

# Exemplification as parthood

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June 11, 2011

Arguments for exemplification as parthood:

1. from what immanence amounts to
2. from what generic dependence amounts to
3. from the nature of universals

## Aristotelian universals

Most realists about universals think they are dependent entities. They are not individually dependent on their bearers, as tropes are, but nevertheless generically dependent on them. It is part of their nature that they cannot exist unexemplified.

They are not free-floating, as they would be in a Platonic heaven or a Fregean third realm, but are tied to their exemplifications: their ‘what’, so to say, is a ‘how’ – not of themselves, but of the particulars that are qualified by them. The tie that binds Aristotelian universals to their exemplars is quite strong: not just do universals (generically) depend on their exemplifications, they are also individuated by them. Universals are what they are in virtue of how they make their exemplifications to be. The universal  $F$ , for example, is what it is, in virtue of the fact that it is what all the  $F$ 's have in common. It is immanent to them.

Instantiation requirement:

**(inst)** Every universal is exemplified.

It is unclear, however, what immanence amounts to. My proposal is that immanence is parthood:

**(immun)** A universal is a (non-spatiotemporal) part of every particular that exemplifies it.

At first sight, this may seem implausible.<sup>1</sup> Not even Aristotle believed it (*Cat. 2: 1a24-25, 5: 3a31-32*). The plausibility it may have, I think, stems from two considerations: a general ban on necessary connections between distinct existences, lately come to be known as the doctrine of *Humean supervenience*<sup>2</sup> and the fact and the nature of the property transfer between universals and their exemplifications.

Can we even go further? Does **(immun)** not only give us a necessary, but also a sufficient condition on exemplification? Not so: not all universals that are part of  $a$  are exemplified by  $a$ . There are, in other words, both upwards and downwards specific properties. So we need further conditions on parthood to turn **(immun)** into an account of exemplification.

Another difficulty is that exemplification and parthood, even with additional conditions imposed, have different logical properties. Parthood is a formal, internal relation, while exemplification is usually taken to be external and material. What we have to do then, is to defend the claim that exemplification is an ‘internal’ relation which may hold contingently and to develop a theory allowing us to take exemplified properties to be parts of their exemplifying particulars.

If exemplification is parthood, this means that the world of objects is much more interconnected than we believe

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<sup>1</sup>Merz calls it the “commonsense, but misleading, model” in its “naive form” (Mertz 1996: 19).

<sup>2</sup>Cf. Lewis (1986: xi–xiv), Lewis (1994), Loewer (1996).

to be.<sup>3</sup> Far from being a *reductio* (we seldom have non-negotiable intuitions about disjointness), I take this to be a mayor advantage of my claim: we can explain similarity as overlap.

### How not to do it: thick and thin particulars

The paradigm case of truthbearers in need of truthmakers are singular existentials, claims to the effect that such and such an entity exists. In such cases, it seems incontestable that the entity in question, iff it exists, makes the corresponding claim true.<sup>4</sup> But how is this compatible with the world's being a world of states of affairs? John's existence, after all, is not a state of affairs (Armstrong 2004: 6). But perhaps John is?

John is a non-mereological component of the state of affairs of John's being human, which is making it true that John is human and hence, by the entailment principle (truthmaking distributes over entailment),<sup>5</sup> also that at least one human being exists (Armstrong 2004: 21). But is John's being human a minimal truthmaker? Could not the remainder of the state of affairs be abstracted, leaving us just with John? Armstrong (2004: 55) says it can: though every state of affairs involving humans is a truthmaker for the truth that at least one human exists, only the individual human beings are minimal truthmakers. But are they necessitating it? Only, it seems,<sup>6</sup> if they are essentially human beings, i.e. cannot exist as non-humans. But let this be assumed.<sup>7</sup> In some sense, then, John is more minimal a truthmaker than John's being human.

Sometimes, however, the (non-mereological) inclusion relation goes in the other direction: while the mereological fusion of Venus and Mars, for example, is a truthmaker for the truth that Venus is greater in size than Mars, it is not a minimal truthmaker:

“For this truth, it seems that we do not need all the properties of the two objects, or even all their non-relational properties. It is enough that Venus is a certain particular size, and that Mars is a certain particular size. These are states of affairs. The minimal truthmaker appears to be the mereological fusion of these two states of affairs. The other properties of Venus and Mars seem irrelevant.” (Armstrong 2004: 50)<sup>8</sup>

Here, the inclusion, goes the other way round: *Venus's being of size m+Mars's being of size n* is here said to be more minimal than *Venus+Mars*. A distinction is needed.

