

# What Is the Problem of Universals About?<sup>1</sup>

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**Abstract:** The Problem of Universals is one of the oldest problems of metaphysics. And still, there is no agreement, neither about its *explanandum* nor about its *explanans*. What is the most adequate formulation of the problem? And what kind of explanation does it require? My aim in this paper is to offer an overview of these two basic questions in the contemporary debate. I will present the four most important formulations (section 1), discuss their connections (section 2) and how the three most prominent *explanantia* are related to these formulations (section 3). We will see that, despite the long history of the problem, in recent years new formulations and approaches have been proposed which may open up original perspectives on its solution.

**Keywords:** Problem of universals, nominalism, realism, grounding, existence

## 1. Explanandum: Four Formulations of the Problem of Universals

As some have noticed (see e.g., Rodriguez-Pereyra 2000, MacBride 2002, Peacock 2009), the so-called *Problem of Universals* is more a family of issues than properly a single question.<sup>2</sup> Among the many formulations that have been proposed and discussed in contemporary metaphysics, these four are at the center:

- F1. Are there universals?
- F2. How is it possible that, at the same time,  $a$  is both  $F$  and  $G$  and  $b$  is  $F$  and non- $G$ ?
- F3. Given that  $a$  is  $F$ , in virtue of what is  $a$   $F$ ?
- F4. Are universals fundamental or derivative?

Formulation F1 is the most traditional one. According to it, the problem of universals must be conceived as a problem of existence. However, it is important to notice that

<sup>1</sup> For papers with a similar topic, see Oliver (1996), Rodriguez-Pereyra (2000), MacBride (2002), Wieland (2008) and Imaguire (2015).

<sup>2</sup> Campbell (1981, 483) notes that “the problem is not one about universals but about properties, universals being a particular solution to it”. (See also Rodriguez-Pereyra 2000, 256.)

F1 is not an ordinary question of existence, like whether or not there are unicorns or horses. Ordinary questions of existence aim to decide whether or not there are instances of a certain kind. Conceived this way, question F1 amounts almost to a platitude: redness (as far as it is not conceived as a trope) is not a particular, but a universal; therefore, there are universals. Now, F1 is not an ordinary question of existence, but an *ontological* one. And whenever we ask an *ontological* question, the whole class of the category is at stake. For instance, the question “Are there numbers?” discussed in the philosophy of mathematics does not aim to decide whether there are some instances of numbers, but whether the whole class of numbers has to be assumed as existent or not (see Fine 2009).<sup>3</sup> Further, F1 is a *categorical* question, i.e., it aims to answer a question about the existence of the very ontological category itself. And this is usually understood in terms of the reducibility or non-reducibility of a given category. For the bundle theory of universals, for instance, there are no particulars (at least not ultimately), for these may be reduced to bundles of universals. For class nominalists, on the other hand, there are no universals, for these may be reduced to classes of particulars. Thus, plausibly, the Problem of Universals is connected to the question of whether or not the category of universals may be reduced to another category. If they cannot, then they exist. In fact, there are three possible answers: the realist says, “Yes, there are universals” (i.e., they may not be reduced); the nominalist says, “No, there are no universals” (or “they can be reduced”, and a reduction is offered); and the dismissivist says that there is no substantial answer.

Formulation F2 has so far not been proposed explicitly in this complex way. In fact, as I formulate it here, it is not intended as a simple question, but as a cluster of similar “how is it possible” questions that have been proposed in the contemporary debate. All of them ask for a “possibilitator”: something which makes an apparently puzzling phenomenon possible. According to Armstrong (1978), the problem of universals may be formulated as a requirement for the explanation of the possibility of the fact that two different particulars *a* and *b* are identical in nature, say, both are *F*. *One Over Many* (or Identity in Difference) is a common designation of this puzzlement: *a* and *b* are in a sense identical, although they are different entities. In his own words

The same property can belong to different things. The same relation can relate different things. Apparently, there can be something identical in things which are not identical. Things are one at the same time as they are many. How is this possible? (Armstrong 1978, 11)

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<sup>3</sup> Compare: there is a sense in which it is trivially true that there are fictions. “Sherlock Holmes is a fiction, therefore there are fictions”. But still, one may do not accept the existence of fictions despite of classifying Holmes as a fiction. Similarly, “redness is a property, therefore there are properties.” The idea here is that in the case of the ontological questions classification precedes and is independent of existence. In the case of ordinary questions, whenever you classify *x* as an entity of kind *K*, you must assume the existence of *K*’s.

