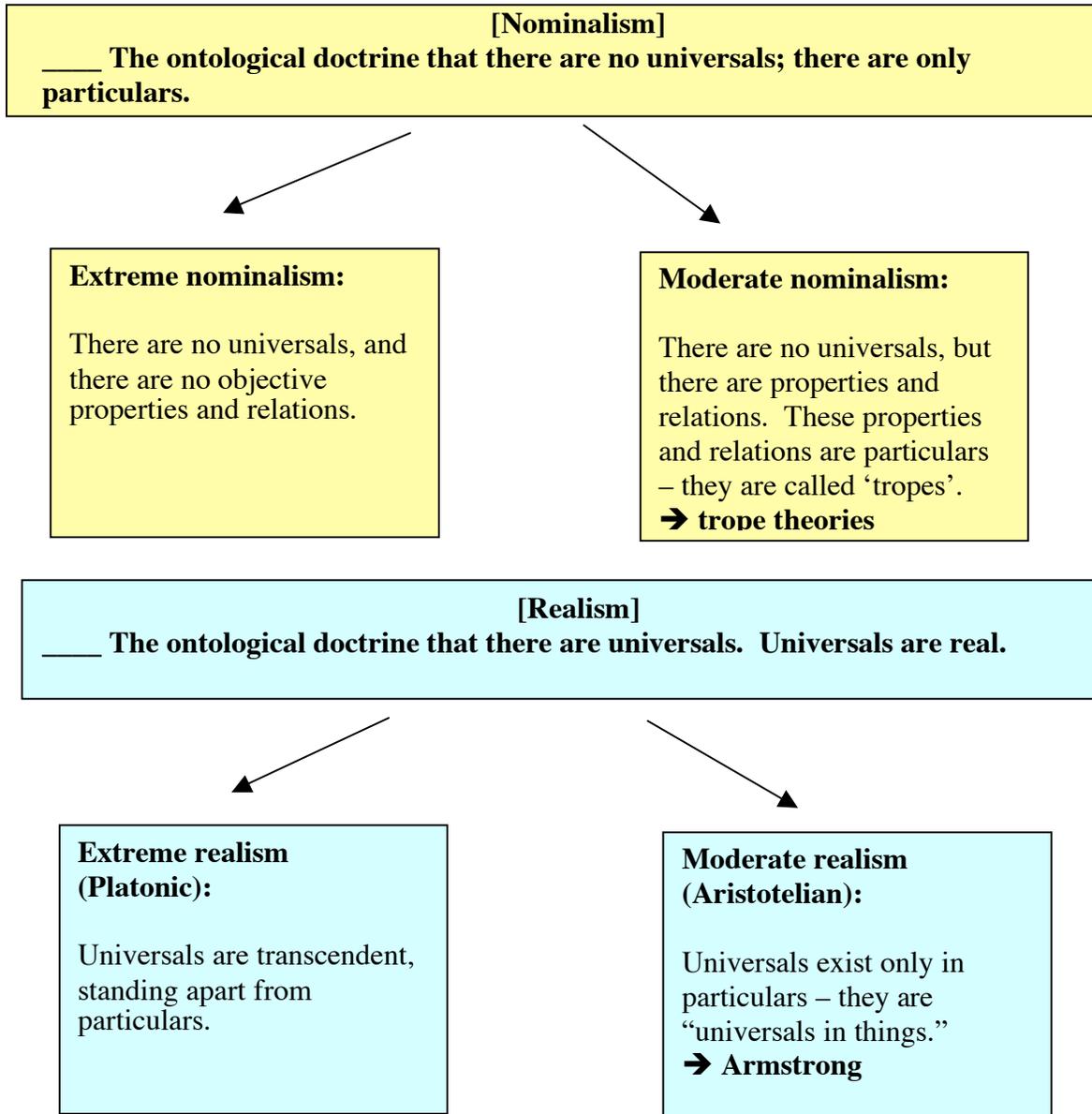


## PHIL 420: Metaphysics

### Handout 5

Professor JeeLoo Liu

#### § Universals and Properties/Relations: Realism vs. Nominalism



#### § Moderate Nominalism (tropes) vs. Moderate Realism (universals)

Where the upholder of universals finds strict *identity* of universals, there the trope theorist finds exact *resemblance* of numerically different tropes.

