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What is the Problem of Universals?

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1. Introduction

Although the Problem of Universals is one of the oldest philosophical problems, and has been discussed at length for many centuries, philosophers have not always been clear about its nature. As Alex Oliver makes clear, there are two basic issues about which philosophers are not clear: one is the issue about what is supposed to be explained or accounted for by a solution to the Problem of Universals and the other is the issue about what sort of explanation or account should a solution to the problem be (Oliver 1996, pp. 49–50). There are then two different but related questions to be answered: What are the *explananda* of a solution to the Problem of Universals?, and What sort of explanation should we give of those *explananda*? The aim of this article is not to solve the Problem of Universals, but to clarify its nature by answering these questions. Indeed answers to those questions will give us an answer to the more general question, “What is the Problem of Universals?”. This article is thus concerned with a rarely discussed, fundamental and basic question, since only after we are clear about the nature of the problem should we look for a solution to it.

As we shall see in §2, a natural understanding of the Problem of Universals is as the problem of the *One over Many*. This understanding or formulation of the problem, however, is unsatisfactory since it is compatible with different answers to our questions about the *explananda* and the sort of explanation or account one should give of those *explananda*. In §3 I shall say what those different answers are and I shall argue that a solution to the Problem of Universals must account for the *truthmakers* of certain truths (as opposed to their ontological commitments or their conceptual contents), namely for the truthmakers of whatever truths are the *explananda* of a solution to the Problem of Universals. In §4 I shall present some fairly uncontroversial results of Truthmaker Theory. These results will be used in §5 to show what are the *explananda* of a solution to the Problem of Universals. This will provide a different understanding of the nature of the Problem of Universals, according to which, as argued in §6, it should be thought of as the *Many over One*

rather than the *One over Many* problem. Thus it is the Many over One which a solution to the Problem of Universals should solve.

2. *The One over Many*

As I have said, philosophers are not clear about what a solution to the Problem of Universals should explain, nor about the sort of explanation such a solution should be. Usually, however, the Problem of Universals is considered to be the problem of showing how *numerically different* particulars can have the *same* properties, as when white particulars share the property of *being white*, hot particulars the property of *being hot*, square particulars the property of *being square* and so on.¹ Thus, as acknowledged by Keith Campbell (1981, p. 483) and Oliver (1996, p. 47), “The Problem of Universals” is a misnomer, since the problem is not one about universals but about properties, universals being a particular solution to it. I think “The Problem of Properties” would be a better name, and only to maintain a link with tradition will I keep the name “The Problem of Universals”.

Some solutions solve the problem by postulating universals that are instantiated by particulars (Realism about Universals), others solve it by postulating tropes which are had by particulars (Trope Theory) and others solve it by appealing to different resemblances holding between particulars (Resemblance Nominalism). But whatever the exact nature of the Problem of Universals, something about it seems clear, namely that it is an *ontological* problem, a problem about what kinds of entities exist, not about how we know, think or speak about such entities (although a solution to it may, and probably would, have interesting consequences for these). It is important to keep this distinction in mind, since even philosophers who are generally aware of the ontological nature of the problem sometimes fail to observe it.

But what is the Problem of Universals? As I said, it is usually taken to be the problem of accounting how different particulars can have the same properties. But why is this a problem? Robert Nozick finds that many philosophical problems have

¹ The same question, of course, arises about relations when the members of different groups are related to each other in the same way. Thus the orbits of Mars, Jupiter and Saturn, and those of Mercury, Venus and the Earth, are such that in each case the second is (spatially) between the other two. For simplicity I shall from now on speak only about properties but shall assume that everything I say about them applies more or less directly to relations.

the following form: how is a certain thing, call it “X”, possible given (or supposing) certain other things? (Nozick 1981, p. 9). He gives many examples, some of which are the following:

- * How is it possible for us to have free will, supposing that all actions are causally determined?
- * How is it possible that we know anything, given that we may be brains in a vat?
- * How is it possible that motion occurs, given Zeno’s arguments?
- * How is evil possible, supposing the existence of an omnipotent omniscient good God?

Nozick calls these things other than the thing X “apparent excluders”, which appear to exclude the obtaining of X. The force of these apparent excluders, it seems to me, is variable: some might appear to exclude X *logically*, others *metaphysically* and others perhaps only *physically*. But in any case the coexistence of X and its apparent excluders is puzzling in some way and needs to be understood. Explaining how X is possible is, I take it, showing that there are no *real* excluders for X and, obviously, there are two ways of doing this: either one shows that the apparent excluders do not exist or else one explains why they are merely *apparent* excluders.

Although Nozick failed to include the Problem of Universals among his examples, this problem has the form of his problems. This is more clearly seen in David Armstrong’s formulation of the problem, for whom it is “the problem of how numerically different particulars can nevertheless be identical in nature, all be of the same ‘type’” (Armstrong 1978, p. 41). Here the occurrence of the contrastive adverb “nevertheless” suggests that there is an apparent excluder and this is, I think, just the numerical difference among the particulars. The question which troubles the philosophers is: how can there be identity in the difference?, or how can there be oneness in the multiplicity? This is why the problem is also called *The One over Many*.