According to Rodriguez-Pereyra (2002, 46–7) the really puzzling phenomenon which cries for explanation is not the fact that two different particulars are similar, but the fact that the same particular may have, at the same time, at least two different natures: it may be *F* and *G* at the same time. This is the *Many Over One*: things are identical with themselves (this is the *One*), but have many different properties (this is the *Many*).

Finally, according to Howard Peacock (2009), the really challenging phenomenon is neither the shareability of nature, nor the possibility of one particular having two different natures at the same time, but the apparent contradiction of two particulars *a* and *b* being similar (both are *F*) and dissimilar (one is *G* the other non-*G*) at the same time. This is the *Many Over Many*: there are many, sometimes different sometimes identical, properties over different particulars.

My formulation of F2 covers all three phenomena (*a* and *b* are both *F*, *a* is both *F* and *G* and *a* and *b* are similar but different). In any case, the insight behind this kind of formulation is that the Problem of Universals (either as the One Over Many or as the Many Over One or as the Many over Many) must be understood in terms of Nozick's (1981, 15) account of the general form of philosophical problems: "How is *X* possible given that *Z*?", where *X* is intended as an obtaining or existing entity, and *Y* is an apparent excluder of *X* (see Rodriguez-Pereyra 2002, 30). In other words, the obtaining of *Y* seems to exclude the possibility of *X*, but *X* does in fact occur. For instance, how can God exist, given that there is evil in the world? The existence of evil is (or seems to be) an excluder of the possibility of the existence of God. Or consider: how is freedom possible given that everything which happens in space and time obeys rigid laws of causality? Causal closure of reality appears to be an excluder of freedom. The expected explanation of the possibility of *X* must explain either (i) why the apparent excluder does not really obtain, or (ii) why the apparent excluder is only apparently an excluder (i.e., *X* and *Y* are not really incompatible).

It is important to note that some dismissivists about the Problem of Universals believe that the problem, at least as it is identified in F2, is based on a misconception of identity and difference. According to them, a mere conceptual analysis of the distinction between *numerical* and *qualitative identity* would be enough to dissolve the supposedly puzzling phenomenon. When two different particulars *a* and *b* are both *F*, then they are numerically different but qualitatively identical, full stop (see for instance McBride 2002 and Wieland 2008). However, it is hard to see how this conceptual analysis will really dissolve the problem in its depth. Of course, an explanation of the phenomenon in terms of the concepts of numerical and qualitative identity is helpful for understanding what is going on here and may reduce our feeling of perplexity. But as long as we consider the ontological question about the status of universals in its full complexity, problems remain. For the important issue is then whether or not this explanation in terms of qualitative identity and difference forces us to accept the existence, or the fundamentality, of universals. For consider the questions: Does this explanation entail unavoidable quantification over universals? Or does it entail that universals must be considered fundamental?

All this depends on the exact form in which we conceive the notions of qualitative identity and difference and numerical identity and difference.

F3 was proposed by Campbell (1990: 29ff) as an alternative to the traditional One Over Many. According to him, the One Over Many formulation is biased, for it assumes as given something that may be rejected, viz. that there really is something identical in both  $Fa$  and  $Fb$ . This presupposition, of course, forces one to accept the existence of universals. Following Williams (1953), Campbell himself prefers to assume Trope Theory, according to which there is nothing in common to the facts  $Fa$  and  $Fb$ . The trope  $a$ 's  $F$ -ness is one thing, the trope  $b$ 's  $F$ -ness is another. But F3 also brings another aspect into the debate: it is a question formulated in terms of "in virtue of". Thus, it seems to anticipate the recent trend in analytic metaphysics of replacing existence with grounding questions (which are at the core of question F4, which I will deal with shortly).

Now, as with F1, we must distinguish two possible senses of question F3: one concerns the particular grounding profile of the property which constitutes the fact, and the other concerns the general notion of predication. Take for instance the fact that this ball is red. Asking for the ground of this fact suggests two kinds of answers. On the one hand, one may—I think correctly—say that the fact that this ball is red is grounded in the fact that this ball is scarlet. Here is the grounding profile of the property which is at stake: for something to be scarlet is for this thing to be red. On the other hand, one may claim that the fact that this ball is red is grounded in the fact that this ball instantiates the universal *redness*, or in the fact that this ball is an element of the class of red things, or something similar. Here, not the particular grounding profile of the property *redness* is at stake, but the general issue about the connection between the particular and the universal (or its surrogate, i.e., the class, the predicate, etc.). One natural interpretation of the explanation required here concerns the Problem of Predication: given the particular  $a$ , and the (particular or universal)  $F$ -ness, what is responsible for connecting them into a unity? What is the nature of the mysterious tie which connects  $a$  and  $F$  to the fact  $Fa$ ? At the center of the debate here is Bradley's famous regress argument (or, more exactly, a grounding variant of it) and the many strategies used in attempting to solve it. Even authors who saw the Problem of Universals essentially in terms of explaining F2 also called for explaining F3, as for instance Armstrong (1974, 1989) and Rodriguez-Pereyra (2001, 2002).

