MIRAGE REALISM REVISITED

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In a seminal exchange between Armstrong and Devitt about the one over many problem (1980), Devitt accused Armstrong of seeing a problem that is not real. That is, he accused Armstrong of largely being a 'mirage' realist about universals. I think that debate was inconclusive. However, since that debate, Armstrong's theory of immanent universals has undergone a number of developments, and it is time to reassess the one over many problem in the light of those developments. I argue that a stronger case than ever can be made for thinking that Armstrong ought not to take the one over many problem seriously. However, all is not lost for realists about universals who think the one over many problem should be taken seriously. I argue that, unlike Armstrongian immanent realists, Platonic realists about universals need not be mirage realists.

1. Introduction

In the 1980 exchange between Devitt and Armstrong, Devitt accused Armstrong of being (largely) a 'mirage' realist. By this Devitt meant that Armstrong largely accepts his theory of immanent universals in order to solve a problem that is not really there. The problem in question is the one over many problem (more on this below). Even though this exchange proved to be seminal, there are reasons for thinking the main arguments on either side are inconclusive. However, since that exchange, Armstrong's theory of immanent universals has undergone a number of developments, particularly in his 1997 work, *A World of States of Affairs* and his 2004 *Truth and Truthmakers*. I think the time is right, therefore, to re-examine how Armstrong fares with the one over many

problem.¹ I will argue that, where the one over many problem is concerned, there are even more difficulties for Armstrong than there were in 1980. Fortunately for Armstrong, in later work he does have other arguments for the existence of immanent universals, and so it would not be fair to think he is a mirage realist generally. Nonetheless, if the arguments of this chapter are successful, they show that Armstrong greatly overestimated the force of the one over many problem in his early work, even by his own lights. Finally, I will argue that despite our assessment of Armstrong, all may not be lost for realists who think the one over many problem is to be taken seriously. This is because the platonic view of universals, which takes universals to be transcendent entities, can serve the realist better where the one over many problem is concerned.

The structure of the chapter is as follows. In the next section I distinguish different versions of the one over many problem and identify the version that is the subject of Devitt and Armstrong's exchange. In section three I briefly outline Devitt's main reasons for thinking that Armstrong is largely a mirage realist, before examining Armstrong's response. I then suggest that there is no clear-cut winner in that 1980 exchange. In section four, I offer a new argument for the claim that Armstrong should not have placed any weight on the one over many problem, an argument that is based on his 1997 views. The main problem, as we will see, is that in this later work Armstrong holds that facts of the form *a* is *F*—what he calls *states of affairs*—are *ontologically basic*. On this picture, universals are merely derivative abstractions from states of affairs. I will argue that they are ontologically dependent upon those facts. In section five I turn to Armstrong's 2004 work, in particular his new partial identity view of property instantiation. Armstrong does not say much about how this view bears upon the one over many problem, but I will argue it is far from clear that this new view of instantiation constitutes progress where the one over many problem is concerned. All in all, then, Armstrong would do best to

¹ It should be noted that Devitt has recently published a postscript to his mirage realism paper (2010, 20-30). He uses the postscript to clarify the Quinean criteria of ontological commitment and to strengthen aspects of his 1980 arguments. He does not, however, examine Armstrong's more recent views and so the arguments in this chapter are different from those offered in his postscript.

concede that the one over many problem is not one that deserves to be answered, as Devitt urged. In the final section, however, I argue that if one abandons Armstrong's commitment to immanent universals, and instead adopts a platonic transcendent conception of universals, the prospects for giving a solution to the one over many problem are much better.

2. The One Over Many Problem

The one over many problem was originally described by Armstrong as that of explaining 'how many different particulars can all have what appears to be the same nature' (Armstrong 1978, viii) or how distinct particulars can 'all be of the same "type" (Armstrong, 1978, 41). There are, however, different interpretations of this problem.

To begin, it is important to distinguish the semantic versions of the one over many problem from the metaphysical versions. Armstrong briefly describes the semantic problem as follows: 'it is asked how a general term can be applied to an indefinite multiplicity of particulars' (1978, xiii). In short, this version asks for a semantic analysis of *predication*, one which provides truth conditions for true predications and helps shed light on the semantic notions of designation and application. The problem of predication also has an epistemological correlate: that of how we can *know* when a predicate is being correctly applied. Indeed, one could think that these semantic and epistemological problems are genuine without thinking the metaphysical versions are, as Devitt himself urges (1980, 436).