\* [Armstrong's First Reason in favor of Moderate Realism]

1. The Universal theorist can appeal to the presence or the lack of common properties to explain both the relation of "strict identity" as well as the relation of resemblance.
2. Thus, the existence of "common properties" is the *truth-maker* for the Universal theories.
3. On the other hand, the trope theory has no such *truth-maker* for its Axioms of Resemblance.
4. Therefore, the Universal theory is better than the trope theory.

\* [Armstrong's Second Reason in favor of Moderate Realism]

1. The Universal theorist can give account of the nature of laws of nature by describing the relation between two universals.
2. On the other hand, the trope theorist has a hard time to get away from a Regularity theory of laws.
3. But the Regularity theory is not an acceptable theory of laws of nature.
4. Therefore, the Universal theory is better than the trope theory.

§ Properties and Predicates

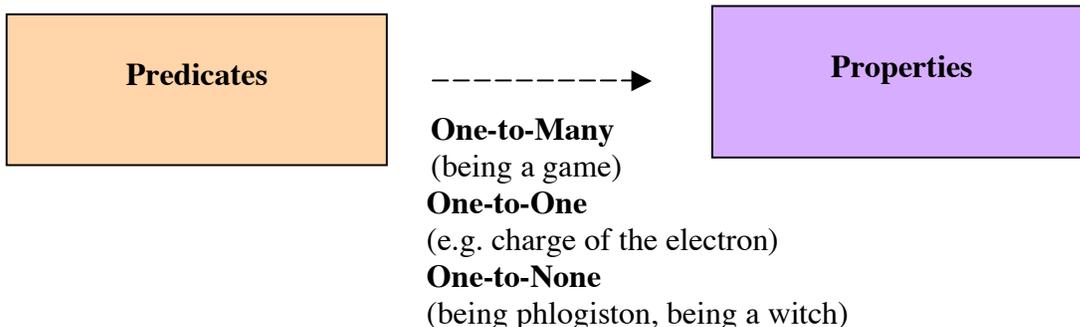
\_\_\_ Universals are not upheld in order to give semantic value to general words and phrases. They are here postulated, in the main, in order to explain the resemblances and differences that we find among particulars.

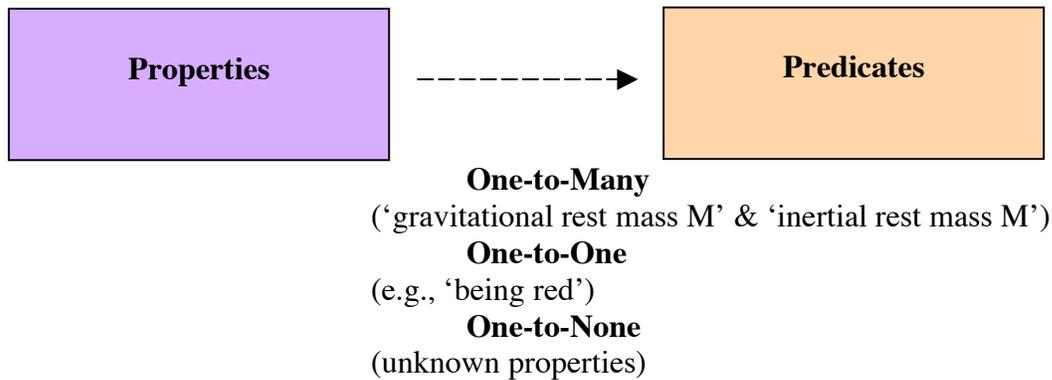
**Armstrong:** "There is no automatic passage from predicates (linguistic entities) to universals [properties]." [*Universals*, p. 84]

**Q:** How does one decide whether one is or is not in the presence of a genuine property or relation?

**Armstrong:** (p. 25) "It is to natural science that we should look for knowledge, or perhaps just more or less rational belief, of what universals there are."