Some may see an apparent *logical* incompatibility here, others a weaker one. Either way an explanation is called for, and this is what solutions to the Problem of Universals try to provide. But others may feel that the Problem of Universals does not have Nozick’s form, for there seems not to be any incompatibility, of any sort,

between *a* and *b* being the same *in kind* (or the same in a certain qualitative respect) and *a* and *b* being *numerically* different.² But *there is* an incompatibility of some sort between being different and being the same and distinguishing between numerical identity or difference and qualitative identity or difference is already an attempt to explain how particulars can be identical in spite of being different. And, of course, without an account of what kinds or properties are, merely saying that numerically different particulars can be identical in kind is an incomplete explanation. But, anyway, there is a more basic problem, for the sort of explanation involved in how different particulars can have the same properties is rarely clarified, as Oliver (1996, p. 75) points out, but in §3 I shall say what it must be.

It should be added that the properties sharing of which the Problem of Universals is about are what David Lewis (1983, pp. 346–7, 1986, pp. 59–63) calls *sparse* or *natural properties*, i.e. those which are shared if and only if the particulars which share them resemble each other and which suffice to characterise particulars completely and without redundancy. Charges and masses of particles are examples of sparse properties. Non-sparse, or *abundant* properties, may be “as extrinsic, as gruesomely gerrymandered, as miscellaneous disjunctive” as one pleases (Lewis 1986, p. 59). But of course there need be nothing identical in two particulars which share the abundant property of *existing in the twentieth century and being negatively charged or having mass of less than 20 kilograms*. The Problem of Universals is about sparse properties (and relations), and from now on when I speak of properties I have in mind *sparse* ones.

² I owe this observation to an anonymous referee for *Mind*.

3. *A Problem about Truthmakers*

What must a solution to the Problem of Universals account for? Characterising the Problem of Universals as the problem of explaining how can different particulars be identical in nature, or have the same properties, does not give a unique answer to this question. In particular it does not tell us whether we have to account for facts like that *a* and *b* have a common property, or that *a* and *b* have in common the property *F*, or, perhaps, that *a* and *b* are both *F*. But the possibility of disagreement goes even beyond this, as is clear from the following passage by Campbell, where he urges us to distinguish two questions which may not have parallel answers:

... 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 can 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*. (Campbell 1990, p. 29)

Discussions of the Problem of Universals often take for granted that these two questions are to be given parallel answers. This leads philosophers to conflate the questions, and that in turn, according to Campbell, favours Realism about Universals and begs the question against Trope Theory (Campbell 1990, p. 29).

Campbell is right to say that many philosophers conflate the two questions and indeed some philosophers, like Devitt (1980, p. 435), explicitly say that the problem is how to account for truths like “*a* is *F*” rather than truths like “*a* and *b* have the same property *F*” or “*a* and *b* are both *F*”. Others, however, are less clear about what the Problem of Universals demands an account of. The most notable example here is Armstrong himself, whom Oliver (1996, pp. 49–50) has shown to vacillate between the following six sentences stating the facts to be accounted for by a solution to the Problem of Universals:

- (1) a and b are of the same type/have a common property.
- (2) a and b are both F .
- (3) a and b have a common property, F .
- (4) a has a property.
- (5) a is F .
- (6) a has the property F .

However, as Oliver makes clear, Armstrong vacillates between (1)–(6) because he thinks that “ a is F ” is equivalent to “ a has the property F ”, from which one can infer “ a has a property”; similarly “ a and b are both F ” is equivalent to “ a and b have a common property, F ”, from which one can infer “ a and b have a common property”; finally from “ a has the property F ” and “ b has the property F ” one can infer “ a and b have a common property, F ” (Oliver 1996, p. 50).

For the time being I shall take (2) and (3), and (5) and (6), to express the same facts (I shall come back to this in §5). This leaves four facts to be accounted: those expressed by (1), (2)/(3), (4) and (5)/(6). Which of these does the Problem of Universals demand an account of? This is not a trivial question, for since the facts are different there may not be an unified account of all of them. Indeed Lewis (1983, pp. 354–5) thinks that (1) and (3) have different accounts, and we saw Campbell urging different accounts of (2) and (5). But before I can say what solutions to the Problem of Universals must account for, I shall make clear what sort of account is required.

Oliver (1996, p. 50) points out that there are three views of what an account or explanation of (1)–(6) would be, and Armstrong seems to vacillate among them too. I take these views to be candidates for the sort of solution the Problem of Universals requires, and as such I shall show that only one of them is correct. These candidates are:

- (a) a *conceptual* analysis of the *content* of (1)–(6);
- (b) an account of the *ontological commitment* of (1)–(6); and
- (c) an account of the *truthmakers* or *ontological grounds* of (1)–(6).

Candidate (a) tries to capture the content of some or all of (1)–(6). I agree with Oliver that “capturing content” is vague. It is clear that material equivalence is too weak and strict synonymy too strong, but as he points out necessary equivalence is also too weak because “if Q is necessarily equivalent to P , then so is $Q \& R$, where R is any necessary truth” (Oliver 1996, p. 51). Whether or not this poses a problem for conceptual analysis, it does not matter here, since I think conceptual analysis is not what the Problem of Universals demands. For, as I noted in §2, I take the Problem of Universals to be an ontological problem, an answer to which should tell us something about what there is, whereas all a conceptual analysis can tell us about is the content of the concepts and words we use to think and speak about what there is. This is not to deny that conceptual analysis of (1)–(6) may have ontological consequences, nor is it to deny that such ontological consequences may play a rôle in solutions to the Problem of Universals; it is only to insist that the Problem of Universals is an ontological problem, not a conceptual one, and so its solution may not take the form of a conceptual analysis of any of (1)–(6).