However, as Devitt highlights, it is indeed the metaphysical problem that Armstrong thinks will help to motivate realism about universals. Although one could, in principle, invoke an abundance of universals to provide the meanings for predicates, Armstrong thinks that such a view is wrong-headed (1978, xiii-xiv). What, then, is the metaphysical version of the problem? Again, there are different variants as Campbell (1990) and Oliver (1996) have highlighted. And Armstrong himself sometimes slides from one variant to another in his 1978 work. According to Campbell, the metaphysical one over many problem tends to split into two questions, which he calls the *A question* and the *B question*:

Now we can pose two very different questions about, say, red things. We can take one single red object and ask of it: what is it about this thing in virtue of which it is red? We shall call that the *A question*. Secondly, we ask of any two red things: what is it about these two things in virtue of which they are both red? Let that be the *B question*. (1990, 29)

Examination of Armstrong's 1978 suggests that it is primarily the B-type question that he has in mind. For instance, Armstrong's initial characterisation of the metaphysical problem, quoted above, concerns how *more than one* particular can have what appears to be the same nature. Nonetheless, Armstrong does sometimes speak of the A-type question. For example, when discussing predicate nominalism, Armstrong speaks of the need for facts of the form '*a* has the property, F' (1978, 13) to be analysed, a case involving a single particular (see Oliver, 1996, 49-50 for further examples).

Was Armstrong right to focus on both versions of the problem? Arguably not, because in the 1980 exchange, Devitt (1980, 435) points out that it is what Campbell later called the A-type question that is what Armstrong's one over many problem must really be about. What Armstrong had perhaps not noticed in earlier work is that a hard-nosed Quinean nominalist will think the answer to the B-type question is trivial from the start. Why is it that both a and b are F? The most obvious nominalist answer will simply point to two separate facts. The first is that a is F. The second is that b is F (Devitt 1980, 435). Surely, Armstrong must want the problem to be more difficult for the nominalist than that. Hence, Devitt concludes as follows: 'In virtue of what is a (or b) F? If the One over Many argument poses a problem, it is this' (1980, 435). In short, then, the one over many problem as it is set up in the 1980 exchange concerns Campbell's A-type question.

3. Devitt's Charge of Mirage Realism

Before examining how Armstrong's later work bears upon the one over many problem, it will be useful to rehearse briefly the 1980 debate between Devitt and Armstrong. In the process, I will suggest that the debate was somewhat inconclusive.

For all Devitt says early on in favour of not taking the one over many problem seriously, he admits midway through his paper that '...if Armstrong's Realist response to the one over many argument is a

genuine explanation, then there must be a problem here to be explained' (1980, 436). Hence, the most important section of Devitt's paper aims to show that Armstrong's universals offer no explanatory gain where one over many facts are concerned.

Now, as Devitt highlights, superficially Armstrong's explanation of a fact of the form a is F is that a has F-ness, where F-ness is understood as a universal (1980, 437). But as Devitt rightly points out, this is hardly illuminating unless we are told what it means for a particular to *have* a universal. It is at this point, Devitt thinks, that realism about immanent universals shows itself to be problematic (more on the notion of immanence in section six).

In the first instance, a realist could try construing *a's having F-ness* as a relational state of affairs, where the predicate 'having' represents a genuine two-place relation (Devitt, 1980, 437). The obvious problem is, however, that the one over many problem applies just as much to relational facts as it does to monadic facts. So, it looks like the relation of 'having' should be treated as a universal. But this just raises a further problem. The 'having' relation must itself be one that is *had* by its relata. And so it looks like we need to invoke a second 'having' universal to explain why the original 'having' relation holds between its relata. Clearly, this is a regress in the making. As Devitt remarks, 'this sort of Realist makes us ontologically worse off without explanatory gain' (1980, 437).

Fortunately for Armstrong, he rejects the relational view of instantiation in favour of *non-relational immanent realism*. But for Devitt, non-relational immanent realism is just as problematic as the relational view. According to non-relational immanent realism, the bond between a particular and the universal it exemplifies is more intimate than a relation. That is, the 'having' of a universal does not involve a further universal because the 'having' of a property does not itself involve a genuine relation. Rather, the bond between a particular and its properties is a sort of non-relational tie.