➔ *a posteriori* realism





### § No Disjunctive and Negative Properties

It is a very important part of this theory of universals that, given distinct universals F and G, there are, in general, no universals that correspond to the predicates 'F or G', 'not-F' and 'not-G.'

#### \* Armstrong's Argument against Disjunctive Properties:

1. A truism about universals is that universals are strictly identical in their different instantiations.
2. If *a* is F but is not G, while *b* is G but is not F, then the predicate 'F or G' truly applies to both particulars.
3. Yet there seems no ground for thinking that *a* and *b* have something in common.
4. Therefore, 'F or G' is not a universal property.

#### \* Armstrong's Argument against Negative Properties:

1. Consider all those particulars – a miscellaneous lot – that lack a certain property *P* (e.g., lacking charge *e*).
2. It is not plausible to think of each of these particulars as having an identical something in virtue of which 'not-*e*' applies.
3. Therefore, it is not plausible to include negative properties as genuine properties.

### § Complex Properties

#### [A] Conjunctive Properties

\_\_\_ Given that F and G are distinct universals, then F&G can be a universal, provided always that a particular exists at some time which is both F and G.

Provided that F and G are both instantiated by the very same particular, there seems no reason to reject this species of complex universals.

#### \* Armstrong's Argument for Conjunctive Properties:

1. If  $a$  is  $F$  and  $a$  is  $G$ , while  $b$  is also  $F$  and  $b$  is  $G$ , then there is something in virtue of which  $a$  and  $b$  have in common, namely, being  $F$  & being  $G$ .
2. If 'being  $F$  & being  $G$ ' is common to some particulars, then ' $F$ & $G$ ' is a universal property.
3. Therefore, there are conjunctive properties.

*Q:* The red pen is on the desk and the blue pen is also on the desk, is there then a property of "being a pen & being on the desk"?

*Q:* Can we use "ease of detachment" as our criterion of acceptable conjunctive properties?

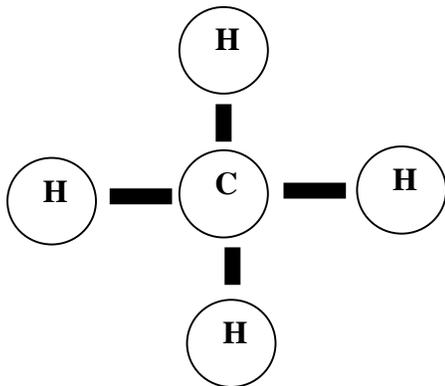
*Q:* The apple is 'red and delicious' and the (red) plum is also 'red and delicious' – is there then a property of 'being red and delicious'?

**\*Possible paper topic: Should we allow conjunctive properties if we don't allow disjunctive and negative properties?**

### [B] Structural Properties

\_\_\_ Suppose to be an  $F$  a particular must be made up of just two non-overlapping parts, one of which instantiates universal  $G$  while the other universal  $H$ , with the  $G$  part and the  $H$  part linked by the external relation  $R$ . To be an  $F$  is thus to be a certain sort of structure.  $F$  may be called a structural property.

\* *being methane* ( $\text{CH}_4$ )



The above is a diagram which represents a particular, a token, methane molecule. It is a thing with four parts of hydrogen ( $a$ ,  $b$ ,  $c$ ,  $d$ ) and one part of carbon ( $e$ ). So we have states of affairs  $Ha$ ,  $Hb$ ,  $Hc$ ,  $Hd$ , and  $Ce$ . If and only if all these states of affairs obtain, then the particular  $a + b + c + d + e$ , is a methane molecule. It is thus *a conjunction of states of affairs*.

**A complex universal is a conjunction of states of affairs type.**

## § Uninstantiated Universals (again!)

*Q:* Should we take universals as *ways things are* or *ways things can be*?

\_\_\_ If universals are ways things are, or ways things stand to each other, then it seems implausible to assert that there are entities, the ways, with no thing to be that way or no things to stand that way to each other.