Candidates (b) and (c) must be carefully distinguished, since they are often confused, notably by Armstrong (1989, p. 41, footnote). The ontological commitments of a sentence are those entities that must exist for the sentence to be true. More precisely, and adapting Oliver (1996, p. 60):

(OC) Sentence “S” is ontologically committed to entity E if and only if “S” entails “E exists”.

The truthmaker of a sentence, on the other hand, is that *in virtue of* which it is true, or that which *makes* it true (Armstrong 1997, p. 13, Bigelow 1988, p. 125). Although this intuitive explanation is not altogether clear, authors agree that “making true” means not “causing to be true” and many of them think that it means “entailing”. Thus a truthmaker is often characterised like this (Bigelow (1988, p. 126), Fox (1987, p. 189), Oliver (1996, p. 69)):

(T) Entity E is a truthmaker of sentence “S” if and only if “E exists” entails “S”.

As Oliver (1996, p. 69) suggests, the necessity in the notions of entailment involved here is broadly logical or metaphysical. But whatever the notion of entailment, ontological commitment and truthmaking are converse entailment relations, running from language to world for ontological commitment and from world to language for truthmaking.³

Thus both (b) and (c) tell us something about what exists. Neither can therefore be rejected on grounds that applying them to sentences (1)–(6) would tell us nothing about the world: both candidates are ontologically illuminating. But they are illuminating in fundamentally different ways, and this affects which of them should be taken to be the sort of explanation demanded by the Problem of Universals.

Now, the nature of explanation is a highly controversial topic into which fortunately I need not go. I take it, however, that if “S” entails but is not entailed by “E exists”, E’s existence does not explain how the fact that S is possible. For then E’s existence is compatible with S’s non-existence and therefore with S’s *real* excluders and so E’s existence is not enough to explain how the fact that S is possible. So since the Problem of Universals is the problem of giving a philosophical or metaphysical explanation of how the facts expressed by (1)–(6) are possible—i.e. showing either that there are really no apparent excluders or that they are merely *apparent* excluders—the sort of account in question cannot be one about their ontological commitments, which rules out candidate (b) above.

On the other hand, one way of explaining how some fact S is possible is by invoking the existence of something which entails it. For if “E exists” entails “S” then E’s existence *necessitates* the fact that S, which means that, *given E*, the fact that S cannot fail to obtain, not that it obtains or exists necessarily. For then E’s existence rules out the real excluders of the fact that S: what necessitates the fact that S thereby “impossibilitates” its real excluders and so explains how S is possible. But if E is a truthmaker of “S” then “E exists” entails “S”. And so I conclude that (c) above is the right candidate, i.e. that the sort of account demanded for the Problem of Universals is an account of the truthmakers of sentences (1)–(6). Of the three candidates this is the

³ I take *sentences* as truth-bearers; those who prefer propositions or statements will know how to adapt what I say about sentences.

only one which can provide us with an explanation of how the facts expressed by (1)–(6) are possible.⁴

4. Some Results of Truthmaker Theory

The notion of truthmakers, on which the Problem of Universals depends, is, however, controversial and there are arguments, like a version of the so-called *Slingshot argument*, which tries to show that the notion is empty or incoherent (Oliver 1996, p. 73). The Slingshot can, I think, be stopped by adopting a so-called “structuralist” criterion of identity for facts (see Olson 1987, p. 91, Rodriguez-Pereyra 1998, pp. 520, 522 and Rodriguez-Pereyra 2000).

The Slingshot, however, is not the only problem lurking around the notion of truthmakers. For (T) says that E is a truthmaker of “S” if and only if “E exists” entails “S”. Thus (T) makes every truthmaker for some sentence also a truthmaker for every necessary truth, for if “S” is necessarily true then every entity E is such that “E exists” entails “S”. Thus Socrates is a truthmaker both for “Snow is white or snow is not white” and “ $4 > 3$ ”. This seems wrong, for whether or not necessary truths have truthmakers, any notion of truthmakers which has as a consequence that contingent entities are truthmakers for necessary truths is clearly wrong. For how can it be that Socrates *makes* it true that, say, the number 4 is greater than the number 3? How can it be that “ $4 > 3$ ” is true *in virtue of* Socrates? Surely, the notions of *making true* and *being true in virtue of* are not completely clear and that is why a clarification in terms of the *relatively* clearer notion of *entailment* is usually proposed. But any such proposal implying that Socrates is the truthmaker of “ $4 > 3$ ” distorts rather than clarifies our intuitive notion of truthmaking. Thus I reject (T), and propose to replace it by (T*), which only asserts that entailment of the corresponding truth is a necessary condition for truthmakers:

(T*) If E is a truthmaker of “S” then “E exists” entails “S”.

⁴ Nothing here commits me to the dubious claim that explanation is entailment, if only because I am speaking about a specific kind of explanation, namely explanation of how, given some apparent excluders, a certain fact is possible.

It should be clear that my argument that the Problem of Universals is a problem about truthmakers (§3) appeals only to the fact that entailment of the corresponding truth is a necessary condition for truthmakers, i.e. it appeals to (T*) rather than the stronger (T).⁵

I do not know, however, what else we need to get necessary and sufficient conditions for truthmaking. But the notion of truthmaking can at least be clarified by showing what the truthmakers of different sorts of sentences are. True, what the truthmakers of true negative sentences and universal generalisations are is a hotly debated topic, about which I shall say nothing here and refer instead to the work of Armstrong (1997, pp. 134–5, 196–201), Hochberg (1992, pp. 102–3), Russell (1994, pp. 211–6, 228–32) and Simons (1992, pp. 163–8). In this section I shall instead concentrate upon the less controversial truthmakers of disjunctions, conjunctions and existential generalisations, since what I say about them will be useful in the next section.