Finally, F4 puts the problem of universals in a somewhat new light. Since Antiquity metaphysicians, including Plato and Aristotle, distinguished entities as fundamental or derivative. Contemporary notions like dependence, supervenience and, more recently, grounding are intended to yield in one way or another a stratified picture of reality according to which some entities are the basis—fundamental entities—and some entities are "built upon" them—derivative entities. According to a recent trend in analytic metaphysics, the metaphysically more interesting questions are not about existence, but about fundamentality, or as Schaffer (2009) says, about "what grounds what" (see also Fine 2012, Rosen 2010, Correia and Schnieder 2012). Grounding is usually characterized as a hyperintensional relation of

metaphysical explanation and necessitation which connects facts or true propositions and corresponds to the expressions “because”, “in virtue of” or “grounds” of natural language: if the fact that  $p$  grounds the fact that  $q$  (or “ $q$  because  $p$ ”), then  $p$  and by necessity (and relevantly) that  $p$  determines the occurrence of  $q$ .

The application of this new metaphysical perspective to the Problem of Universals consists in a substitution of existence by the grounding question: are universals fundamental or derivative entities? This way of dealing with the question is followed by authors like Dixon (2017), Imaguire (2018), Schulte (2019). But there is a difficulty that the orthodox view of grounding has to overcome to properly deal with the Problem of Universals via grounding: grounding connects facts, and not constituents of facts. So, it is far from clear how an analysis in terms of grounding could yield an answer to the problem of the status of universals (even under the plausible assumption that universals are constituents of facts).

## 2. How Are the Four Formulations Connected to Each Other?

So far, the result seems a bit unsatisfactory. Instead of a single question, the Problem of Universals is split into four quite different questions: one about existence, one about a possibilitator, one about predication and one about fundamentality. How can such different questions be defended for the role of being “the” correct formulation of the Problem of Universals? Indeed, in order to correctly grasp the nature of this problem, it is not only important to understand each proposed formulation, but also how they are related to each other. Is there a unity among them? And how are they connected to each other? How can all of them be candidates for the core formulation of the very same problem? This should be clarified now.

There is an important correlation between F1 and F2. While F1 clearly states a question (do universals exist or not?), F2 may be seen rather as a rhetorical question which suggests a particular argument, or line of reasoning, for establishing a positive answer to the existence question than properly as a problem. According to realists, we cannot explain the puzzlement of the One Over Many or its alternatives without appealing to (the existence of) universals. Universals are the “possibilitators”: they make “identity in difference”—in more standard terminology “qualitative identity without numerical identity”—possible. Without universals, particulars would simply *be* (even this is, of course, for other reasons disputable), without being possibly similar to or different from each other. This way, F2 provides an argument for a positive answer to F1. Posing universals is not a problem, but a solution to a problem. This is defended by Catherine Legg (2001): sometimes some things have something in common. The main issue of the Problem of Universals is whether this “something” is real or not (although she argues that there is an important difference between *real* and *existent*).

Something similar can be said about the relation between F1 and F3. Virtually everyone agrees that there is at least one case of a particular being some way—say, this apple is red. For brevity,  $a$  is  $F$ . So, some (in fact, the majority of the participants of the debate) consider it a metaphysical duty to offer an explanation

for the simple predicative fact that  $a$  is  $F$ . And again, an explanation for such a fact may or may not entail a commitment to the existence of universals. While realists appeal to universals in order to explain such a fact, nominalists appeal to classes, predicates or relations of similarity and, in this way, show that the appeal to universals is avoidable. However, some (the remaining minority) consider the very fact that  $a$  is  $F$  a fundamental fact, with no need of further explanation. Because of their refusal to offer an explanation for the fact that  $a$  is  $F$ , these metaphysicians are often called “ostrich nominalists”. But it should be importantly noted that also some realists may assume the fundamentality of a simple predicative fact. Frege plausibly defended such a view. He used the term “falling under” to designate the relation between an object and a property (a “concept”, in his terminology) and considered an object’s falling under a concept to be a primitive logical fact, without any possible explanation. “The logically primitive relation is the relation of an object falling under a concept: all relations between concepts can be reduced to it” (Frege 1983, 128). Although a *logically* primitive relation may not necessarily be identified with a *metaphysically* primitive relation, this identification is certainly a plausible assumption. In any case, it is far from clear that the postulation of the fundamentality of the fact  $Fa$  constrains one to accept a nominalistic stance, for there may be other reasons for accepting universals. In any case, like F2, F3 opens a route for assessing the issue about the existence of universals.

