

Instantiation as Partial Identity

If you believe in universals and particulars, and you believe that neither are simply bundles of the other, then you need to make sense of instantiation, what Armstrong calls the fundamental tie ([2], p. 118). It needs to be a ‘non-relational tie’ ([42], p. 169).¹ That is, it can be neither an internal nor an external relation, as Armstrong construes them ([2], pp. 85, 87). Internal relations are always necessary – the relata can’t exist without them – but instantiation is sometimes contingent – the relata can exist without it. External relations are or involve additional entities, but instantiation is not an additional entity. The fabled Bradley’s regress forces this last conclusion. If the tie between universal and particular were an additional entity, a new tie would be needed to tie it to them and so on.²

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. So the mystery needs to be cleared up if possible.

There is other work to be done too. Armstrong in [2] has discerned the main characteristics of the tie. There are four. Besides being contingent (p. 118), it is non-mereological (p. 118), makes states of affairs particular (p. 126), and is a kind of inseparability.³ Discerning these is a clear advance, but there is no theoretical unity to the list. A further advance would be to give an account of the tie that entailed its characteristics.

¹ See [41], p. 388; [28], pp. 211-212.

² I say ‘fabled’ because it distracts from Bradley’s real concern in Ch. 2 of *Appearance and Reality* -- how a relation could make many qualities into a single particular. See [7].

³ In [2], Armstrong rejects bare particulars (p. 86) and uninstantiated universals (p. 38), though with some reservations (p. 154). Thus he speculates that a universal can’t exist without some particular or other and vice-versa (pp. 267-68).

I propose to reduce the mystery and increase the unity with my theory of aspects. That might seem a case of explaining the obscure with the more obscure, but I hope to show otherwise. I will argue that belief in universals commits one to belief in *aspects* of universals. With the conceptual resources of a theory of aspects one can explain the non-relational tie.

I have presented this theory of aspects in ‘The Discernibility of Identicals.’ ([6]; see also [9], [10]). The underlying idea is that an entity can differ from itself without contradiction. Something can be true of one aspect of an entity that is false of another aspect of it, even though its aspects are numerically identical with it. Understanding the theory requires appreciating the role of phrases such as ‘insofar as’ or ‘to the extent that’. That appreciation allows us to understand sentences of the form ‘x insofar as it is F is H, whereas x insofar as it is G is not H’ and ‘x insofar as it is F is identical with x insofar as it is G’. I’m not exactly saying that all identity sentences, nor all predications in general, are elliptical for ones that mention aspects.⁴ Some are, of course, e.g. ‘x differs from itself’. However I am saying that all sentences can be more perspicuously paraphrased by ones mentioning aspects or quantifying over aspects. For example ‘Socrates is snub-nosed’ can be put ‘Socrates in some aspect is snub-nosed’. Realising this allows us to make Leibniz’s Law more precise. The gist of it is that no entity has a property in some aspect that it lacks in every aspect. The law allows an entity to have a property in one aspect that it lacks in another aspect, and this allowance I exploit.

It follows from the theory that an aspect can lack properties that the entity itself has in virtue of having them in other aspects. Thus there is some resemblance between aspects as I conceive them and various simulacra that have been posited such as Brentano’s accidents, Castañeda’s guises, and Fine’s qua objects. All have fewer properties than the individuals that they are intimately related to. The main difference is that while differing aspects of an entity are on my view numerically identical, differing

⁴ Nonetheless this is an interpretation of me close enough for most purposes. It is inspired by Geach’s famous claim that identity sentences are elliptical for ones using using sortals ([23], p. 3). In this way Geach is said to have relativized identity. I am reluctant to say that I myself am relativizing identity, since that seems really to mean that the identity relation has additional relata. However aspects of something are not additional things. As an aside, it looks like Geach’s theory could be clarified by appeal to aspects. When he says that there are two legitimate ways of counting the inhabitants of Leeds though there are not surmen in addition to men, we could understand him to be saying, for instance, that Geach insofar as he is a

examples of any of the simulacra are numerically distinct. Thus they do not give us cases of something differing from itself. Their unity with each other is not identity but rather is provided by dependence on the same substance, in the case of Brentano ([18], pp. 6-8, 115-116); various ‘sameness’ relations, in the case of Castañeda ([19], pp. 127-129, 143-147, and [36], pp. 143-151); and by sharing a constituent, in the case of Fine ([21], p. 100). The importance of this main difference between aspects and the various simulacra will appear immediately. I will begin by showing that the sort of multiple location which is characteristic of a universal requires that a universal differ from itself. So it has aspects. Once that is established, I can begin to explain instantiation.

My presentation will be programmatic. The problem of instantiation is so basic, with so many ramifications, that a full treatment is too much to hope for. My goal, rather, is to show the promise of a new approach.

I.

To discern aspects in universals, we need to consider an old objection to them. We find it in the *Philebus* at 15b-c.⁵ Let me call it the multiple location objection (cf. [3], pp. 98-99). Boethius assumed a version of the objection was decisive ([12], pp. 21-22). It motivated his version of moderate realism so influential on Aquinas and Scotus, and hardly changed even in Locke. Part of the influence of the theory depended on the perceived strength of the objection, which goes like this: A universal cannot exist as a universal in the mind-independent world. If it is wholly present in both of spatially separated particulars, then the universal is spatially separated from itself. In Socrates’ words: ‘The whole of it...get[s] apart from itself.’ For a given location, the universal is all there yet there is more elsewhere. Thus the universal is where it is not. But that’s absurd.