Disjunctions show that the truthmaking relation is not one-one, but many-many. For, on the one hand, some truthmakers make true more than one sentence, e.g. the fact that Socrates is white makes true both “Socrates is white or Socrates is round” and “Socrates is white or Plato is white”. On the other hand, some sentences, like “Socrates is white or Plato is white”, have more than one truthmaker, i.e. the fact that Socrates is white and the fact that Plato is white, the existence of either of which entails the truth of the sentence. In this case the facts that Socrates is white and that Plato is white are *separate* truthmakers for “Socrates is white or Plato is white”, since each of them suffices on its own to make the whole sentence true.

This shows that disjunctive facts, if there are any, should not be postulated as the truthmakers of disjunctive sentences. For it is clear enough that a disjunction is true *in virtue of* the truth of any of its disjuncts, and that a disjunction is made true by the truth of any of its disjuncts. This is, of course, compatible with disjunctions being made true *also* by disjunctive facts.⁶ But my claim is simply that there is no reason to

⁵ An alternative way of dealing with the Slingshot and the problem that any truthmaker is a truthmaker for every necessary truth would be to reject the notion of entailment as strict implication and adopt instead some relevant notion of entailment. But this is not the place to explain why I think such a line is unsatisfactory. I put forward some problems with the relevant entailment solution to the Slingshot in my “Searle’s Correspondence Theory of Truth and the Slingshot”, pp. 521–2. For a different and better objection to the relevant entailment solution to the Slingshot see my forthcoming article “Truthmaking and the Slingshot”.

⁶ As suggested by an anonymous referee for *Mind*.

posit them as such truthmakers, given that that rôle is already played in Truthmaker Theory by the facts which make true any of the disjuncts.^{7,8}

What are the truthmakers of existential generalisations? This case is of course similar to that of disjunctions, since they have separate truthmakers. One might want to say that an existential generalisation is made true by whatever makes true any of its true instances; but there may be exceptions to this since “ $(\exists x)(Fx)$ ” might be true though none of its instances is because, for instance, no F -particular has a name. Thus I prefer to say that “ $(\exists x)(Fx)$ ” is made true by whatever makes true that a certain F -particular is F . So the facts that Socrates is white and that Plato is white separately make true the sentence “There is something white”. Thus, as in the case of disjunctive facts and disjunctions, existential facts—if there are any—should not be postulated as the truthmakers of existential generalisations.⁹

How about conjunctions? The situation here is different, since there is a *prima facie* cogent principle about the truthmakers of conjunctions which has no analogue in the case of disjunctions. I call the principle (Conj) and it says that whatever makes a conjunction true makes also its conjuncts true:

(Conj): If E makes “P & Q” true then E makes “P” true and makes “Q” true.

Clearly an analogue of (Conj) would not be true of disjunctions, for since “P \vee Q” may be true while “Q” is false, a truthmaker of “P \vee Q” need not be a truthmaker of “Q”. That is, the truth of a disjunction does not entail the truth of all its disjuncts. And so one may suppose that to account for the truthmakers of conjunctions like “ Fa &

⁷ There might be exceptions to this, for in *some* theories of vagueness, e.g. *supervaluationism*, a disjunction might be true although neither disjunct is. Thus given that “tall” is a vague predicate if Ted is a borderline case of it, then “Ted is tall or Ted is not tall” is true though neither “Ted is tall” nor “Ted is not tall” are. But not even in these theories disjunctive facts should be postulated as truthmakers. Thus supervaluationists should say, instead, that what makes “Ted is tall or Ted is not tall” true is that Ted has a certain height, which makes him count as tall on some precisifications of “tall” and as short on other such precisifications.

⁸ Stephen Read (2000, pp. 8-9) has recently made a case against the contention that all what makes a disjunction true are the truthmakers of the true disjuncts. However Read’s case depends on a postulate, which he calls ‘The Entailment Thesis (ET)’ (Read 2000, p.3), according to which truthmaking is closed under entailment. This thesis follows from (T) above, but I rejected (T) and replaced it by (T*), from which (ET) does not follow. And (ET) can and must be rejected on some of the grounds I rejected (T), namely that it makes every truthmaker a truthmaker for every necessary truth.

⁹ Vagueness might be a problem here again, since in supervaluationism an existential generalisation can be true without any of its instances being true (Keefe and Smith 1996, p. 32) and therefore without anything being what the generalisation says something is. But this should not lead one to postulate existential facts as truthmakers of existential generalisations.

Fb” one needs to postulate conjunctive facts, for what can make true *both* “*Fa*” and “*Fb*” if not the conjunctive fact that *Fa&Fb*?