Let’s look at F2 and F3. As we saw above, formulation F3 was explicitly proposed as a more fundamental question than F2. For F2, in all its variants, suppose a kind of plurality of facts: at least  $Fa$  and  $Fb$  (One Over Many),  $Fa$  and  $Ga$  (Many Over One), or  $Fa$ ,  $Fb$ ,  $Ga$  and *not*- $Gb$  (Many Over Many). Now suppose a radically simple possible world composed of a single particular  $a$  and a single universal  $F$  instantiated by  $a$ . In this world, there is only one single fact  $Fa$ . There is neither one property over many particulars, nor are there many properties over one particular. But still, one may wonder about predication, i.e., about the nexus between  $a$  and  $F$ . Therefore, the approach stated in F3 is more general than that stated in F2, for if there were only one single particular instantiating one single universal, the issue of the shareability of natures proposed by F2 would not arise (at least not about this particular world), but the issue of an explanation of predication would still remain.

Further, the plausible solutions to these two questions are not completely independent of each other. If someone explains predication in terms of, say, class membership, the puzzlement concerning the One Over Many problem is easily resolved:  $a$  and  $b$  are “one” simple because they are members of the same class, and there is nothing puzzling in the fact that classes may have many members. If someone explains predication in terms of the attribution of predicates, the puzzlement is resolved in terms of the general applicability of predicates, and there is nothing puzzling about a predicate being truly applied to different subjects. And so the connection is immediate: by explaining the nature of the relation of predication we automatically identify the entity to which the particular  $a$  is related in a state of affairs like  $a$  is  $F$ . For the class nominalist, it has to be a class, for the predicate nominalist

it has to be a predicate, and for the realist, it has to be a universal. To sum up so far, formulations F2 and F3 point to different ways of establishing an answer to F1.

Now take F1 and F4. These are clearly different questions: while F1 asks about the existence of universals, F4 asks about their fundamentality. In fact, more than a difference in formulation we have here two truly competing questions based on quite different meta-metaphysical agendas. For some grounding enthusiasts, grounding questions should simply replace questions about existence. According to Schaffer's (2009) proposal, e.g., we should simply be maximally tolerant concerning existence. We shall assume that virtually everything (in an unrestricted sense) exists: numbers, possibilities, propositions, meanings, abstracta, mereological composition, etc. This also includes universals, of course. This may be seen as a principle of ontological correctness: do not preclude the right to existence to any putative entity, even if it seems like an *ens non gratum* at first glance. But then, after accepting that each of them has a place in reality, try to find the path of grounding which organizes the whole. The result will be a structured or leveled picture of reality, which is much more interesting than the result of a theory which simply divides up the whole of reality in two classes: existents and non-existents. So, once we accept this proposal, F4 is supposed to replace F1. While the answer to F1 is trivial in this proposal ("of course, universals exist"), the answer to F4 is difficult and interesting. Are universals fundamental or mind-dependent? Are universals simply shadows of predicates, or are they basic constituents of reality? Of course, there is an obvious way to reinterpret the realism versus nominalism divide according to F4: for nominalists universals are derivative, for realists they are fundamental.

But, as a matter of fact, real philosophy is always more complicated than expected. Curiously, realists and nominalists may agree on their answer to F4. For some realists like Aristotle and Neo-Aristotelians like Lowe (2006), and for some nominalists like Schulte (2019), universals are derivative, i.e., less fundamental than particulars. For some others, including Plato, universals are more fundamental than particulars. It is, of course, hard to see how a nominalist could claim that universals do not exist but are fundamental, and as far as I know, no one has ever claimed this. But the history of philosophy teaches us not to preclude theoretical options before careful consideration. (One could, for instance, claim that universals do not strictly exist but have some form of subsistence and are in a sense ungrounded).