Devitt's response to this non-relational view is quite simple. He complains that Armstrong is trying 'to speak the unspeakable: to talk about "the link" between particulars and universals without saying that they are related' (1980, 437). In short, Devitt finds the notion of a non-relational link completely obscure and 'inexplicable'. Thus, he concludes that 'talk of 'particulars' and 'universals' clutters the landscape without ultimately adding to our understanding' (1980, 437).

Is Devitt's objection fair? My view is that although Devitt's objection has some force, it is by itself inconclusive. Armstrong himself concedes that the issue of how a particular stands to the universals it instantiates is 'profoundly puzzling' (1980, sect. 3). And so, he feels he is not able to say much more than that instantiation is a primitive element of the theory. Is that really so bad? At this point, I think two points are worth bearing in mind. As Devitt himself remarks, 'explanation must stop somewhere' (1980, 436). Thus, it seems Devitt does not have any objection to metaphysical primitives per se. The question to settle is just where the metaphysical primitives lie. In 1980 Armstrong thought that primitive 'a is F' facts are so mysterious that we need realism about universals plus a primitive notion of instantiation, whereas Devitt thought primitive instantiation is so mysterious that we should rest with primitive 'a is F' facts. Who, then, is right? I think this question cannot be answered unless we consider other relevant philosophical issues. If universals can do enough theoretical work for us elsewhere, then perhaps acceptance of primitive instantiation is worth the price. Indeed, as Armstrong points out at the end of his paper, it may be that Devitt himself has to postulate universals due to the Quinean paraphrase problem he discusses (1980, 438-9). Secondly, even if we push this first issue aside, we know in hindsight that Armstrong does have more to say about instantiation in later work. He tries to shed light on the matter by analysing instantiation in terms of the notion of partial identity (following Baxter in doing so; see Armstrong, 2004, 46-8). Of course, Devitt cannot be blamed for not addressing the partial identity proposal, because Armstrong did not formulate it until much later. Nonetheless, what this suggests is that Armstrong's notion of non-relational instantiation need not be as mysterious as Devitt supposed. Yet another reason, then, for us to reassess the Devitt-Armstrong debate in the light of more recent developments. We will return to the partial identity view in section five, where we will consider how it fares with the one over many problem.

To sum up this section, then, some of Devitt's original criticisms of Armstrong's realism are inconclusive at best. However, now that we have the benefit of knowing more about the details of Armstrong's non-relational immanent realism, we will see that those who side with Devitt can play a stronger hand. In the next section, we will say more about Armstrong's original 'one over many' explanatory strategy and see how his 1997 work on states of affairs affects it.

4. The One Over Many Problem and Armstrong's World of States of Affairs

Although Armstrong introduces the one over many problem at the start of his first book on universals (1978. viii), he does not always say much about the precise *form* of the explanation that his realist solution is supposed to provide. As we saw above, it is often explained that facts of the form a is F are facts in which a has F-ness, or it is sometimes said that facts of the same type *share* universals (e.g. Lewis 1983, 351-2). But we are not always told exactly what this sort of explanation amounts to.

However, reading between the lines, it is fairly clear that Armstrong's original idea was that talk of 'having' and 'sharing' points towards the way in which facts of the form *a* is *F* are *composed*. Indeed, in many explanatory contexts, it is entirely appropriate to explain an entity, or some feature of an entity, in terms of how that entity is *composed*. For example, if we want to know how it is that water molecules exist, an obvious explanation involves pointing out that water molecules are composed of two hydrogen atoms and one oxygen atom, and that when those three components come together in a certain way, a water molecule is created.

With this in mind, then, it seems Armstrong's original idea was that facts of the form *a* is *F* can be analysed as *composite* entities, and to say that two things share a common property is to say they have the same immanent universal as a *component*. Indeed, there are places where Armstrong explicitly uses compositional language in connection with states of affairs (see in particular Armstrong 1991).

So far, so good. However, the problem is that as soon as Armstrong got clearer on the precise nature of states of affairs (i.e., facts of the form a is F) in later work, there are reasons for thinking he undermines this explanation of one over many facts. The problem arises through two developments in Armstrong's 1997 work. The first is his insistence that the form of composition in states of affairs, if indeed 'composition' is still the right word, must be *non-mereological*. And the second development, which is closely related to the first, is that states of affairs are *ontologically basic*. The worry to be articulated below is that if states of affairs—like facts of the form a is F—really are ontologically basic, then Armstrong ultimately ends up doing just what Devitt recommends, which is to 'rest with the basic fact that a is F' (1980, 437). If this is so, then it is unclear how Armstrong, even by his own lights, can think the one over many problem is genuine. Let us now explain why in more detail.