But if the conjunctive fact that *Fa&Fb* is a truthmaker of “*Fa*”, does this mean that “*Fa*” has more than one truthmaker? This in itself should not be a problem, since we have seen that disjunctions often have more than one truthmaker. But “*Fa*” is not a disjunction. And surely “*Fa*” is true in virtue of the fact that *Fa*, not of the fact that *Fa&Fb*, if there is any such thing. For let $F_{\&} = Fa\&Fb$. If $F_{\&}$ did not have the fact that *Fa* as one of its constituents, then “ $F_{\&}$ exists” would not entail “*Fa*” and so this might not be true even if $F_{\&}$ existed. But then “*Fa*” is true in virtue of *Fa*, not of $F_{\&}$, i.e. not of *Fa&Fb*.¹⁰

But perhaps conjunctive facts are truthmakers of conjunctions but not of their conjuncts? Perhaps so but since one already has the facts that *Fa* and that *Fb* as truthmakers of “*Fa*” and “*Fb*” respectively, there is a simpler, less committing and so better way to account for the truthmakers of conjunctions. This consists in, following Kevin Mulligan, Peter Simons, and Barry Smith (1984, p. 313), making “*Fa&Fb*” made true by the facts that *Fa* and that *Fb*, not *separately* of course, but *jointly*. In general, on this view, conjunctions are jointly made true by the truthmakers of their conjuncts.¹¹ Thus the truthmakers of “Socrates is white and Plato is white” are *both* the facts that Socrates is white *and* that Plato is white, i.e. the facts that Socrates is white and that Plato is white make “Socrates is white and Plato is white” true *jointly*.

So, it seems, we should reformulate (Conj) to read that if E_1, \dots, E_n *jointly* make true “ $P_1\&\dots\&P_n$ ” then E_1, \dots, E_n *jointly* make true “ P_1 ” and...and “ P_n ”. But what makes true each of the conjuncts of a conjunction is not the co-existence of their various truthmakers! Indeed “*Fa*” is no more made true by *both* the fact that *Fa* and the fact that *Fb* than it is made true by the *conjunctive* fact that *Fa&Fb*. And so (Conj) is wrong even if reformulated in this way. But how can (Conj) be wrong, if the truth of a conjunction entails the truth of each of its conjuncts? But entailment, as we saw, is only a necessary condition of truthmaking and does not exhaust it. (Conj) can only be cogent if confused with the following undeniable principle about truthmaking, which should replace it:

¹⁰ This goes against what Simons (1992, p. 165) calls the *monotonicity* of truthmaking.

(Conj*): If E_1, \dots, E_n jointly make true " $P_1 \& \dots \& P_n$ " then " E_1 exists $\& \dots \& E_n$ exists" entails " P_1 " and... and " P_n ".

5. *The Explananda of the Problem of Universals*

It is one thing to know how to solve the Problem of Universals, and another to know exactly what facts this solution should explain. In looking for the truthmakers of (1)–(6), should we concentrate upon some of (1)–(6) and then extend our results more or less directly to the others? If so, on which of them should we concentrate first? Or are their truthmakers independent of each other?

In §3 I provisionally took sentences (2) and (3), and (5) and (6), to express the same facts, but given what I have said about the Problem of Universals I can now weaken this and assume only that (2) and (3), and (5) and (6), have the same truthmakers. I shall defend this weaker assumption in §6.

What I have said about the truthmakers of conjunctive and disjunctive sentences in §4 then suffices to single out the basic fact the Problem of Universals demands an account of. Consider again sentences (1)–(6):

- (1) a and b are of the same type/have a common property.
- (2) a and b are both F .
- (3) a and b have a common property, F .
- (4) a has a property.
- (5) a is F .
- (6) a has the property F .

(4) says that a has a property but does not specify which one; it says, in other words, that it has some property or other. Thus I take (4) to be a covert disjunction, something like " a is (has the property) F or a is (has the property) G or a is (has the property) H ...". Alternatively (4) might be seen as an existential generalisation saying

¹¹ Since "jointly" suggests plurality there are, of course, exceptions to this rule, like the conjunctions " $Fa \& Fa$ ", " $Fa \& (Fa \vee Fb)$ " etc., but they are degenerate cases special treatment of which is unnecessary here.

that there is something (some property) which a is (has). Either way what makes sentences like (4) true are the truthmakers of sentences like (5) and (6).

Similarly for (1), which can be taken either as a covert disjunction like “ a is (has the property) F and b is (has the property) F , or a is (has the property) G and b is (has the property) G ...”, or else as an existential generalisation like “There is something (some property) which both a and b are (have)”. Either way what makes sentences like (1) true are the truthmakers of sentences like (2) and (3).

But sentences like (2) and (3) are short for conjunctions like “ a is (has the property) F and b is (has the property) F ”. Thus sentences like (2) and (3) are made true jointly by the truthmakers of sentences like “ a is (has the property) F ” and “ b is (has the property) F ”. That is, the truthmakers of sentences like (5) and (6) jointly make sentences like (2) and (3) true. Therefore an account of the truthmakers of sentences like (5) and (6) will thereby give us an account of the truthmakers of all the other sentences the Problem of Universals has been thought to demand an account of. In short, then, given that the Problem of Universals is a problem about truthmakers, one has to concentrate on sentences like (5) and (6).

Thus Campbell (1990, p. 29) is wrong in saying that his A-questions (i.e. What is it about a in virtue of which it is red?) and his B-questions (i.e. What is it about a and b in virtue of which they are both red?) may not have parallel answers. Campbell says that “ a is red” is true in virtue of a 's having a red trope and similarly “ b is red” is true in virtue of b 's having a red trope, and that it is in virtue of the likeness of the tropes in question that it is appropriate to use resembling word tokens, each a case of “red”, in describing a and b (Campbell 1990, p. 31). But if Campbell's questions are taken as questions about truthmakers, as I think they should be, either Campbell has misunderstood truthmaking, or else in his theory the relation of resemblance plays no rôle in truthmaking. For, obviously, the answer to his B-questions is dictated by the answers to his A-questions: how can what makes it true that a and b are red fail to be that a is red and b is red? Thus what makes both a and b red cannot be that they have exactly resembling tropes unless their resemblance is what makes each of those tropes red-tropes, otherwise the only rôle of resemblance in the theory is to be that which makes us apply the predicate “red” to both a and b rather than what makes the resulting sentences true.