\_\_\_ If universals are ways things *can* be, then it is possible to have unsubstantiated universals.

### [New Arguments for Uninstantiated Universals]

\_\_\_ Discuss:

[A]. It is known that certain sorts of chemical structure make a chemical a powerful solvent. It may therefore be predicted that a certain compound, which could be manufactured, would be such a solvent. But because of expense, or danger, or the fortuitous collapse of civilization, the compound is never manufactured. Does not this structure exist, and is it not a candidate for an uninstantiated complex property?

[B] Universals are necessarily *transcendent*; they cannot be brought down into space/time. If so, then it is possible that there are uninstantiated universals.

[C] Mathematical entities have to be universals, and some of these are possibly uninstantiated (e.g., very large infinite cardinals). Therefore, we cannot rule out uninstantiated universals.

[D] Uninstantiated universals fill in gaps between instantiated universals, e.g., “the missing shade of blue” (Hume). Postulating the existence of the missing shade of blue gives continuity to a family of universals.

## § The Eleatic Principle:

**Everything that exists makes a difference to the causal powers of something.**

**➔ To exist (to be real) is to have the power to make a difference in something’s causal power.**

*Q:* Do you accept this principle? What sort of things would be ruled as “nonexistent” by this principle?

*Q:* Do we want to use this principle as a principle for individuation of things (if two things have exactly the same causal influences on all things, then they are identical)?

### \* Armstrong’s *epistemic* argument for the Eleatic Principle:

\_\_\_ If an entity makes no difference to the causal powers of anything, then there would never be any good reason for postulating that thing’s existence. Our whole experience, including all our thinking, would go on in exactly the same way whether or not the entity existed. So why postulate it?

Q: How do you evaluate this reasoning?

**\* Armstrong's argument against uninstantiated universals:**

1. The Eleatic Principle: Everything that exists makes a difference to the causal powers of something.
2. But if uninstantiated universals exist, they are entities that are nowhere and no-when. They can't make any difference to the causal powers of anything.
3. Uninstantiated universals do not exist.

## **Properties II**

Not only do particulars resemble each other more or less closely, so the same is true of properties and relations. All colors resemble each other, and one color can resemble a second one more than it resembles a third.

There could be a one-dimensional ordering of these resemblances.

### **§ Determinables and Determinate**

Johnson 1921, *Logic*

W. E. Johnson understands this relation to be that between a class and its sub-classes. He says, the process of the logical division between a class and its sub-classes must be governed by the following three rules:

- (1) the sub-classes must be mutually exclusive;
- (2) they must be collectively exhaustive of the class to be divided;
- (3) division of the class into its co-ordinate sub-classes must be based upon some one fundamental divisions. [Johnson 1921]

**\* [Determinables]:**

\_\_\_ General properties such as having length, having mass, having colors, etc. are called 'determinables.'

**\* [Determinates]:**

\_\_\_ Absolutely specific lengths, absolutely specific masses and absolutely specific shades of colors are (the lowest) determinates.