Armstrong says that this problem can be resolved by understanding space-time as a structure of states of affairs ([3], p. 99). But an easier solution is available, and seems to be assumed in a dark comment that a universal has all the environments of its particulars without contradiction ([2], p. 101; see also p. 222). The solution is as follows: The objection assumes that **being wholly present at one location entails being not at all**

man is identical with Geach insofar as he is a surman ([23], pp. 10, 12). (Here I pretend that there are surmen, something I doubt.)

⁵ See also the *Parmenides* at 131b, both in [35].

present at a separate location. On this assumption multiple location yields contradiction. But universals are just the sort of thing to which the assumption doesn't apply. That a universal is wholly present at a location simply means it itself is there, not just a part of it. And it is not that 'more' of the universal is at a different location. Only the universal itself is there. Thus the assumption boils down to this: **If something itself is at one location then it itself is at no separate location.** But this just begs the question against the believer in multiple location. Reject the assumption and the objection fails.

This solution works and yet is too quick. An objection that seemed utterly convincing to great minds deserves a diagnosis of its plausibility if one has given a diagnosis of its failure. I will suggest that there is an interpretation of the assumption on which it is true. That interpretation, plus a natural way of thinking of identity, makes the multiple location objection decisive against universals. Construing universals as immune to the objection thus involves another way of thinking of identity, one that involves aspects.

The assumption is true when read as follows: **Something insofar as it is in one place, is not in a separate place.** This is compatible with its being in the separate place too. However one is only selectively attending to it; one is engaged in a partial consideration. One is thinking of it only insofar as it is in the first place.

Thus a universal insofar as it is in one location, is not in another. Insofar as it is in one location, it is separate from (spatially discontinuous from) itself insofar as it is in the other. We understand these two sentences and see their truth, even if we don't have a worked out theory of their grammar and meaning.

What sort of distinction are we making here? In medieval parlance, we have three choices: a mental distinction (or distinction of reason), a real distinction, and a formal distinction ([43], pp. 16-26).

We nowadays are likely to see only a mental distinction. That is, we are likely to see a distinction only between different concepts applied to the same thing. We would parse 'Insofar as it is here, it is not there' as 'It is here and the concept of being here does

not include being there’, where including is entailing or explaining.⁶ But such a reading cannot make sense of the second sentence I used above, namely ‘Insofar as the universal is here it is separate from itself insofar as it is there.’ How would we read this? The universal is here and the concept of being here includes being separate from, i.e. spatially discontinuous with, anything that is there? But that can’t be right. It is not a conceptual or logical impossibility that something spatially continuous be both here and there. Not every truth about the universal insofar as it is here is included in the concept of being here. Another example: Insofar as it is here the universal is closer to the radiator than it is insofar as it is there. Certainly this fact is not included in the concept of being here.

We nowadays, if denied the mental distinction, will likely be able to see only a real distinction – a distinction between one thing and a second one, a numerical distinction. This, I think, is how those convinced by the multiple location objection saw it, and this is the diagnosis why the objection to universals seemed so forceful to great minds: The universal insofar as it is here is separate from itself insofar as it is there. There are two kinds of distinction – mental and real. The distinction isn’t mental. So it is real. So the universal is two things, not one. So nothing can be wholly present at separate locations.

What is needed to answer the objection is the third sort of distinction – the formal distinction of Scotus.⁷ The term for it is confusing as Suarez rightly complains ([43], p. 27) and means nothing to us now, so I have suggested we call it the ‘aspectival’ distinction ([6], p. 51). It is a distinction in things, not just between concepts, but not a real distinction. In other words, things aspectivally distinct differ, but are numerically identical. The universal insofar as it is here is here. The universal insofar as it is there, is not here. But the universal insofar as it is here is numerically identical with the universal insofar as it is there.

⁶ An analogy would be the sentence ‘Insofar as Venus is the morning star, it does not appear in the evening’. We would read that as ‘Venus is the morning star and the concept of being the morning star does not include appearing in the evening’.

⁷ Scotus, *Ordinatio* II. d. 3, part 1, q. 6, in [40], p. 107; *Reportata parisiensia* I, d. 33, q. 2 in [14], pp. 329-334; [24], pp. 97-101; [13], pp. 53-55. In assimilating my aspectival distinction to Scotus’s formal distinction I am neglecting various medieval subtleties important in other contexts.

Why isn't this just a contradiction? Ockham thought it was, and for the most part he has had the last word.⁸ But there would be contradiction only if it were the case that the universal insofar as it is here is here, and yet also the universal insofar as it is everywhere that it is, is not here. But nothing I've said entails this contradiction. The universal is not here only insofar as it is some of the places it is, not all. Thus the theory does not contradict Leibniz's Law, which basically is a complicated way of saying that no contradictions are true. All I've said is that something can differ from itself, not that there is a contradiction true of it (see [6]). We tend not to distinguish these because we tend imprecisely to think of Leibniz's Law as the 'indiscernibility of identicals.'