In response to the criticism of Devitt (1980: 98) that his account renders exemplification obscure, Armstrong (1980a: 109–110) claims that while we can distinguish the bare or ‘thin’ particular from its properties and the unexemplified universal from its exemplifications in ‘thick’ particulars, neither can exist without the other. The thin particular is the “thing taken in abstraction from all its properties” (Armstrong 1978: 114), the particular “taken apart from its properties” (Armstrong 1989b: 95), it is “the particularity of a particular, abstracted from its properties” (Armstrong 2004: 105).<sup>9</sup> It is the thin particular John that is contained, as a proper but non-mereological part, within the state of affairs of John's being human.

<sup>3</sup>Jubien (1997: 45) takes this to be a *reductio* of the thesis: “The property of *being a table* cannot literally be a physical *part* of a table. For suppose we have two tables in front of us. If *being a table* were a physical part of *one* of them, then the *other* wouldn't be a table since it doesn't share any parts with the first.”

<sup>4</sup>(Cf. eg. Mulligan et al. 1984: 300) Armstrong (2004: 6) calls the relation between John and the proposition that John exists “the simplest of all truthmaking relations”.

<sup>5</sup>Armstrong (2004: 11) restricts the entailment principle to ‘purely contingent truths’ $\square\Box$ , i.e. truths that do not contain any necessary conjunct on any level of analysis.

<sup>6</sup>Cf. Fox (1987: 194), Restall (1996: 332) and Lewis (1998).

<sup>7</sup>Curiously, Armstrong extends this account to merely possible entities. He says that the minimal truthmaker for the truth that there are no arctic penguins is the totality states of affair that these some fusion comprises all the arctic animals (Armstrong 2004: 75–76). He then continues: “In the same way, if we work with the totality of all birds, we eliminate the phoenix” (Armstrong 2004: 76) But this presupposes that the phoenix, if it existed, were essentially a bird. In the same spirit, the minimal truthmaker for “there are no unicorns” is said to be the totality state of affairs that all ‘horse-like creatures’ lack ‘unicorn-making characteristics’ (Armstrong 2004: 36,76) – but for this to *exclude* unicorns, it has to be assumed that unicorns are essentially horse-like and essentially have the unicorn-making characteristics. But if, contra Kripke, the possibility of unicorns is conceded, then certainly also the possibility of unicorns that lost their horn or some other of the ‘unicorn-making characteristics’.

<sup>8</sup>In the same vein, Armstrong (2002: 34) says that *O* itself is a truthmaker of “*O* has a mass of five kilograms”, albeit not a minimal one.

<sup>9</sup>Armstrong (1997: 109) says it is “the particular abstracted in thought from its non-relational properties”, but then makes it clear later that he means all properties (Armstrong 1997: 123). Sometimes, eg. in Armstrong (1989b: 95) and Armstrong (1989a: 52), Armstrong says that the thin particular has some properties: though it is thin, it is still clothed and not bare. It is not clear, however, which properties these might be. They are not the essential properties, for the thin particular together with its essential properties is intermediate between the

The thick particular, on the other hand, is the “particular taken along with all and only the particular’s non-relational properties” (Armstrong 1997: 124). It is the state of affairs of the (thin!) particular’s having all its nonrelational properties (Armstrong 1989b: 95), the particular “with all [its] (non-relational) properties upon [it]” (Armstrong 1997: 176). These properties are said to be “contained within it” (the scare quotes are Armstrong’s) and it “enfolds” these properties “within itself” (Armstrong 1989b: 95). It is in the fusion of the thick particulars that *Venus’s being of size m* and *Mars’s being of size n* are contained.

Here we have another violation of combinatorialism: the thick particular depends on the thin and the thin on the thick. They are ‘wholly distinct’ in the sense that they do not overlap in a mereological part. The thick particular could not exist without a ‘hook’ to hang the properties on; it could not be a mere bundle of properties. The thin particular, however, is a mere abstraction which does not enjoy independent existence: though there is no thick particular of which it must be a component, it must be a component of at least one (Armstrong 1989a: 52).