**\* Five features of the relation between determinables and determinate**

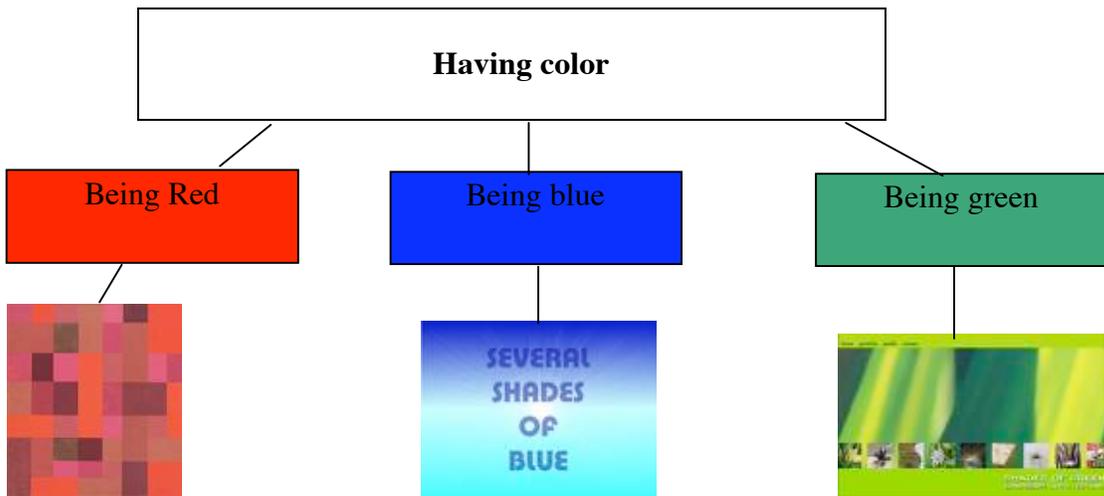
1. If an ordinary particular has a determinable property, then it is entailed that it has some determinate property, right down to the absolutely determinate property. (e.g. 'being red' → 'being a particular shade of red')
2. To have a determinate property also entails having the corresponding determinable. (e.g., 'being a particular shade of red' → 'being red')

3. If a particular has a determinate property, then it cannot have another determinate property under the same determinable. (e.g., ‘being a certain shade of red’ → can’t be another shade of red)
4. This relationship is not the same as genus/species relation (like ‘dog’ is included under ‘animals’).
5. There are systematic resemblances between the determinates falling under a single determinable, but there is no ordering among the highest determinables (e.g. there is no ordering between ‘having a color’ and ‘having a mass’).

*Q:* What is the truth-maker for this relation? Why are there such orderings among different properties?

***Q:* Do we identify universals to determinables or the lowest determinates? What do particulars share in common – a determinable or the lowest determinate?**

Examples:      determinables  
                          ↓  
                          determinates      multiple layers



***Q:* Can the mind/brain relation be interpreted as a determinable/determinate relation (that we have the same thought, which is multiply realized by different particular brains)? What other relations can be analyzed this way? (This is an interesting notion. Think of how to use it to analyze other relations.)**

***Q:* Can we apply the Eleatic principle to the determinable/determinate relation? Which property (the determinable or the determinate) in any given case would be ruled out as not having causal influences?**

**Review Questions:**

1. What is “moderate realism” according to Armstrong? How does he defend this view and do you think his arguments are successful? Explain.
2. What is Armstrong’s view on the connection between properties and predicates? What are his reasons for rejecting disjunctive and negative properties while allowing conjunctive properties? Do you think his reasons are consistent? Do you think his view is acceptable?
3. What is the Eleatic Principle? What reasons would motivate us to accept or reject this principle? Do you think it provides us a good reason to reject uninstantiated universals?
4. What is the relationship between *determinables* and *determinates*? Explain it in your own words (you don’t have to memorize the five features exactly). Do you think that universals should be determinables or determinates? Give your reasons.

**Study questions for Essay 5:**

- \_\_\_ What is Mellor’s view on properties? Does he think that properties should be treated merely as meanings of predicates?
- \_\_\_ Skip Lewis’ article.

**Optional: Start working on your view (in place of Essay 5)**

**Possible paper topic:** (At this stage you won’t need to worry about citation. Just try to get your thought organized.)

1. Do you agree with Armstrong that the Necessitation theory of law of nature is better than the Regularity theory of law of nature? Compare the two views from metaphysical and epistemological perspectives. Examine Armstrong’s critique of the Regularity theory and his defense of the Necessitation theory in depth, and formulate your own argument for or against his theory (of course, you’d have more interesting things to say if you took the opponent side).
2. Are there uninstantiated universals? Compare arguments for and against the possibility of uninstantiated universals and choose the side you wish to defend as your thesis.
3. Is it better to conceive universals as transcendent (Platonic) or as immanent (in things)? Compare Russell’s and Armstrong’s theories and argue for one of them.
4. Should we allow conjunctive properties? Are there conjunctive properties corresponding to all conjunctions or conjunctive predicates? If not, what criteria could we use?