For want of a better word, I'm calling the universal insofar as it is here an 'aspect' of the universal. The universal insofar as it is there is another aspect. The distinction between them is the 'aspectival' distinction. I'm not appealing to any antecedent understanding of aspects to explain the distinction. Certainly I don't want to convey that aspects are simply perceiver-dependent. I'm just trying to use some easy-to-remember terminology.⁹ My theory depends on how phrases like 'insofar as' work, not on what 'aspect' might connote. Often such phrases act like 'because'. Not always, though, and that's not the function I'm concerned with. Sometimes they make a noun phrase and a sentence into a noun phrase – for instance 'the universal insofar as it is here.' The referent of the result is what I'm calling an aspect.¹⁰

With aspects, the objection to universals fails. There certainly is a difference between the universal insofar as it is here and the universal insofar as it is there – a difference that doesn't depend solely on our manner of conceiving it. But it need not be construed as a real, numerical, distinction. If you believe in universals you should believe the difference is a formal – an aspectival – distinction. Believing in universals involves believing in their aspects.

If believing in universals involves believing in their aspects, then the conceptual resources of a theory of aspects is available to elucidate instantiation, that is, the non-

⁸ Ockham, *Ordinatio* I, d. 2, q. 6 in [40], p.156.

⁹ Another possible term, following Suarez, is 'modal distinction' in which some of the things distinguished are 'modes' ([43], pp. 27-33). However 'modal' has the connotations of possibility and necessity nowadays.

¹⁰ Other such phrases are 'to the extent that' and 'so far forth as'. For now I will assume that '*qua*' and relevant uses of 'as' enable briefer ways of saying what we say with 'insofar as'.

relational tie. All we have to do is think of a particular as like a universal in having aspects. The difference between them would be based on the one Aristotle gives us: The universal can be instantiated in many particulars, whereas the particular cannot.¹¹ We might call particulars conceived this way ‘concrete universals.’ (cf. [15], p. 188, and [2], p. 126)

Here is the proposal in brief: The non-relational tie is the identity of an aspect of a universal with an aspect of a particular. If you think of aspects as parts, then the non-relational tie is the ‘partial identity’ of particular and universal. That’s putting it Armstrong’s suggestive way ([2], p. 17).¹² The aspect is the part they have in common.

You shouldn’t think of aspects as parts, unless you hold a theory of composition as identity. On standard conceptions the parts are all numerically distinct from each other and each is numerically distinct from the whole they compose. Aspects aren’t like this. They are numerically identical with each other and the whole. Think of parts like this.¹³

We’ve thought this way about the universal. Let me show how it works for spatial parts of a particular. As before, focusing on location helps in introducing the concept of aspects. Think of the locations of each of the parts. Think of the whole as a concrete universal. Then the whole is wholly present in each of these locations, just like any universal. As before, we can distinguish the whole insofar as it is in one location from itself insofar as it is in another. These are aspects of it. There is no further work for parts to do in this context. We can regard the whole as a single thing, yet get all the complexity numerically distinct parts could give us. Thus we can think of spatial parts of a particular whole as aspects of a concrete universal.

Partial identity, with the parts thought of this way, is much more like Bradley’s conception of partial identity ([17], p. 83) – the source of Armstrong’s term.¹⁴ For Bradley partial identity is ‘identity in difference’, and so it is for me.

¹¹ [1]: *On Interpretation*, 7, 17^a38-40; *Metaphysics* VII.13, 1038^b9-12.

¹² I’ve come across reference to a partial identity account of instantiation in Forrest [22]. Thus he has anticipated the possibility that a realist like myself might appeal to such an account. He goes on to assert that such an account is familiar (p. 208), but this is a claim I’ve not been able to corroborate. Forrest’s only citation is of an essay by Stout [41] which at best entails (though does not explicitly mention) an account of intersecting distributive unities. Distributive unity is the sort of unity distinct things in a class have [41], p. 384. My view, in contrast, has it that particulars and universals alike are genuinely unitary.

¹³ In terms of my [10] and [11] think of aspects as parts in the count in which the whole counts as one.

¹⁴ Cf. Brentano in [18], p. 46 for a conception of partial identity more like Armstrong’s.

As with spatial parts of a particular so with any part of anything that is a single thing. Thinking of a single thing as composite is thinking of it as having aspects that differ but are not numerically distinct. Universals as well as particulars are single things. Both are composite in that they are wholly present in different locations. They are composite in other ways as well – the particular in virtue of all the universals it instantiates, the universal in virtue of all the particulars that instantiate it, for instance. But given that they are single things, this complexity is a matter of having differing aspects. Thus the partial identity of particular and universal, is the identity of a shared aspect.

Here is an example. Suppose Hume is a particular, Benevolence is a universal, and Hume is benevolent. Then Hume has as an aspect, Hume insofar as he is benevolent. Also Benevolence has as an aspect, Benevolence insofar as Hume is it. These are the same aspect – Hume's benevolence.¹⁵

II.

This account exposes another layer of the multiple location problem for universals. This layer gets us closer to Boethius's way of regarding the problem. Boethius assumed, I think, that something is a single thing only if its components are identical. It is many if it has distinct parts. This assumption, which I agree with, is baldly stated in Augustine ([5], Book II.8, p. 45).and in the *Parmenides* at 131c. Thus if a universal is a component of a particular, as was thought, then they are identical. Otherwise the particular is not a single thing. Now consider the multiple instantiation of a universal in separate particulars. If separate, the particulars are distinct. The universal is a component of each, so identical with each. So the universal is distinct from itself.