First, why think that, if states of affairs involve composition at all, it would have to be a nonmereological form of composition? The answer lies in what some have called the 'unity' problem (see e.g. Dodd 1999). The unity problem arises from the thought that the mere existence of a particular aand property F does not by itself make it true that a is F. Assuming particulars instantiate properties contingently, then a could exist and F could exist without it being the case that a is F. The realist owes an account, therefore, of what more is needed to unify a particular and a universal within a state of affairs, as Armstrong himself emphasises (1997, 115).

One way to go, of course, is to claim that there is some further ingredient, over and above a particular and a property, which makes it the case that the particular and property are united. One way of carrying out this strategy would be to appeal precisely to the relational form of immanent realism that was discussed in the last section. This would involve appealing to a further dyadic universal which serves to bring the particular and the universal together. An advantage of this general approach is that the composition of a state of affairs would be understood in terms of garden-variety mereological composition. If the existence of the particular, the property, and the binding ingredient entails that a is F, then states of affairs can be analysed without remainder into their constituents, as all mereologically composed entities can. For this reason, Vallicella calls this approach the reductionist theory of states of affairs (2000, 238). This approach promises a straightforward and elegant explanation, but as we saw earlier, appealing to a further binding ingredient invokes further problems. For it seems we still need to explain what binds the binding ingredient to the other elements of the state of affairs. As Vallicella nicely puts it 'the existence of two boards and some glue does not entail the existence of two-boards-glued-together. Something more is needed' (2000, 244). At this point it is tempting to introduce a further binding ingredient, but as we saw during the last section in our discussion of the relational approach, this kind of remedy puts us on the road to an infinite regress.2

² For the purposes of this chapter, I have offered only a brief characterisation of this regress problem, one which is commonly attributed to F. H. Bradley. For further details of the problem and of how various versions of the mereological approach arguably fail, see Vallicella (2000).

Now, we know already that Armstrong rejects the relational form of immanent realism. What this means, then, is that for Armstrong states of affairs cannot be analysed without remainder into their constituents (1997, 118). But where, we might ask, does this leave his view about the composition of states of affairs? The answer is that he can only say it is states of affairs themselves, rather than a binding ingredient, that holds the constituents together. States of affairs come with a ready-made unity, so to speak, and 'hold their constituents together in a non-mereological form of composition' (1997, 118). This non-mereological view is what Vallicella calls the *non-reductionist* view of states of affairs (2000, 246). Crucially, this non-reductionism then quickly leads Armstrong to declare that 'it is often convenient to talk about instantiation, but states of affairs *come first*' (1997, 118; my emphasis). And when Armstrong says that states of affairs *come first*, this marks a significant development in his view. It is unified states of affairs, i.e. facts of the form *a* is *F*, that are the fundamental building blocks of reality on this picture. The world is, as the title of Armstrong's 1997 book says, nothing more than *A World of States of Affairs*.

Where does all of this leave universals and particulars? The answer is that insofar as we can talk about particulars and universals, this is only because they can be 'abstracted' from a prior state of affairs. More precisely, a universal is 'everything that is left in the state of affairs after the particular particulars involved in the state of affairs have been abstracted away in thought' (1997, 29).³ In short, without states of affairs, particulars and universals are nothing. Using a theological metaphor, we could express this picture as follows: Once God has decided which contingent properties particulars are to have, He does not gather the components (i.e., particulars and universals) and 'build them up' from there. Rather, He has to create a state of affairs *in its unified entirety, in one fell swoop*. Insofar as particulars and universals can be taken as entities in their own right, this is only because they can be abstracted from a prior state of affairs. And so, the sorts of compositional explanation that are

³ It is interesting to note that the seeds of this idea are arguably present in Armstrong's 1980 exchange with Devitt when Armstrong describes particulars and universals not as entities in their own right but rather as two 'factors' (1980, sect. 3) of a state of affairs. Talk of 'factors' is suggestive of a view that takes particulars and universals to be different aspects of what is a more basic, unified entity.

available in, say, the molecule case discussed earlier, do not apply in the case of states of affairs, since the direction of ontological priority is different.