F4 and F2 have to one another a relation similar to that between F1 and F2. More exactly, the analysis of the One Over Many problem may ground a line of reasoning for establishing the grounding profile of universals. While nominalists deny that we need universals (either as fundamental or as derivative entities) in order to explain the puzzle of the One Over Many, realists claim that they are necessary, either as fundamental or, at least, derivative entities. Exactly this is the main divide between immanent and transcendent realists. For immanent realists the fact that F-ness exists is grounded in the fact that both *a* is F and *b* is F, which, in turn, is grounded in the fundamental facts that both *a* and *b* instantiate F-ness. The conclusion from this line of reasoning is that universals do exist, but only in a derivative way. On the other hand, for transcendent realists, universals do exist, independently of whether or not

they are instantiated. As a matter of fact, some even say that the Aristotelian idea that the existence of universals is grounded in their being instantiated is incoherent.<sup>4</sup> If so, universals must be fundamental (at least as fundamental as particulars).

But there are more issues about the relation between the One Over Many (and the Many Over One) and grounding. For Wieland (2008), given facts of identity (“One”) or difference (“Many”), the interesting question is that about the grounding for identity and difference: what makes  $x$  and  $y$  identical, and in virtue of what are they different? According to him, the One Over Many or the Many Over One is not really puzzling or incoherent, so it does not require a possibilitator. Instead, it requires an “identity maker” and a “difference maker.”

Finally, both formulations F3 and F4 are quite close, for they explicitly frame the Problem of Universals in terms of ontological grounding. However, there is an important difference: while F3 asks for the fundamentality profile of a simple predicative fact, F4 asks for the fundamentality profiles of universals. Note importantly that a particular solution to one does not necessarily determine the solution to the other. For instance, as mentioned before, both immanent realists and transcendent realists agree on their answer to F3 ( $a$  is  $F$  in virtue of instantiating/participating in  $F$ -ness), but disagree about the fundamentality status of  $F$ -ness (for the immanent realist it is derivative, for the transcendent realist it is fundamental).

The main obstacle to a unified solution to the Problem of Universals, which may provide an explanation to both F3 and F4, lies in a particular formal feature of the theory of grounding. According to the orthodox view, grounding is a relation which exclusively connects facts or true propositions: “ $p$  because  $q$ ” is the canonical form of grounding. Indeed, “object  $x$  because object  $y$ ” and “redness because scarletness” are clearly ungrammatical. Therefore, only facts may strictly be considered grounding-fundamental or grounding-derivative. Thus, the orthodox conception of grounding can be directly applied to F3 (“what fact grounds the fact that  $a$  is  $F$ ?”), but it is far from clear how we should decide the fundamentality profile of the constituents of the facts, i.e., the objects and universals which constitute them. The most natural way to expand the grounding talk to these constituents seems to be a definition of the grounding profile of objects and universals in terms of the canonical form of fact grounding. In some cases, the grounding connections of the constituents almost seems trivial: if the fact that  $a$  is red is grounded in the fact that  $a$  is scarlet, we may plausibly conclude that *being red* is grounded in *being scarlet*. But there are some quite difficult cases: what should we conclude from “the fact that  $p$  is false grounds the fact non- $p$  is true”? That *being true* is grounded in *being false*? Or that non- $p$  is grounded in  $p$ ? None of these sounds plausible. Even more difficult is the decision about *transcategorical* grounding: if  $Fa$  grounds  $Gb$ , what shall we conclude about the relation between  $a$  and  $F$  and  $G$ , or between  $b$  and  $F$  and  $G$ ? These are general meta-metaphysical questions about grounding that still wait for clarification.

<sup>4</sup> For Costa (2020) and Alvarado (2020), Aristotelian universals are considered less fundamental than particulars, but, at the same time, particulars depend on universals for existing, for particulars cannot exist without instantiating universals. For a reaction to this criticism, see Imaguire (2021).



### 3. The Three Approaches: Ontological Commitment, Truthmaking and Grounding

In recent metaphysical literature, three approaches have been proposed to the Problem of Universals: ontological commitment, truthmaking and grounding. Let us consider what they consist in and how are they supposed to offer solutions to the four problems we presented.

#### 3.1 *Ontological Commitment*

As soon as we accept that the Problem of Universals is a problem about existence, as stated in F1, we are immediately led to question how to decide whether universals exist or not. In *On What There Is* (1948) Quine established what has been considered for many decades the standard view about how to decide questions of existence in general. Quine's suggestion is usually called the *Principle of Ontological Commitment*. According to it, our ontological claims must be coherent with the theories we accept. Our best overall theory of the world gives us many sentences we should take to be true. For extracting the ontological consequences of these sentences, we just have to translate these sentences into the canonical notation of first order logic and examine their range of quantification. Whatever is in the domain of the quantifier must be accepted as existent. To cite Quine's famous slogan: to be is to be the value of a variable of a true sentence. For instance, we cannot coherently affirm that  $a$  is  $F$  and, at the same time, deny that there is an  $F$ . Since we are bound by the limits of first order logic, we do not have to assume that  $F$ -ness exists.