The Boethius problem is the deep problem, I think, underlying the multiple location problem. We needed to take seriously an account of instantiation as partial identity in order to see it. How can the problem be resolved?

Again it will help to appeal to aspects. At first this looks like no help, however. Suppose we try to resolve the problem by saying that the universal insofar as it is

¹⁵ One must not confuse aspects with tropes. See part IV below. Nor should one think of aspects as logical constructions. These things said, the aspects of universals shared with particulars sound similar to Fine's logically constructed tropes: 'A trope will be a universal under the description of being possessed by such and such an object.' [20], p. 68.

identical with one particular is distinct from itself insofar as it is identical with the other. In one aspect, the universal is distinct from itself in another. However, these are aspects of the same universal and so are identical. So they are identical and distinct. The same problem faces us as before, or so it seems.

Bradley thought there couldn't be a resolution of this problem. He saw the concept of partial identity, a.k.a. identity in difference, as irremediably flawed, although better than any competitor. 'Necessary makeshift' he called it ([16], p. 28).

I'm more sanguine. We can make sense of many-one identity. What Bradley overlooks, I think, is that when different aspects are involved, being identical and distinct is no more a contradiction than was being in one location in one aspect, and not being in that location in another aspect. There would be a contradiction only if things were identical in some aspects and in none. But there is no contradiction if things are identical in some aspects but not in others. Thus not only what something is like, but also how many things it is, can differ between aspects of it. In the latter case I will refer to the relevant aspects as the object in one count and the object in another. When I simply speak of aspects, with no mention of count, then I will be taking them to be in the same count.

To see more easily how this approach works, consider a more familiar problem – what Armstrong following Plato calls the problem of the 'One over Many.' ([4], pp. xiii, 11, 138; [3], pp. 1-2). We often call distinct resembling particulars, the same. Distinct tokens of the letter 'A' are called the same letter: 'A'. Believers in universals will say that there is some sort of numerical identity here that makes true this use of 'same'. Of course this is not the only possible response, but I have taken belief in universals as a starting point. Now consider the situation so far. Distinct particulars are said to be numerically the same. If what we say is true, then distinct particulars are numerically the same. When faced with a contradiction, make a distinction. The standard move is to distinguish an additional entity – the universal. Then resolve the contradiction by noting that the particulars are what are distinct and the universal is what is the same. However this doesn't explain why we seem to be saying the particulars themselves are the same. Further, any multiplication of entities must be viewed with suspicion, given Ockham's razor. Why should our conceptual problems breed new entities?

What we can multiply with less presumption (though not none) are ways of being counted for the entities we have. This approach would use an alternative distinction, an aspectival one, to resolve the contradiction. Don't multiply entities, multiply ways of being counted for the same entities. When we say the distinct particulars are the same we count them as one and the same, not two. It is them we count this way. Thus the apparent contradiction is resolved as follows: Particulars distinct in one count are identical in another (see my [10] and [11]). In that other count they are the same universal.

This is an appeal to aspects as follows: Each of the two particulars has an aspect in which it is identical with the other. Each also has an aspect in which it is distinct from the other. The former aspects are the particulars insofar as they are counted one way – as one. The latter aspects are the particulars insofar as they are counted another way – as two.

If you thought the count as two to be strict and philosophical, you would think the count as one to be loose and popular. That would be to settle for a simple nominalism. But here are the moves to realism: First, be agnostic about which count is strict and philosophical. Be agnostic whether the identity of the universals is loose identity. It could be rather that the diversity of the particulars is loose diversity. Next, admit there is in principle no way to find out which is really strict and which is really loose. Finally, recognise that the counts have equal, though competing, claims to being strict.¹⁶

Thus we might say of two particulars that each has an aspect in which it is identical with the other. But we might just as well say of a universal that it has aspects in which it is distinct from itself. Both describe the same situation and, given the appeal to aspects, neither is contradictory. Now we can see that the One over Many problem – how distinct particulars can be numerically the same – is the Boethius problem – how a universal can be numerically distinct from itself – looked at from another vantage point. The solution to both appeals to alternate competing counts that are equally strict.

What makes a way of counting strict, rather than loose? In other words, what makes a count correct regardless of the purposes of the counters? The answer depends on what aspects the things involved have. If something and something have aspects in

¹⁶ Here 'strict' connotes correctness, unlike in my [11] where it just connoted more things.

which they are distinct and aspects in which they are identical, then both a count as one and a count as two are strict. Otherwise one of the counts is loose.

If more than one way of counting is strict, what makes one count appropriate rather than another? Now that does depend on the purposes of counters.

Thus we resolve the problem of the One over Many not by multiplying entities, but by multiplying ways of being counted. Universals are still real. They are as real as particulars. In fact they are particulars, strictly identical in a different count.

This last claim has to be qualified. We can distinguish co-instantiated, even necessarily co-instantiated, universals. A universal is better thought of as various particulars insofar as they are the same way, counted as identical. The similar aspects of distinct particulars are counted as identical. The differing aspects of the same particular are counted as distinct, in this count of universals. They help compose different universals.

