Properties = Universals. Universals differ from particulars in two main ways. They are not just characterizable but characterizers – they specify how things are. And they are (potentially) wholly present at two or more locations. Words, classes, and tropes are perhaps characterizers, but they lack the multiple location feature. People and tables have the multiple location feature, but they aren’t characterizers. Armstrong thinks you need universals to explain naturalness vs. arbitrariness of classes. What not take naturalness as a primitive? Armstrong’s reasons:

Degrees of naturalness make us hanker after a mechanism (like degrees of warmth). Resemblance nominalist can say: more natural because members more similar. Realist can say: more natural because members share more properties or more fundamental properties. Primitivist has to say more natural just because. (Everyone has to say that eventually.)

Co-extension If all there is to “sharing a property” is cohabiting a natural class, then presumably properties are classes. But then if two properties are coextensive, the theory can’t tell the difference between them. Renateness = cordateness, unicornhood = dragonhood, etc, being a right-angle triangle and being Pythagorean \((a^2 + b^2 = c^2)\). (Doesn’t follow from things having a property in common if they cohabit a natural class that properties are natural classes. People have a senator in common if they are from the same state, yet senators aren’t states.)

Causation The pear depresses the scale due to certain properties only: its heaviness not its greenness. If the heaviness were a set, then it depresses the scale by virtue of belonging to that set! “How does this relation of an individual [heavy thing] to the whole class of [heavy] things get into the causal act?” (29). (The pear depresses the scale because it’s heavy, end of story. There is trouble if the pear is in turn heavy by virtue of possessing the property of heaviness. But that’s what the realist thinks, not the nominalist.)

Realists say, red things resemble each other because they have a property in common. Resemblance-nominalists turn this around: they “have a property in common” – that is, they’re all red – because they resemble each other. Here’s the idea. Take as exemplars "a certain tomato, a certain brick, and a certain British post-box. Let us call them A, B, and C for short. Then a red object is any object which resembles A, B, and C as closely as they resemble one another."

Suppose we have a similarity measure \(\sigma\) mapping any two objects to a real number in \([0,1]\). Let \(m\) be the max of \(\sigma(A,B)\), \(\sigma(B,C)\), and \(\sigma(A,C)\). The resemblance-class induced by A, B, C is the set of objects \(X\) such that \(X\) resembles each of A, B, C to degree \(m\). The claim seems to be this: for \(X\) to be red is for it to belong to \(R(A,B,C)\). Some objections.

Regress Russell in Problems of Philosophy: “If we choose to avoid the universal whiteness ..., we shall choose some particular parch of white...and say that anything is white if it has the right sort of resemblance to our chosen particular...[But] since there are many white things, the resemblance must hold between many pairs of particular white things; and this is the characteristic of a universal....The relation of resemblance therefore, must be a true universal...” (Russell says, the pairs AB, CD, etc. resemble each other; so there has to be a universal resemblance. But the whole point of the resemblance theory is to deny that "these things resemble each other" implies "there is a universal they share." If A, B, and C can all be white without sharing a universal whiteness, why can’t AB, CD, EF resemble one another without a universal of resemblance?)
It now becomes trivial that the post-box is red.

This tomato has to exist for there to be such a thing as red?

Why these paradigms in particular?

Hard to keep red things in and non-reds out. A red star out of space is not very similar to any of A, B, C, so it won’t count as red, though it should. A tomato-shaped mailbox made of brick is quite similar to all of them, but it might be green.

Neither sort of nominalism works, apparently, so we are driven to realism. Big question: should we accept the

Principle of Instantiation, Each universal is instantiated (at some time or another) in a particular.

Transcendental realists like Plato say no; immanent realists like Aristotle say yes. Start with the former. Where do these uninstantiated universals – so presumably all universals – reside? You are going to need a separate realm: Platonic heaven. Big problem with this.

Consider the exemplification relation E (converse of predication). A relation is internal if whether x bears R to y depends entirely on what x and y are like intrinsically, that is, “in themselves”; otherwise external. Taller-than is internal, far-from and cause-of are external. Is E internal or external? If exemplification is external, then it seems all objects are intrinsically just alike; only their relations differ. This leaves a mystery: why do these things bear relation E to roundness and those bear it to triangularity? And how can triangularity be causally relevant, if it doesn’t show itself down here where the causation is happening? Suppose then that E is internal. Then whether x exemplifies roundness turns on something about x “in itself.” Shouldn’t roundness be this intrinsic feature rather than the universal in heaven?

So we’ll be immanent realists, rejecting uninstantiated universals; instantiated ones can be down here where their instances are. Being instantiated is not enough, though. Disjunctive universals (being round-or-charged) are out, because a universal is something its possessors have in common, and there’s nothing round-or-charged things have in common. Also, disjunctive properties confer no causal powers; the causal work is always done by one disjunct or the other. Negative universals are out for similar reasons. But conjunctive universals are OK. Their possessors are to that extent similar. And they confer causal powers; being charged and moving confers the power to induce a magnetic field.

Negative and disjunctive predicates apply in virtue of “other” universals. So no automatic passage from meaningful predicate to corresponding universal. Helps with problem of family resemblances (quote from W. on 97). The moral of the game example is that a predicate doesn’t always apply in virtue of same universal: $\neg \exists G \forall x (x$ is a game because $x$ has $G$). But Armstrong can accept this. He claims only that $\forall x \exists G$ (x is a game because x has G).

This leaves the question of how to tell which predicates apply for the same reason each time, and which for different reasons, that is, on account of different universals. Armstrong thinks you can't decide this by armchair speculation. Then how? Properties go with causal powers; science taxonomizes by causal powers; so we should look to science. Armstrong is an aposteriori realist, perhaps the first.