But whatever is wrong with Campbell's theory, what is important here is that to solve the Problem of Universals one just needs to provide the truthmakers for

sentences like (5) and (6). And for these sentences different theories will offer different truthmakers, e.g. particulars instantiating universals, particulars resembling each other, or particulars having resembling tropes. Thus Realism about Universals says that the truthmaker of (5) and (6) is that a instantiates F -ness, which is also a truthmaker of (4); and that a instantiates F -ness and that b instantiates F -ness are the joint truthmakers of sentences (2) and (3) and hence of (1). Similarly, Resemblance Nominalism answers the Problem of Universals by saying, roughly, that the truthmaker of (5) and (6) is that a resembles the F -particulars, which is also a truthmaker of (4); and that a resembles the F -particulars and that b resembles the F -particulars are the joint truthmakers of sentences (2) and (3) and therefore of (1) too. Finally Trope Theory should say that the truthmaker of (5) and (6) is that a has a trope which resembles the F -tropes, which is also a truthmaker of (4); and that one of a 's tropes resembles the F -tropes and one of b 's tropes resembles the F -tropes are the joint truthmakers of (2) and (3) and hence of (1).

6. *The Many over One*

So far I have assumed that sentences like (5) and (6) have the same truthmakers, but what does this assumption mean? Shall I say that a sentence like “ a is F ” is made true by a 's having property F —whatever our account of what a particular having a property consists in—and so that its truth requires the existence of properties? Or shall I instead say that the truth of a sentence like “ a has the property F ” requires nothing but a as its truthmaker?

Many would be inclined to the latter option, for they endorse semantic theories according to which a sentence like “ a is F ” is only committed to the existence of the particular a , not to the property F . Michael Devitt, for instance, thinks that (6) has to be paraphrased by (5) and that this commits one to the existence of a , not of F , since he endorses a Quinean semantics according to which “ a is F ” is true if and only if there is an x such that “ a ” designates x and “ F ” applies to x (Devitt 1980, p. 435). Thus Devitt endorses what Armstrong (1978, p. 16) calls *Ostrich Nominalism*, according to which the Problem of Universals is not a genuine philosophical problem, as it is based upon a false presupposition about the ontological commitments of

sentences like “*a* is *F*”. And Devitt’s Ostrich Nominalism may be satisfactory, provided one is concerned with the ontological *commitment* of sentences like (5) or (6). But this is of little importance for us since, as we saw in §3, the Problem of Universals is concerned not with the ontological commitments but with the truthmakers of sentences like (5) and (6).¹²

Yet why believe that something else besides *a* is necessary to make sentences like (5) and (6) true? Maybe all that makes them true is just the particular *a*? For is it not the case that, given that *a* is *F*, *a*’s existence suffices to make “*a* is *F*” true? Is it not possible to reproduce the Ostrich’s strategy about truthmakers? No, for even if Ostrich Nominalism works for ontological commitments, the truthmaker version is untenable, as we shall now see.

One might think that the truthmaker version of Ostrich Nominalism fails simply because a sentence like “*a* is *F*” may be *contingently* true. If so, then *a* does not suffice to make it true that it is *F*, since “*a* exists” does not entail “*a* is *F*”, for the former may be true and the latter false. Therefore *a* is not the truthmaker of “*a* is *F*”.

Persuasive as this might be, there are reasons why some may remain unpersuaded by it. Thus Counterpart theorists, according to whom no particulars exist in more than one possible world, may want to have Socrates as the sole truthmaker of a contingent predication like “Socrates is white”. For although they accept this sentence as contingently true, they believe that “Socrates exists” is true in only one possible world and so “Socrates exists” does entail the truth of “Socrates is white”.

But Counterpart Theory provides no reason to make Socrates the truthmaker of “Socrates is white”, unless one assumes that entailment is sufficient for truthmaking. But we saw in §3 that this distorts our idea of truthmaking and entailment is only necessary, not sufficient, for it. Thus Counterpart Theory does not help the Ostrich Nominalist about truthmakers.

Maybe a better way to make Socrates the truthmaker of “Socrates is white” is to claim that all true sentences like “*a* is *F*” are *necessarily* true. Indeed some hold that particulars are the truthmakers of any sentences predicating something essential to them (Bigelow 1988, p. 128). Thus if Socrates is essentially human and essentially

¹² In a later work Devitt reverses the order of his argument, since there he does not argue from a semantics for sentences like “*a* is *F*” to an ontological conclusion that there are only particulars, but says that the reason for preferring the Quinean semantics is indeed ontological (Devitt 1991, p. 58). Thus he does now argue from ontology to semantics, rather than other way round. Another philosopher who endorses Ostrich Nominalism for no semantic reasons is James van Cleve (1994).

moral, Socrates is the truthmaker of both “Socrates is human” and “Socrates is moral”.