Thus there is a solution, which avoids additional entities, to the Boethius problem and the problem of the One over Many. And so the partial identity of particular and universal can be recognised. It is a cross-count partial identity. The very aspect which (in one count) is an aspect of a particular is (in another count) an aspect of a universal. This is instantiation, the non-relational tie.

One way to think of this proposal is in terms of intersecting identities.¹⁷ In a case of instantiation, the identity between the aspects of the particular and the identity between the aspects of the universal, intersect at the shared aspect. Each of the intersecting identities is as primitive, fundamental, as the other.¹⁸

Notice that particular and universal are not wholly identical across the count. Some aspects of each are not aspects of the other. At last we can clear up to some extent the mystery of the non-relational tie.

¹⁷ Cf. Armstrong: 'Identities run across the states of affairs' ([2], p. 265); 'Then we shall have to say that particulars and universals are not "distinct existences" but that their identities are in some way entangled with each other' ([2], p. 268).

¹⁸ Forrest's trenchant though obscure objection to what he calls the 'Unity Account' of instantiation (a general label that includes the partial identity account) is of interest here. He says that the Unity Account theorist tries to solve the mystery of the One over Many – how many can in some respect be identical – with a mystery 'recognizably of the same kind' – how many can form a unity ([22], pp. 209-210). Unfortunately Forrest says nothing further. I assume the problem is that having distinct things united by identity would seem to entail the contradiction that distinct things are identical. My solution to the Boethius problem and the problem of the One over Many answers this objection.

The mystery was how the non-relational tie could hold between distinct things that are not distinct. I resolve the apparent contradiction as follows: It holds between partially distinct things that are partially identical.¹⁹

III.

A test of this account is whether it can accommodate relations. On an account of instantiation as identity, the main problem for relations is Bradley's complex-unity problem. Fortunately it resembles the Boethius problem.

Bradley's problem goes like this: In what is a relation between distinct things instantiated? In one of the relata? Surely not. It must somehow be instantiated in all the relata. In the relata considered as many? Surely not. That would entail that distinct things are identical with the same thing, and so not distinct, given that instantiation is identity. In the relata considered as one? Surely not. Nothing could unite many into one except a relation. But then we need already to have made sense of how a relation can be instantiated, in order to make sense of how a relation can be instantiated ([16], Ch. 2).

The root problem is how many could be identical with one. This, I think, is the problem alluded to by Leibniz when he dismisses any relation as an entity with feet in different things ([30], pp. 203, 339; [29], pp. 609, 704).²⁰ He needed no further explanation, I conjecture, because his audience would have recognised the general problem with universals. What is needed is the account of many-one identity. There will be some complexities in its application to relations, but start with the following: A relation is its distinct relata which are identical in another count.

As before the possibility of co-instantiated or perhaps necessarily co-instantiated relations drives us to distinguish aspects. Suppose Abelard loves Heloise. Then the relation is: Abelard insofar as he loves Heloise, and Heloise insofar as Abelard loves her, counted as identical. Of course these aspects counted as identical are only an aspect of

¹⁹ To some degree my theory resembles that of Scotus. (See [13], chapter 2). His formalities, I would interpret as my aspects. His less-than-numerical unity of common natures, I would interpret as their unity in another count. His contraction of the common nature into an individual I would interpret as the cross-count identity of universal and particular. However I don't understand Scotus well enough to say much more. To the extent that my theory resembles Scotus's, it also somewhat resembles Pierce's theory modelled on that of Scotus, especially when you add the similarity between universals and particulars which I posit. However despite regarding individuals as concrete universals, I take them much more seriously than Pierce who apparently regarded them merely as fragments of systems ([13], p. 141; see pp. 160-64).

²⁰ For corroboration of my general point here, independent of Leibniz interpretation, see Mertz [33], p. 64.

the relation of Loving. There are plenty of other lovers and beloveds. The entire universal relation of Loving is the relevant aspects of all particular lovers and beloveds, counted as identical.

Love is unfortunately not always requited. Loving is a non-symmetrical relation. Thus we must distinguish two aspects of Loving – Loving-by and Loving-of. Abelard insofar as he loves Heloise is partially identical with Loving, in virtue of being partially identical with Loving-by. Heloise insofar as Abelard loves her is partially identical with Loving in virtue of being partially identical with Loving-of. In general the blanks filled by noun phrases in relation predicates, if they correspond to anything, will correspond to aspects of a relation.

Note that on this account there would be at most a distinction of reason between a relation and its converse. Loving and Being-loved-by are both simply the composite of Loving-by and Loving-of.

Which horn, then, of Bradley's trilemma do we choose? Each, I think. They no longer need be seen as inconsistent. The relata counted as many are each partially cross-count identical with the relation. The relation, or at least an aspect of it, is the relevant aspects of the relata counted as identical. Thus the relation is at least partially identical with each relatum, with the relata counted as many, and with the relata counted as one.

Nowadays it is hard to think that a relation between distinct things could be properly said to be instantiated in one of them. Yet, if instantiation is partial cross-count identity then that is what we must think. For some reason we have assumed that since a relation between distinct things can't be instantiated in just one of them, that it can't be instantiated in one of them. I don't see the reason and don't accept the inference.