All this sounds quite simple. However, things become more complicated as soon as we try to apply this criterion to particular debates on existence. Quine himself suggested that one should reject the existence of universals on the basis of this quantificational criterion, and this despite two seemingly good reasons for accepting them. Firstly, since there are red houses and red roses, we are tempted to conclude the truth of the sentence "There is something red houses and red roses have in common, viz. redness". In this apparently true sentence, we do quantify over a universal. Quine's strategy for avoiding this realistic conclusion was the somewhat vague appeal to pragmatic dismissiveness: to say "There is something common to  $a$  and  $b$ , viz. redness" is just a "misleading manner of speaking", i.e., it is a phrase to which we should not attribute ontological seriousness at all. Secondly, some sentences of natural science like "There are cross-fertile species" are clearly committing to the existence of kinds, which are universals. Again, Quine adopted a dismissive attitude. We just need to find a non-committing sentence which plays the same theoretical role as the committing sentence in order to avoid the undesirable existential claim. For this sentence, by the way, he never proposed such a paraphrase.<sup>5</sup>

To fully appreciate Quine's proposal, we must consider the central place paraphrases play in his theory. Given a sentence  $S$ , which quantifies over entities of type  $E$ , we have to accept entities of type  $E$  in our ontology if, and only if,  $S$  is an

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<sup>5</sup> As far as I know, van Inwagen (2009) was the first to propose a first order paraphrase for this sentence.

*unavoidable* sentence of our overall best theory. So, we may avoid the commitment to entities of type E as soon as we are able to offer a paraphrase of S, say S\*, which does not entail that there are entities of type E in its universe of discourse. Unfortunately, this leads to a further difficulty, recognized by William Alston (1958): Suppose sentence S commits us to the existence of E, while its paraphrase S\* commits us to the existence of E\*. What shall we decide in this case? Do we have to accept the existence of E or of its rival E\*? It seems that any decision must be based on a lot of arbitrariness. This is the problem of the arbitrariness of the quantificational criterion, and I will come back to it below.

As we mentioned, the quantificational criterion is a plausible candidate as an approach for someone who considers the Problem of Universals a question about existence. Now, if we conceive the problem in terms of F2, i.e., as a question about the “possibilitation” of a puzzling phenomenon, its adequacy is less obvious. Indeed, Rodriguez-Pereyra explicitly rejected the quantificational criterion as a suitable approach. Ontological commitment establishes a relation between a sentence and an existential claim. The sentence S commits to the existence of E when S entails “E exists.” But then, ontological commitment does not yield a solution to the Problem of Universals. In Rodriguez-Pereyra’s own words:

[. . .] if (the sentence) “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. (2002, 30)

In other words, ontological commitment does not explain the obtaining of the One Over Many (or Many Over One or Many Over Many). Such an explanation is offered instead by presenting S’s truthmaker.

Rodriguez-Pereyra claims further that only when “S” is entailed by “E exists”, does E’s existence explain the possibility of S. Now, this seems to me clearly false. Take for instance the sentence “Fa.” The sentence “Fa” entails, but is not entailed by, “a exists”. However, the existence of the particular *a* does (at least partly) explain the fact that “Fa” is possible. For if *a* did not exist, it could not have been *F*, and so the fact that *a is F* would not have been possible. Rodriguez-Pereyra’s requirement is too strong: if “S” is entailed by “E exists”, the existence of E does not “possibilitate”, but rather necessitates S. Further, for Rodriguez-Pereyra if E’s existence is compatible with S’s non-existence, it is also compatible with S’s real excluder. But this is not necessarily so. For, in our example, *a*’s existence is indeed compatible with the non-existence of the fact that *a is F*, but this does not entail that *a*’s existence is compatible with *Fa*’s real excluder. More exactly, the fact that *a is F* has (at least) two excluders: (i) the fact that *a* does not exist and (ii) the fact that *a is non-F*. The existence of *a* is compatible with the excluder (ii), but incompatible with excluder (i). Thus, *a*’s existence is compatible with the non-existence of *Fa* and still incompatible with one real excluder of *Fa* (that *a* does not exist).