Now it will certainly be difficult to argue convincingly that all true sentences like “*a* is *F*” are necessary. But whether or not that can be done, assuming that Socrates is essentially human and essentially moral, can “Socrates is human” and “Socrates is moral”, predicating such different characteristics of Socrates, both have the same truthmaker? Can those two sentences be true in virtue of the same thing when “is human” and “is moral” are not even coextensive predicates? Only if one thinks all there is to truthmaking is entailment, for “Socrates exists”, given the essentiality of his humanity and morality, entails both “Socrates is human” and “Socrates is moral”. But as we now know, entailment is only a necessary condition, not a sufficient one, for Socrates to be the truthmaker of “Socrates is human” and of “Socrates is moral”. Thus not even essential predications of Socrates may have Socrates as their sole truthmaker.

And this, of course, is a general point which applies independently of whether the predications in question are assumed to be essential. This general point is also independent of any considerations about what entails what, and constitutes my reason for denying that particulars are the sole truthmakers of sentences like “*a* is *F*”. For take any true sentence predicating something of *a*, “*a* is white” for instance. There will then be other truths about *a*, like “*a* is spherical” and “*a* is hot”. And now the idea that *a* is the only truthmaker of these truths must be seen as seriously deficient. For how can the same thing make it true that *a* is white, that *a* is spherical and that *a* is hot? Surely it takes more than just *a* to make these claims about *a* true. Thus whatever one believes about whether being white, spherical or hot is essential to *a*, and whatever one believes about “*a* exists” entailing those three sentences, an account of what makes them true must include something *about a*, something more than merely *a*. And then it is obvious what this extra is in each case, namely the facts that *a* is white, that *a* is spherical and that *a* is hot.

There must therefore be some complexity or multiplicity involving *a* that accounts for the truth respectively of “*a* is white”, “*a* is spherical” and “*a* is hot”. But then one has to take those facts seriously, since it leads nowhere to say, as van Cleve does, that “the fact that *a* is *F* has *a* as its sole constituents, and the difference between this fact and the fact that *a* is *G* is not a difference in their constituents” (van Cleve 1994, p. 589). Unfortunately van Cleve does not explain how, if not in their

constituents, these facts differ. But if both facts have *a* as their sole constituent, why does the fact that *a* is *F* not also make it true that *a* is *G*? Thus there must be some multiplicity to do with *a* that enters into the facts that *a* is white, that *a* is spherical and that *a* is hot. But then what is this multiplicity if not a multiplicity of properties? If there is something more than *a* in the fact that *a* is white, what else can it be if not the property of *being white*? But if so, the fact that *a* is white is just the fact that *a* has the property of *being white* and then what makes the sentences in question true are the fact that *a* has the property of *being white*, the fact that *a* has the property of *being spherical* and the fact that *a* has the property of *being hot*.¹³

Thus even if sentences like “*a* has the property *F*” are misleading about the ontological commitments of sentences like “*a* is *F*”, they are still illuminating and revealing about their ontological grounds or truthmakers. And this confirms our previous assumption that sentences like “*a* is *F*” and “*a* has the property *F*” have the same truthmakers. For “*a* has the property *F*” has as its truthmaker that *a* has the property *F*, which is according to the above also the truthmaker of “*a* is *F*”.

Thus the fact to be accounted for by a solution to the Problem of Universals is what I call the *Many over One*, i.e. that single, numerically one particulars have many different properties. The *One over Many* requires an explanation of oneness given its apparent excluder—multiplicity. Correspondingly, the *Many over One* requires an explanation of multiplicity given its apparent excluder—oneness. The question posed by the *Many over One*—exactly the opposite of that posed by the *One over Many*—is then “How can there be multiplicity in the oneness?”, i.e. “How can a particular be in some sense multiple, given that it is numerically one?” The *Many over One* is indeed puzzling, for given that the particular is one, where does its multiplicity come from?

That the Problem of Universals is the *Many over One*, i.e. that the *Many over One* rather than the *One over Many* is the phenomenon to be explained, should not be surprising, since the *One over Many* has as its starting point facts about a multiplicity of particulars sharing some property or other, facts expressed by sentences like “*a* is *F* and *b* is *F*” or “*a* has the property *F* and *b* has the property *F*”. But given that the Problem of Universals is one about truthmakers, and that the truthmakers of these

¹³ I am imagining, for the sake of the example, that properties like *being white* and *being hot* are sparse.

conjunctions are the truthmakers of their conjuncts, the One over Many vanishes into the Many over One.¹⁴

The explanation of how it is possible for single particulars to have a multiplicity of properties can obviously take two forms: either one denies that there are any numerically one particulars or else one shows that the oneness of particulars is merely an *apparent* excluder of their having a multiplicity of properties. The latter is done by explaining how this multiplicity of a particular's properties is compatible with its being one. And in this sense solutions to the Problem of Universals are theories of properties: they explain in virtue of what a single particular can have many of them. And then some such theories, as Resemblance Nominalism does, may very well account for the Many over One without postulating universals or tropes, for according to Resemblance Nominalism what makes true that *a* is *F* is, roughly, that it resembles all *F*-particulars. Thus the realism about properties to which everyone is committed by recognising the Many over One as a genuine problem is minimal, since it only commits one to the idea that what makes sentences like "*a* is *F*" and "*a* has the property *F*" true is more than just *a*, and this extra is what theories of properties are about.