Thus the instantiation of a relation, is the sharing of an aspect by a particular and a relation. In the example there are two cases of instantiation. One is the following: Abelard insofar as he loves Heloise is the same aspect as Loving insofar as Abelard bears it to Heloise.

Actually the aspect of the relation is a little more fine-grained. Using emphasis to make the distinction, we can say it is Loving insofar as Abelard bears it to Heloise. The correlative aspect is Loving insofar as Abelard bears it to Heloise. This is the aspect which is the same aspect as Heloise insofar as Abelard loves her.

Notice that, on this account there is a necessary connection between Abelard insofar as he loves Heloise and Heloise insofar as Abelard loves her. Neither aspect can exist without the other. This connection is due to the fact that necessarily Abelard loves Heloise if and only if Abelard loves Heloise.

It might seem that, therefore, there is a necessary connection between Abelard and Heloise. After all there is a necessary connection between an aspect of each, and aspects are identical with the objects they are aspects of. But if the necessary connection between the aspects of the distinct particulars entailed a necessary connection between the distinct particulars, there would be trouble. It seems a fundamental truth about being wholly distinct particulars – that is, ones with no particular in common – that it is metaphysically possible for each to exist without the other and without a substitute for the other. As Hume following medieval usage put it, the wholly distinct are ‘separable.’ ([27], p. 634; see also pp. 10, 36, 38, 79, 233)

However the troublesome entailment doesn’t follow. It is not necessary that if Abelard and Heloise exist, they have their respective aspects. Abelard could have existed although Abelard insofar as he loves Heloise did not. Likewise for Heloise and the relevant aspect of her. To take the most obvious sort of case first, Abelard might change.

But what about the identity that seemed to lead to the troublesome entailment? I have said an aspect of a thing is numerically identical with the thing itself. If an object can exist without one of its aspects, then seemingly the object can exist without itself. This is a version of the ancient problem of change. Of course ‘change’ is ambiguous between alteration and replacement. The problem concerns alteration. Here is another example: Suppose a green leaf changes to red. The green leaf is the leaf. The green leaf ceases to exist, yet the leaf remains in existence. So something both ceases to exist and remains in existence.

This problem is a version of the multiple location problem, for times rather than for places. If we let particulars be wholly present at different times, in the way we have let them be wholly present at different places, then we have a solution. Suppose the relevant times are yesterday and today. First consider what it is for a temporal aspect of the leaf to cease to exist: The leaf insofar as it exists yesterday does not exist today. This is compatible with the leaf existing today. Thus the ceasing to exist of the aspect does

not entail the ceasing to exist of the leaf despite their identity. This is analogous to the fact that the leaf insofar as it is there (where one spatial part is) is not here (where another is) even though the leaf is here too.

Now add the concept of aspects of aspects. Suppose the leaf insofar as it exists yesterday is green. Then the leaf insofar as it exists yesterday, insofar as it is green, is an aspect of an aspect of the leaf. Presumably aspects of aspects of a particular, are aspects of it. If the leaf yesterday is the leaf's last temporal aspect which is green, then its cessation is the cessation of the leaf insofar as it is green. As above, however, the leaf insofar as it is green can cease without the leaf ceasing.

On this solution, an object insofar as it is some way ceases to exist if the object ceases to be that way. Further the cessation of the aspect need not be the cessation of the object. If the solution works for the variation of the problem of change, then it should work for the problem of change in its traditional version. I will show that it does.

Again the problem concerns alteration. Suppose something changes: Something has a property, then lacks it. For instance a leaf changes from green to red. When red it is not green. But then the very same thing is green and isn't, and that's a contradiction. How could the same thing both have and lack the same property? This problem in a more carefully presented version is called by Lewis 'the problem of temporary intrinsics.' ([32], pp. 202-04, 210).²¹

Any solution begins by noting the role of time: The leaf at one time is green and at another time is not. The major solutions then divide into two camps. (I've simplified the division by letting a property include its being instantiated or include the way it is had.²²) One camp uses the mention of time to show that the property had is not the property lacked. The other camp uses the mention of time to show that the haver of the property is not the lacker of it. Whatever their virtues, both these approaches seem to distort alteration, in which the same thing has then lacks the same property. A better account would allow the haver to be the lacker, and the property had to be the one lacked. I think I can provide a better account via the following consideration:

²¹ Armstrong less elegantly but more perspicuously calls it 'the problem of temporary non-relational properties' ([2], p. 101).

²² Cf. Lewis [31], pp. 65-66. For reasons to resist one or the other of my simplifications see Haslanger [25] and Hinchliff [26].

Regardless of the sort of solution one opts for, one can distinguish the particular insofar as it exists at one time, from the particular insofar as it exists at another. No-one is likely to see this distinction as a distinction of reason. After all, the concept of existing at a time contains so little of what is true of a thing at that time. Rather, with no perceived alternative, one will naturally think of the distinction as a real distinction. On this line of thought both camps should acknowledge a succession of particulars, so the solution might as well appeal to these.

It might as well, that is, if there is no alternative. But of course there is – the aspectual distinction. In a case of alteration, a particular insofar as it exists at one time has the very property which that particular insofar as it exists at a another time lacks. The haver is the lacker and the property had is the one lacked. Here then is the better account of the alteration of the leaf: The leaf insofar as it is green is an aspect of the leaf insofar as it exists at one time, but is not an aspect of the leaf insofar as it exists at a later time.