Where, then, does this development leave Armstrong's original 'one over many' project of providing a metaphysical analysis of one over many facts—facts of the form a is F? The difficulty is clear. Armstrong's 1997 work involves moving away from the idea that the components of a state of affairs are ontologically prior. States of affairs are now viewed as primitive unities that, in Armstrong's words, 'come first', with the universals being wholly 'dependent' on them (Armstrong, 1989, 43).⁴ This gives rise to the following explanatory puzzle, however. It is precisely these states of affairs—facts of the form a is F—that the one over many problem invites us to explain. But if states of affairs are ontologically basic, surely there is nothing we can be expected to explain. Indeed, if there is anything to explain, surely it will be the universals themselves, given that states of affairs 'come first' and universals are derivative abstractions from them. The problem here is that, generally, explanatory relations in metaphysics run from dependee to depender: if A metaphysically explains B then this explanatory relation will typically be grounded in the fact that B derives from A rather than vice versa (see e.g. Fine 1982 and Correia 2008). To use a common example from Fine, it is held that the singleton set {Socrates} is explained by the existence of Socrates because the singleton set is ontologically (i.e., essentially) dependent on Socrates (but not vice versa: see Fine, 1995). In short, then, positing explanatory relations which run from the dependers to the dependees is to posit a relation running in the wrong direction. Perhaps a case can be made for states of affairs being an exception to the rule, but it is far from clear how such an argument would run, and Armstrong himself

⁴ Mumford thinks that Armstrong's 'states of affairs first' view may even compromise Armstrong's realism about universals. Mumford writes: 'Armstrong really does have a states of affairs ontology. Such Tractarian facts are what do all the work. Universals and particulars both then seem to fall foul of the naturalist commitment'. He goes on: 'Both abstraction and partial consideration sound too much like mind-dependence. If one really is to hold a states of affairs ontology, it might be that universals and particulars will have to be sacrificed' (2007, 105). Even though I think this criticism is to be taken seriously, we will not pursue it here. The key point for the argument to follow is that *even if* universals can still be said to be real in some sense, their explanatory roles are limited given that they are no longer viewed as fundamental ontological posits. does not provide one. Indeed, Armstrong says surprisingly little about the one over many problem in his 1997 and 2004 work, preferring instead to focus on other arguments for universals such as the argument from laws (1997, Ch. 15) and the truthmaking argument (1997, 113).⁵ This might make one wonder whether Armstrong himself came to realise that, even by his own lights, the one over many problem is a red herring.

In short, the discussion above suggests that if states of affairs—facts of the form a is F—are the basic units of reality, then the best thing to say is simply that there is not a one over many problem to be answered. Once we get to facts of the form a is F, i.e. states of affairs, we have hit the bedrock of reality. As Devitt puts it, 'we should rest with the basic fact that a is F' (1980, 437).⁶ There may be good reasons for believing in Armstrong's universals, but the one over many problem should not be counted among them. To think otherwise is to be, at least in part, a mirage realist.

Finally, was Armstrong aware of these issues at the time of the 1980 debate with Devitt? Perhaps not, but there is evidence to suggest that elements of the picture above were bubbling under the surface. Interestingly, when summarising Armstrong's response to the problem of unity, Dodd includes a short Armstrong quote that is precisely from his 1980 exchange with Devitt:

Here is what Armstrong has by way of an alternative approach. States of affairs are ontologically basic unities, their constituents, particulars and universals, being 'vicious abstractions' from them (Armstrong, 1980). Hence, the problem of how particular and universal can be unified in a state of affairs rests on a misunderstanding; it is the product of wrongly taking particulars and universals to be ontologically prior to states of affairs (1999, 151; format of Armstrong reference brought in line with the formatting of this chapter).

⁵ In his postscript, Devitt also rightly points out that the one over many argument becomes less important in Armstrong's later work, given his new realist strategy of providing truthmakers which make our scientific theories true. Devitt says of the truthmaking strategy that 'Whatever justified that supposition would establish Realism about states of affairs without appeal to the One Over Many argument' (2010, 24, fn. 13).

⁶ This is not to say that there are not other problems with Armstrong's states of affairs. For recent criticisms, see Bynoe (2011) and Rissler (2006). Unfortunately, the issues discussed there fall beyond the scope of this chapter.

Nonetheless, Devitt can hardly be blamed for not making use of the above arguments, because Armstrong's view on states of affairs did not become fully clear until his 1997 work. Had Devitt known about these developments, he would have been able to play a stronger hand and argue that *even by Armstrong's own lights,* the one over many problem should not be considered a genuine one.

However, before resting with all of these conclusions, it is worth bearing in mind that in his 2004 work, Armstrong's view on universals and states of affairs underwent another significant change. It is well worth considering, therefore, whether these late developments allow Armstrong to approach the one over many problem in a different way.