As proposed in the literature, the excluder relations in the problem of universals are:

- (i) How is it possible that  $a$  and  $b$  are similar, if they are different? The difference is the excluder of the identity.
- (ii) How is it possible that  $a$  is  $F$  if  $a$  is  $G$ ? The difference of nature is the excluder of the identity of  $a$ .
- (iii) How is it possible that  $a$  and  $b$  are similar ( $F$ ) and different ( $G$  and non- $G$ ) at the same time? Being different is the excluder of being similar.

I mentioned that “ $Fa$ ” has at least two possible excluders:  $a$ ’s non-existence, or  $a$ ’s being non- $F$ . But I focused on the existence of the particular just in order to show that Rodriguez-Pereyra’s argument against ontological commitment is based on a mistake. What about the excluder in the case of the Problem of Universals? Obviously, the existence of universals is at stake. The “how is it possible” formulations seem to point to this excluder relation: how is the fact that  $Fa$  and  $Fb$  possible if there is no  $F$ , so to speak? Apparently,  $a$  and  $b$  can only “have something in common”,  $F$ -ness, if  $F$ -ness exists. Thus, “ $F$ -ness does not exist” is considered a real excluder of “ $a$  and  $b$  have  $F$ -ness in common”. Indeed, this is the line of reasoning of some realists in order to establish the existence of universals, and nominalist appeal to different strategies to dismiss “ $a$  and  $b$  have something in common,” or “there is something that  $a$  and  $b$  have in common” as derivative, or a mere *façon de parler* (one of these strategies will be presented below).

So, it seems that the quantificational criterion is an adequate explanation of the problem of universals conceived as F1 or as F2. What about F3 and F4? F3 asks for the grounding of a simple predicative fact. Although this is not evident at first glance, F3 may be seen as a way to improve the existential question. In virtue of what is the particular  $a$   $F$ ? “In virtue of  $a$  instantiating  $F$ -ness” is the realist answer; “in virtue of the trope  $a$ ’s  $F$ -ness inhering in  $a$ ” the trope theorist would say; “in virtue of  $a$  being a member of the  $F$  class” is the answer of Class Nominalism, and so on. These theories may be seen as deciding what kinds of entities there are: universals, tropes or classes, respectively. One may wonder: why does the answer “ $a$  is  $F$  in virtue of the trope  $a$ ’s  $F$ -ness inhering in  $a$ ” commit to tropes, or why does the answer “ $a$  is  $F$  in virtue of  $a$  being a member of  $F$ ” commit to classes? The straightforward answer is: “ $a$  is  $F$  in virtue of  $a$ ’s  $F$ -ness inhering in  $a$ ” commits to tropes, because the grounding sentence “ $a$ ’s  $F$ -ness inheres in  $a$ ” entails a quantification over tropes, and “ $a$  is  $F$  in virtue of  $a$  being a member of  $F$ ” commits to classes, because “ $a$  is an element of the class  $F$ ” entails a quantification over classes.<sup>6</sup> And so, in the end, even when we take F3 as an essential aspect of the Problem of Universals, the principle of ontological commitment still does play a central role. If we suppose that “ $a$  is  $F$ ” in virtue of  $S$  (where  $S$  is a sentence which expresses a ground for the

<sup>6</sup> More explicitly: “ $a$ ’s  $F$ -ness inheres in  $a$ ” entails  $\exists x \exists y$  ( $x$  inheres in  $y$ ), and “ $a$  is a member of the class  $F$ ” entails  $\exists x \exists y$  ( $x$  is a member of  $y$ ).

predicative fact), the criterion of ontological commitment applies to S and yields an answer in terms of existence.

Is there any possible relation between ontological commitment and F4, the question of the grounding profile of universals? In fact, as to what may presently be considered the orthodox view of grounding, questions of grounding are supposed to be an alternative to questions of existence (Schaffer 2009). Thus, as soon as we understand that not F1 but F4 is the most interesting formulation of the Problem of Universals, we should simply abandon ontological commitment and assume grounding as the correct approach. However, as I show below, grounding and ontological commitment do not have to be seen as mutually exclusive approaches. They may supplement each other in order to formulate a complete and comprehensive theory of universals.