This same account can be used to show how Abelard might change: Though the aspect of loving Heloise is identical with Abelard insofar as exists now, he has other temporal aspects it is not an aspect of. For some other time, Abelard insofar as he exists then, is not that way.

As with alteration, so with possible difference in general: A particular insofar as it exists in one possibility has a property which that particular insofar as it exists in another possibility lacks. Thus though the aspect of loving Heloise is identical with Abelard insofar as he is actual, he has other possible aspects it is not an aspect of. Likewise there are possible aspects of Heloise without Abelard's love. So even though it is necessary that Loving by Abelard for Heloise if instantiated by one is instantiated by both, it is possible that Loving is instantiated by neither. So nothing hinders the possibility that one of the actual lovers exist without the other. The necessary connection between the aspects does not entail a necessary connection between the particulars.

Thus the instantiation of relations is, as for all universals, cross-count partial identity. This account solves Bradley's complex-unity problem, provides for the direction of relations that are not symmetric, and allows for the necessity that a relation is instantiated in all its relata without an untoward necessary connection between distinct particulars.

IV.

The account of instantiation presented explains the four characteristics of the fundamental tie.

First, the tie is not mereological. The existence of a particular in one count and a universal in another, even if sufficient for the existence across the counts of their mereological sum, is not sufficient for their being tied. They wouldn't be if they didn't share an aspect.

The second characteristic of instantiation is what Armstrong terms 'the victory of particularity.' Armstrong has called a particular's instantiating a universal a 'state of affairs' ([2], p. 1, ch. 8; [4], p. 113) – a 'this-such' ([4], p. 109), borrowing terms from Aristotle.²³ Despite the presence of the universal, the state of affairs is a particular, because of the presence of the particular (or particulars) that instantiate it. This is particularity's victory. It follows from the account I've given.

I've said that instantiation is cross-count partial identity. To be more specific it is cross-count partial identity between a 'this' and a 'such.' A 'this' is something that is. A 'such' is a way that something is ([2], p. 30). A particular is a 'this' that is not a 'such' for anything. A universal is a 'such', though it can be a 'this' for a higher-order universal – one instantiated by universals. A state of affairs – a 'this-such' – is a 'this' and a 'such' sharing an aspect.

Now suppose the 'this' in a state of affairs is a particular. Then the state of affairs cannot be multiply instantiated. For consider what being multiply instantiated entails: Anything that can be multiply instantiated must be able to be instantiated in wholly distinct particulars – ones with no particular part in common. Now consider what it would be for a state of affairs to be multiply instantiated. The instantiations would have to be partially identical with both the particular and the universal in the state of affairs. But then the instantiations aren't wholly distinct particulars. They have a particular in common, the one in the state of affairs. So a state of affairs cannot be multiply instantiated. It is a 'this' and not a 'such' at all. Particularity wins.

²³ See [1], *Metaphysics* III, 6, 1003^a5-9.

Even though states of affairs are particulars, usually I use the word ‘particular’ to refer to things just in a single count. States of affairs are cross-count entities. They inherit the particularity of the particular(s) involved in their composition.

So far I have relied on the fact that particularity entails not being instantiable in many particulars. However in doing so I have assumed a basic distinction between particulars and universals. More should be said. Aristotle’s characterisation of the difference contains the further insight that universals are dependent entities in a way particulars are not.²⁴ This is not to say that particulars can exist without universals. Rather I interpret it as follows: A particular cannot merely be an aspect of something with other aspects. A universal can. In other words, for a ‘this’ which is a particular, the aspect shared by the ‘this’ and a ‘such’ can exhaust the ‘such’ but not the ‘this.’ Or again, a particular must be more than one way, but a way need not be the way of more than one particular. I’ve put it in terms of properties, but the same thing goes for relations, *mutatis mutandis*. A group of particulars cannot merely be an aspect of a relation, but a relation can merely be an aspect of a single group of particulars. Examples: There could be only one red thing, but there could not be many red things that have no other properties or relations. There could be only two things next to each other, but there could not be many pairs of things that are only next to each other and have no other properties or relations.

It may sound as if I am building in a complexity to particulars that excludes tropes (in D.C. William’s sense) from being particulars. If so, I think no harm done. It seems to me that tropes are aspects of universals with the identities between the aspects denied. Conceiving of tropes is a juggling act between implicitly believing in multiple location in order to get the notion of property (or relation) and explicitly denying multiple location in order to get the trope’s particularity. I don’t see how else to get the notion of property than by noticing multiple location. It won’t do to reply that all you need is the notion of a resemblance between singly located things. Just to the extent that it has distinct relata, resemblance is a paradigm case of multiple location. Here I apply Leibniz’s point about relations and their feet.²⁵

²⁴ In what follows I’m influenced by Brentano’s view that ‘a substance is something that cannot *be* an accident’ ([18], p. 9).

²⁵ Russell makes a similar but different point in [37] p. 96.