5. Instantiation as Partial Identity

In the last section we focused on the problem of unity in order to bring out certain features of Armstrong's later view on states of affairs. An implicit assumption of that discussion was that particulars instantiate at least some universals *contingently*. For if particulars could not fail to instantiate the properties they have, then clearly the question of why certain particulars and certain universals are tied together would not be interesting. The answer would just be that things could not be otherwise. In recent work, however, Armstrong (2004, 2005a, 2005b and 2006) has had a change of heart and now views the instantiation of immanent universals by particulars as a necessary rather than contingent matter. This presents us with a rather different metaphysical view of instantiation to that discussed thus far and so our discussion would not be complete without taking it into consideration.

Following a view put forward by Baxter (2001), the source of the necessity of instantiation is said to lie in the fact that there is partial identity between a particular and each of the universals it exemplifies. Baxter holds that the link between a particular and its universals is still contingent because he thinks there can be contingent identities. Armstrong, however, has long held that identities hold necessarily, a view which he naturally carries over to the notion of partial identity. How are we to make sense of this partial identity? Armstrong describes the partial identity of some particular a with property F as an 'intersection with F' (2004, 47). This talk of 'intersecting' indicates that instantiation involves a sort of overlap, which is to say that part of the particular and part of the universal coincide, in the same way (to use one of Armstrong's examples of partial identity) that two adjoining terrace houses have a coinciding wall (Armstrong 1997, 18). Such overlap is surely a symmetric affair: if a overlaps with b, b overlaps with a. Because of this symmetry, the relationship between particulars and universals is given a new spin. Realists about universals have long described a universal as a one that runs through many particulars. But equally, Armstrong (2006) now says, a particular is a one running through many properties.

Where, then, does this new view leave us in respect of answering the one over many problem? This is not entirely clear. As far as I know, Armstrong did not explicitly address the one over many problem in light of his new theory. However, I will now put forward reasons for thinking that this new view is ill-suited to providing a very illuminating explanation for one over many facts.

The problem is this. A consequence of Armstrong's new theory is that universals cannot be said to be wholly present in each of their various instantiations. Given the necessity of partial identity, if any particular were to have different properties to those it actually has, then it would be a different particular. But given that overlap is plausibly symmetrical, what is equally true on Armstrong's new view is that if any worldly particular were to have had different properties, the world would not have contained the very same universals. What we would have, instead, are universals some of which are merely *close counterparts* of the actual universals. In Armstrong's words:

Consider first the particular and its properties. Could the particular have lacked any property that it in fact has? Strictly, no. Necessarily, the particular would have been at least a little different from what it actually is, and therefore would not be the same particular ... So if the particular is supposed to lack that property, will not the universal be a different entity? I think it must be. Having just the instances it has is essential to the universal being what it is. So the particular must have that property. (2005b, 318).

We can now clearly see why universals are not wholly present in each of their instantiations on this view. If universals were wholly present in their instantiations, then it would not be possible to take a universal out of existence by taking one of its particular instantiations out of existence (assuming it had more than one instantiation). On Armstrong's new view, however, this clearly is possible, as the above quotation implies. What Armstrong has done, then, is to shift his notion of instantiation towards the Platonic notion of *participation*, as Armstrong readily admits in one place (2006; see also Mumford, 2007, 187, where the comparison with Plato's participation view is drawn).⁷

Why, then, might this be problematic with respect to the one over many problem? Well, if instantiation is a form of participation, then the initial answer we would get to the one over many problem is that a is F because a overlaps with part of universal F, while b is F because it also overlaps with part of universal F. Is this explanation satisfactory? On its own, I do not think so. The immediate question that this answer invites is *what makes it the case that the overlapping parts in question are parts of the same universal*? In other words, what unifies these overlapping parts under the same universal? Until this question is answered, we have not dealt with the point that the one over many problem is raising. Pointing out that a's nature and b's nature are overlapping parts of the same universal could be the beginning of an answer to the problem, but only if we can then explain what it means for two distinct natures to be parts of the same universal. What is needed, in short, is some principle of unity. And it is far from clear that Armstrong's new view can provide one. As far as I can tell, it is simply left as a brute fact that certain overlapping parts are parts of the same 'universal' and, indeed, that the parts in question are parts of a universal at all.