7. Conclusion

In this article I have answered two important questions concerning the Problem of Universals, namely the question about what a solution to the problem must account for and the question about what sort of account such a solution should be. Answers to these questions provide an answer to the question "What is the Problem of

¹⁴ An anonymous referee suggests that perhaps the Problem of Universals can be put as follows: it cannot be true that *a* is Moses and *b* is Moses, but it can be true that *a* is round and *b* is round; how is this so? But it is not obvious how appeal to truthmakers of conjunctions answers this questions and so, the same referee suggests, it is not entirely convincing that the One over Many vanishes into the Many over One. I agree that it is not obvious that appeal to truthmakers of conjunctions answers that question, but this is, I take it, because it is not *obvious* that solutions to the Problem of Universals must account for the truthmakers of sentences like "*a* is round and *b* is round". Indeed I had to give an *argument* to show that this is so in §3. But once one see that the Problem of Universals is a problem about truthmakers it is clear that the answer to the question of how can "*a* is round and *b* is round" be true is by citing the truthmakers of its conjuncts. But can sentences like "*a* is round" be true just in virtue of *a*? The answer to this is, as we saw, negative, for *a* alone cannot account for the multiplicity of truths like "*a* is round", "*a* is white" etc. It remains then to account for how it is possible for a single particular to have many properties and this is how the Problem of Universals, even if put in the way suggested by the referee, vanishes into the Many over One.

Universals?”. I argued that a solution to the problem should be an account of the truthmakers of certain true sentences (§3), namely those like “*a* is *F*” or “*a* has the property *F*” (§5).

Then, in §6, I argued that the truthmaker of such sentences cannot be *a* alone, for there are other truths about *a*, like that it is *G*, *H* etc. I concluded then that the truthmaker of a sentence like “*a* is *F*” or “*a* has the property *F*” is that *a* has the property *F* and the truthmaker of a sentence like “*a* is *G*” or “*a* has the property *G*” is correspondingly that *a* has the property *G*, where properties are understood in a minimal sense acceptable even to *Resemblance Nominalism*.

Thus what one has to account for is how can the same particular have different properties and this is why the Problem of Universals, traditionally conceived as the One over Many problem, the problem of explaining how different particulars can have the same properties, is transformed into the Many over One, the problem of explaining how the same particular can have different properties. That is, the Problem of Universals is the Many over One.¹⁵

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REFERENCES

- Armstrong, David M. 1978: *Universals and Scientific Realism*. Vol. I: *Nominalism and Realism*. Cambridge: Cambridge University Press.
- 1989: *A Combinatorial Theory of Possibility*. Cambridge: Cambridge University Press.
- 1997: *A World of States of Affairs*. Cambridge: Cambridge University Press.
- Bigelow, John 1988: *The Reality of Numbers*. Oxford: Clarendon Press.
- Campbell, Keith 1981: “The Metaphysic of Abstract Particulars”. *Midwest Studies in*

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- Philosophy: The Foundations of Analytical Philosophy*, 6, pp. 477–88.
- 1990: *Abstract Particulars*. Oxford: Basil Blackwell.
- Devitt, Michael 1980: “‘Ostrich Nominalism’ or ‘Mirage Realism’?”. *Pacific Philosophical Quarterly*, 61, pp. 433–39.
- 1991: *Realism and Truth*. Princeton, N.J.: Princeton University Press.
- Fox, John 1987: “Truthmaker”. *Australasian Journal of Philosophy*, 65, pp. 188–207.
- Hochberg, Herbert 1992: “Truth Makers, Truth Predicates and Truth Types”, in Kevin Mulligan (ed.) *Language, Truth and Ontology*, Dordrecht: Kluwer Academic Publishers, pp. 87–117.
- Keefe, Rosanna and Smith, Peter 1996: “Theories of Vagueness”, in their *Vagueness: a Reader*, Cambridge, MA and London: MIT Press, pp. 1–57.
- Lewis, David 1983: “New Work for a Theory of Universals”. *Australasian Journal of Philosophy*, 61, pp. 343–77.
- 1986: *On the Plurality of Worlds*. Oxford: Basil Blackwell.
- Mulligan, Kevin, Simons, Peter and Smith, Barry 1984: “Truth-Makers”. *Philosophy and Phenomenological Research*, 44, pp. 278–321.
- Nozick, Robert 1981: *Philosophical Explanations*. Oxford: Clarendon Press.
- Oliver, Alex 1996: “The Metaphysics of Properties”. *Mind*, 105, pp. 1–80.
- Olson, Kenneth Russell 1987: *An Essay on Facts*. Stanford, CA: Center for the Study of Language and Information.
- Read, Stephen 2000: “Truthmakers and the Disjunction Thesis”. *Mind*, 109, pp. 1–13.
- Rodriguez-Pereyra, Gonzalo 1998: “Searle’s Correspondence Theory of Truth and the Slingshot”. *The Philosophical Quarterly*, 48, pp. 513–22.
- 2000: “Truthmaking and the Slingshot”, forthcoming in Uwe Meixner and Peter Simons (eds.), *Metaphysics in the Post-Metaphysical Age: Contributions of the Austrian Ludwig Wittgenstein Society*, Wien.
- Russell, Bertrand 1994: “The Philosophy of Logical Atomism”, in Robert C. Marsh (ed.), *Bertrand Russell. Logic and Knowledge*, London: Routledge, pp. 177–281. Originally published in 1918 and 1919 in *The Monist*, 28, 29.
- Simons, Peter 1992: “Logical Atomism and its Ontological Refinement: A Defense” in

Mulligan, Kevin (ed.), *Language, Truth and Ontology*, Dordrecht: Kluwer Academic Publishers, pp. 157–79.

van Cleve, James 1994: “Predication without Universals? A Fling with Ostrich Nominalism”. *Philosophy and Phenomenological Research*, 54, pp. 577–590.