Even if I am misconceiving tropes, it is important to distinguish them from states of affairs, in my characterisation. In every case differing tropes are wholly numerically distinct. In many cases, in contrast, differing states of affairs share the same particular in one count or the same universal in another.²⁶

Note that this rendition of states of affairs makes sense of a perplexing part of Armstrong's theory. Armstrong emphasises that states of affairs with a shared particular and a different universal are 'wholly distinct', 'wholly independent.' ([2], pp. 127, 140). Likewise are states of affairs with a shared universal and distinct particulars. This claim seems inconsistent, however, especially when he acknowledges the 'in a certain sense, partial identity' of such states of affairs in virtue of the shared component ([2], p. 159, see also p. 265). However what he means, I think, is related to what I explained when resolving the new version of the problem of change. The states of affairs are wholly independent. That is because different aspects of the shared component figure in the different states of affairs. And so, in the way I explained, the shared component in one state of affairs can continue to exist even if the shared component's aspect in the other state of affairs ceases to exist, or were not to exist.

Third, instantiation is a case of what I'll call 'type-inseparability.' (cf. [43], p. 46). A universal can't exist without some particular or other. That's because universals are just aspects of particulars identical in a different count. Likewise a particular can't exist without some universal or other. That's because particulars are aspects of universals identical in a different count.

Fourth, instantiation is contingent. Unlike Armstrong, I'm not sure it is contingent in all case, but that doesn't matter here. The contingency of instantiation,

²⁶ Despite this crucial difference, there are some affinities between my theory of instantiation and that of D.C. Williams ([46]). They are variations on the theme of partial identity. His tropes are like what I think of as shared aspects, and they are 'parts' had in common by concrete particulars and abstract universals. Further in his [45] the trope is 'part' of a universal in the special sense that the universal is the trope counted as identical with exactly resembling tropes. Williams puts things a different way, though. Where I see partial identity he sees 'a double jointed predicative relation' consisting of 'embracing' and 'manifesting.' ([45], pp. 11, 10). I'm grateful to David Lewis for calling my attention to these affinities. There are similar ones between my theory and D.W. Mertz's theory of relation instances. Relation instances are much like tropes and so like my shared aspects. Further Mertz sees the numerically same universal across distinct relation instances. However he is a moderate realist in the medieval sense (as opposed to Armstrong's sense in [2], p. 22). As Mertz puts it, 'For the moderate realist, the universal *qua universal* exists only in the intellect...' ([33], p. 7; see also pp. 12, 58, 75). For me on the other hand, a

when it is contingent, follows from the account of change I've given. If the account allows a particular to instantiate a universal at one time, and not at another, then the account allows instantiation to be contingent at least to that extent. Of course full explanation of contingency would require an account of the metaphysics of possibility. However an account of instantiation can remain neutral about such a metaphysics. For present purposes I can just compare change across possibility, to change in time. In the latter case a particular shares an aspect with a given universal at one time and not at another. That is, one temporal aspect shares an aspect with the universal and another temporal aspect doesn't. In the former case a particular shares an aspect with a given universal in one possibility and not in another. That is, one possible aspect shares an aspect with a universal and another possible aspect doesn't.

The most elegant account would have different possibilities be as real as different times (cf. [32]). But here elegance sins against economy, or so it seems. Having real possibilities seems to multiply entities. Further, having entities that are not actual seems to confer being on things that lack it. I could perhaps avoid the multiplication by making possibilities mere aspects of actuality. But I would still be faced with the problem of the being of aspects that lack being.

One potential solution would be a combinatorial account of merely possible aspects, along the lines of Armstrong's account of possibility ([2], p. 150). Such an account tries to construct truthmakers for non-actual but possible truths out of the components of actual states of affairs. The basis of the account seems to be the medieval principle inherited through Hume that the distinct are separable. Therefore, reasons Armstrong, they are recombinable. This seems to hold true for Armstrong even for things sharing a non-mereological 'part' – a component – if each has another component the other lacks, as discussed above. Thus even the partially distinct are separable, and so recombinable. If so then there is hope that universals and particulars, even when partially identical as on my view, are recombinable.

universal is as much a real unitary thing as a particular, and is literally had in common by distinct particulars.

Such an account may work. To be candid however, I am attracted by the view of mere possibility as just more reality, though perhaps less real than actuality (see [8]). Fortunately I don't have to decide here.

Thus I've shown the four characteristics of instantiation to be entailed by my account. That instantiation is non-mereological follows directly from instantiation as partial identity. This was the main characteristic insisted upon by Armstrong. The victory of particularity in a state of affairs follows from a natural account of states of affairs given my account of instantiation. The two-way type-inseparability of universal and particular follows directly. The contingency of some instantiations follows given the existence of change, and more fully given an account of possible aspects.

The mystery surrounding instantiation cast suspicion on universals and even particulars. Perhaps with the mystery dispelled the suspicion will be lifted and their virtues will be recognised.

If you have particulars, universals, and instantiation, then you have states of affairs, as Armstrong calls them. To see a state of affairs properly you have to see it with binocular vision as it were. With one eye you see the shared aspect as an aspect of a particular in one count; with the other eye you see it as an aspect of a universal in another count. If you do, you see the particular's being the universal. The particular is the universal, where the 'is' is the 'is' of cross-count partial identity.²⁷

²⁷ I am greatly indebted to discussions with David Armstrong. I've benefited also from the comments of Len Krimerman and some referees and editors for *AJP*. Gordon Stevenson and Steve Lahey provided valuable assistance with citations.

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