Ironically, the problem just discussed is precisely that which Armstrong once raised in his early work against the participation interpretation of platonic realism. In the quotation below, where

⁷ It is worth pointing out that, in another place, Armstrong (2005c, 274) considers moving away from the participation view and flirts with the idea that it is not essential to a universal that it has just the instances it has. But as Mumford rightly points out, it is hard to see how this can consistently be maintained, because it is overwhelmingly plausible that partial identity is, like identity, symmetrical (2007, 191). Hence, if the partial identity view is to be maintained, it is hard to see how something like the participation view can be avoided.

Armstrong writes 'Form', we could replace that word with 'immanent universal' and the worry expressed applies equally to Armstrong's own partial identity view:

If "participation" is understood literally, then each particular simply gets a numerically different part of the Form. This is clearly unsatisfactory. The problem is to explain how different particulars can all have something in common. But if the Form has to be broken up among the particulars, then the problem of what is common to the particulars is replaced by the problem by what criterion these parts of the Form are all accounted parts of the same thing. Which is no advance at all (1978, 66).

6. The One Over Many Problem and the Platonic View of Universals

In this final section I want to suggest that all may not be lost for realists about universals who think the one over many problem is real and who want a genuine solution to it. Platonic realism is, I suspect, better suited to solving the one over many problem, providing it moves away from the participation view of instantiation. Note that the discussion so far has focused firmly on the Armstrongian theory of universals, which as we have pointed out at various places is a *non-relational immanent realist* view. Perhaps if we reject the immanentist component, a more promising answer to the one over many problem can be found. But first, what precisely does it mean to say that universals are immanent? Typically, the view is characterised in terms of what Armstrong calls the *principle of instantiation*. Armstrong first expressed the principle as follows:

Principle of Instantiation: For each N-adic universal, U, there exist at least N particulars such that they U (1978, 113).

The principle is, I think, intended to have modal force. The immanent realist does not mean to say that, *as it happens*, each universal that exists is instantiated. Such a claim is entirely compatible with the opposing view of platonism, for it would be a mistake to think that, by definition, platonists must hold that there are uninstantiated properties. For the platonists, universals exist independently of their

concrete instantiations, but whether or not all universals happen to be instantiated in our world is determined by which universals there are and what the concrete world contains. What this suggests is that the principle of instantiation is really a claim about *generic ontological dependence*. That is, if a universal is immanent then *necessarily*, if it exists, then there is at least one instantiation of it.

There is more one could say about the principle of instantiation, but for the purposes of this section I want to focus on the realist rival to the immanent view. As indicated above, platonism rejects the principle of instantiation and this raises the question of whether platonism, as an alternative to the immanent view, can do better where the one over many problem is concerned. I suspect it can.

Before addressing the one over many problem from the perspective of platonism, we first need to establish whether there is anything more to be said about platonism other than that it rejects the principle of instantiation. Clearly, the mere denial of the principle of instantiation leaves it open as to whether platonic universals are ontologically prior to worldly states of affairs or whether each category of entity is equally fundamental, existing independently of each another. Now, it is perhaps not an incoherent view to suppose that worldly states of affairs and transcendent universals 'float free', bearing no dependence relations in either direction. But it is hard to see what the theoretical point of positing universals would be in that case. Plato himself clearly thought that the 'Forms' (i.e., the transcendent universals) were more fundamental than concrete states of affairs, and that worldly entities were mere imperfect shadows cast by the perfect Forms. In the *Phaedo* (1975, 95-106) there is even the suggestion that worldly states of affairs are *causally* dependent on universals in some sense. The causal relation does not sound like the right sort of relation to modern ears in this context, but the general idea that worldly states of affairs are dependent on universals can be cashed out in other ways.

Indeed, I take it that a promising way of cashing out the relationship between platonic universals and their concrete instances is to do so in terms of the notion of ontological dependence (rather than participation, discussed in the last section).⁸ Various notions of ontological dependence are widely