It is a slip from thin with thick particulars, I think, that made Armstrong infer necessitarianism and not just internalism from the sufficiency argument in favour of states of affairs. If truthmakers are to be sufficient for the truthmaking they do, this just means that their standing in the truthmaking relation to certain truthbearers cannot depend on anything external to them, i.e. that it must supervene on their intrinsic properties. Only if these intrinsic properties are conceived of as the properties of thick particulars is the truthmaking relation itself *necessitated* by the mere existence of the truthmaker. Thin particulars, or more generally particulars having not all their intrinsic properties essentially, can be ‘sufficient’ for their truthmaking job without being so necessarily. The confusion is most apparent in the case of singular existentials: if John is to make it true that John exists, then the truthmaker cannot be the thick particular John. For thick John could fail to exist (i.e. John could have different intrinsic properties) and it still be true that John exists. So must be thin John, or at any rate John stripped of his non-essential properties, that makes it true that John exist. But these entities are mere abstractions in Armstrong’s ontology – it is not even clear how they can have any properties at all.<sup>10</sup> The “cross-categorical unity” of thin particulars and universals seems indeed “the most puzzling unity of all” (Armstrong 2004: 267).<sup>11</sup> But it is not just puzzling what it is, but even how it can be possible at all. Exemplification between a ‘thin’ particular and some properties, it seems, would be an external relation, connecting the particular with something outside itself.<sup>12</sup> The sufficiency argument, however, then requires us to bring this external relation into the truthmaker – Bradley’s regress would follow.

Exemplification, however, is no less mysterious when considered a relation between the thick particular and its properties. The ‘thick’ particular “is conceived as already possessing its properties” (Armstrong 1978: 114) and thus does not need to exemplify them. Armstrong (1989a: 52) and Armstrong (1997: 125) say that the ‘thick’ particular has its properties *necessarily*. Strictly speaking, however, the ‘thick’ particular does not exemplify *any* of its (first-order) properties (except perhaps its relational properties). It is, so to say, already ‘saturated’ (the terminology is from Armstrong (1980b: 109)); properties exemplified by it would be second-degree properties. Second-degree properties, however, would give us second-degree states of affairs, which are (according to Armstrong even necessarily) different from first-degree ones.

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thin and the thick particular (Armstrong 1997: 124). Presumably, the thin particular has just its formal properties, like *being a particular* (cf. Hochberg 1999: 68). If we arrive at our concept of thin particulars by ‘partial consideration’ (Armstrong 1997: 109), then their properties would be those we cannot subtract even in thought.

<sup>10</sup>It is even doubtful whether thin particulars can make true the statement that there are thin particulars. For if the world is a world of states of affairs and truthmaker theory is our guide to ontology, then, as Armstrong repeatedly argues, truthmakers are states of affairs, i.e. what thin particulars precisely are not. The problem generalises to necessary relations more generally: whenever two things are ‘internally’ (essentially) related, Armstrong says repeatedly, some statement to that effect is made true just by the two things themselves (cf. eg. Armstrong (1997: 2–3, 89) and Armstrong (2004: 50,121)). Because the things could not both exist without standing in that relation, their joint existence itself makes it true that they do so. But if there are internal relations between universals, like resemblance, parthood and identity, then at least some truthmakers are not states of affairs.

<sup>11</sup>As Armstrong recognises, the puzzlement is not avoided by speaking of a non-relational tie. This is just to label the problem: “One’s first response to this is naturally extremely negative: are there two constituents involved or not? If so, how can they fail to be distinct terms? If they are distinct terms, how can they be ‘tied’ together except by a relation? It is no good simply *talking* about non-relational ties: or, to put it another way, one philosopher’s solution is another philosopher’s problem.” (Campbell 1990: 15); “A non-relational tie between distinct things is pretty mysterious. Seemingly, if the things are distinct then the tie is a relation. If the tie is not a relation then they are not distinct. So a non-relational tie could hold between distinct things only if they are not distinct. That’s how it seems at first. Still, we need the tie if we want universals and particulars.” (Baxter 2001: 449)

<sup>12</sup>Numbering relations, e.g., would be external if they held between properties and *thin* particulars (Armstrong 1997: 176).

It seems mysterious, then, how either the thin or the thick particular could have any properties.<sup>13</sup> But even if they can, they do not exemplify them in a way that helps us in our quest for truthmakers for contingent predications. The thin particular, even in conjunction with its properties, does not necessitate any contingent truths about it. The thick particular does necessitate the truth, but only because it necessarily has the property attributed to it. Necessitarian truthmaking by particulars of contingent predications and factualism are incompatible.

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<sup>13</sup>This means that the introduction of states of affairs does not *explain* the relation of exemplification: This has been, e.g., Linsky's view: "The notion of a fact is introduced precisely to provide an explanation where others just provide truth conditions. Facts are deemed necessary in order to show what it is for an object to have a property." (Linsky 1994: 193) Armstrong is much more cautious: Armstrong (1997: 114-115) says that we need states of affairs because something "is needed to weld [universals and particulars] together" and Armstrong (2002: 33) holds that the acceptance of states of affairs helps us avoiding the problem of explaining exemplification. States of affairs rather presuppose that we can already make sense of particulars and universals combining into entities that exist if and only if a corresponding proposition is true. They do not, contra Armstrong (2004: 24) provide the "ontological connection between subjects and predicates" but presuppose that such a connection has already been made.