⁸ It is well worth noting at this point that relations of ontological dependence should not be thought of as universals. To use Lowean terminology, ontological dependence is a formal rather than a material phenomenon. By this it is meant that ontological dependence relations are not items *within* an ontological category but rather

discussed in contemporary philosophy and it is arguable that we now understand them better. In particular, Fine's notion of *essential* dependence looks especially helpful where platonic universals are concerned. Fine developed this notion in response to the inadequacies of purely modal conceptions of ontological dependence. To say that one thing (call it x) depends *in a purely modal sense upon* another (y) is to say that necessarily, if x then y. Fine (1995) argues, however, that there are many cases in which the purely modal construal of dependence is insufficient for capturing the ontological dependence involved. For instance, strictly speaking Socrates is modally dependent on his singleton set, but surely Socrates is not ontologically dependent on his singleton set; rather, the set depends for its existence on Socrates and not vice versa. In such cases, Fine holds that we need an alternative notion to capture this sort of dependence, namely, *essential* dependence. At the heart of the notion of essential dependence is the idea that, in many (if not all) cases of ontological dependence, 'the necessity of the conditional 'x exists only if y does' should be appropriately tied to the nature of the dependent entity item x' (Fine 1995, 272-273).⁹

The reason why platonism would be best cashed out using the notion of essential dependence rather than purely modal dependence is this. Since platonic universals are transcendent entities, existing outside of space and time, they plausibly exist necessarily (see e.g. Bird 2007, Ch. 5 and Tugby 2013). But as critics of the modal account of ontological dependence point out, where the

capture the dependences *between* the ontological categories (in the platonic case, the categories of abstract universals and concrete states of affairs). Importantly, because ontological dependence is not itself a universal, it is not subject to the sort of regress problem discussed earlier (section 3) in connection with relational realism. ⁹ It is not my intention here to enter into a detailed discussion of the Finean notion of essential dependence. An explanation of the basic idea suffices for current purposes. For further details, interested readers should see Correia 2005, Fine 1995 and Lowe 1998, Ch. 6. Note that although Lowe's notion of ontological dependence is similar to Fine's notion of essential dependence (Lowe 1998, 149), Lowe prefers to cash it out using the notion of identity rather than essence. Again, the argument to follow is unaffected by these specific details. dependee is a necessary existent, anything whatsoever will be dependent on it in the modal sense.¹⁰ Clearly, this leaves the platonist with too many ontological dependences. If ontological dependence is understood in a purely modal sense, it means that, for instance, the existence of an electron particle is dependent on the proton universal, and the universal of being ice-cream, and whatever other transcendent universals there are. In order to avoid these implausible claims, what a plausible form of platonism should say is that the ontological dependence is appropriately constrained by the *nature* of the entities involved, so that, for example, the existence of an electron is dependent on the electronhood universal and no other. The platonic thesis would then be drawn out along the following Finean lines:

Platonic dependence: Essentially, for each particular, if it has some property P, then there is a transcendent universal P.

How does all of this bear upon the one over many problem? Well, importantly, it seems that essential dependences are especially well suited to ground *explanations*. For instance, to return to the Socrates example above, it seems the existence of Socrates plausibly explains the existence of Socrates' singleton set (rather than vice versa), and what seems to ground this explanation ontologically is the fact that Socrates' singleton set essentially depends on Socrates (rather than vice versa). To return to a point made earlier, it is generally the case that a depender is explained by the dependee but not vice versa. If we are to provide a metaphysical explanation for one over many facts—facts of the form a is F—then platonic dependence relations seem to run in precisely the appropriate direction. This is because, in line with the platonic dependence principle above, instantiation facts essentially depend on the relevant universals rather than vice versa.

How, then, can it be that a is F while b is also F? Roughly, a platonic analysis of one over many could be as follows: the fact of a's being F is essentially dependent on universal F, while b's being F

¹⁰ To use an example from Correia (2005, 30), assuming that Socrates is a contingent existent and that the empty set is necessary, then the former is modally dependent upon the latter. And yet, surely we do not want to say that Socrates depends for his existence on the empty set.

is also essentially dependent on universal *F*. Thus, sameness of type arises when there is sameness of essential dependence to a given universal. This is made possible by the fact that relations of essential dependence can be many-one, which is to say that distinct states of affairs can be essentially dependent on the same universal. So, to generalise, we may say that one over many phenomena are explained by the fact that platonic relations of essential dependence are *many-one*.

I have only been able to provide a brief sketch here of how a platonist ought to set about answering the one over many problem (for further details about the platonic solution to the problem, see my forthcoming article 'Universals, Laws, and Governance). But if the main thrust of the argument is correct, it shows that it is not surprising that Plato, who was arguably the first to identify the one over many problem, rejected the immanent view of universals in favour of the transcendent view.

To sum up, if the arguments of this chapter are correct, then Armstrongian immanent realists are indeed mirage realists, at least to some extent. In contrast, it is far from clear that platonic realists who take the one over many problem seriously need be guilty of this charge.

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