### 3.2 *Truthmaking*

Armstrong refers to C. B. Martin as the pioneer of the truthmaker principle, according to which “for every contingent truth at least (and perhaps for all truths contingent or necessary) there must be something in the world that makes it true” (Armstrong 1989, 88). An entity E is said to be a truthmaker of a sentence S when “E exists” entails the truth of S or, more precisely, when the truth of S is grounded in E’s existence.<sup>7</sup>

Truthmaking is a simple alternative to ontological commitment as the adequate approach to the problem of universals conceived in terms of existence. Like the explanation in terms of the quantification criterion, the truthmaker explanation is based on the direct connection between an existential claim and a true sentence or proposition. From the truth of a sentence we consider true, we may conclude to the existence of an entity—its truthmaker.<sup>8</sup>

Following these lines, Armstrong provided with his (2004) the most influential vindication of the concept of truthmaker as a fundamental tool for dealing with many problems of metaphysics, including the Problem of Universals. Curiously, by applying the truthmaker approach, Armstrong decided neither for nor against the existence of universals, but instead for replacing the system of ontological categories having the two categories of particular and universal with a system having only one category, that of states of affairs. For neither the existence of *a*, nor that of *F*, nor the existence of both together are sufficient to make the sentence “*Fa*” true. There could be *a* and *F*-ness and nevertheless *a* could fail to be *F*, and so “*Fa*” could fail to be true. Whereas the fact that *a* exists and the fact that *F*-ness exists are not sufficient for establishing the truth of “*Fa*”, the existence (or the obtaining) of the state of affairs that *a is F* is certainly sufficient for grounding this truth.

However, at this point other difficulties emerge for the application of truthmaking to the Problem of Universals. The truthmaker strategy has the drawback of not being

<sup>7</sup> For the various definitions of truthmaker, see MacBride (2013).

<sup>8</sup> There is a difference between truthmaking and ontological commitment concerning their direction: ontological commitment runs from language to ontology (the sentence commits us to the existence of something), truthmaking runs from ontology to language (the existence of something makes a sentence true). See Oliver [1996, 69], Rodriguez-Pereyra [2000, 26]).

univocal, unlike ontological commitment. Given the truth of “Fa”, there are many different candidates with an equal right to be its truthmaker. In their (1984) discussion, K. Mulligan, P. Simons and B. Smith defended tropes as the proper truthmakers of sentences like “Fa”. Indeed, if the trope *a*’s F-ness exists, the sentence “Fa” must be true. According to others (Lewis 2003, Imaguire 2018:103), the truthmaker for such sentences is the thick particular *a* (i.e., the particular with its properties), as opposed to the thin particular (the particular without its properties). In other words, the way *a* is makes “Fa” true, but the ways objects are do not constitute additional entities alongside the objects that are those ways. Thus, in the end, states of affairs, tropes and thick objects have an equal right to be the truthmakers of “Fa”. The existence of each of them suffices to ground the truth of “Fa”. And so, ultimately, the issue of existence remains undecided. This is a first drawback of the truthmaking strategy.

Here is the second problem. As we saw in the last section, Rodriguez-Pereyra (2002) defended the view that the Problem of Universals requires an explanation in terms of truthmakers, and this is because truthmakers explain the “how is it possible” question (or maybe better, one of the “how is it possible” questions). For, according to him, only when S is entailed by “E exists” does E’s existence explain the possibility of the fact that S. Now, it is far from clear that this is really the case. In fact, when we provide the (or “one”) truthmaker of S, what we really do is to provide a ground for a truth, and not an explanation of its possibility. For an explanation of the possibility something else is required. Recall that the logical structure of “how is it possible” questions requires that one be faced with two apparently incompatible phenomena X and Y (the obtaining of X apparently excludes the possibility of Y). The solution must consist either in rejecting the obtaining of one of them, or in eliminating the apparent incompatibility. Now, providing a truthmaker for X presupposes that X is the case. The same holds for Y. So, if we provide truthmakers for X and Y, unless we accept something like dialetheism (the thesis that reality entails true contradictions), the result must be that, despite all appearances, X and Y are not really incompatible. But this does not explain why X and Y are compatible. The best we may achieve by this strategy seems to be this: we find a truthmaker for only one of the conflicting truths and so conclude that the other truth, despite appearances, does not really obtain.

Can a truthmaker yield an answer for F3, the question of predication? Indeed, already in his 1989 *Universals, an Opinionated Introduction*, Armstrong appeals to the truthmaker strategy in order to block the regress argument which threatened his immanent Realism.

[. . .] my idea is that the instantiation regress can be halted after one step. We have to allow the introduction of a fundamental tie or nexus: instantiation. But suppose that we have that *a* instantiates F or that *a* and *b* in that order instantiate R. Do we have to advance any further? I do not think that we have to. For note that the alleged advance is now, as it was not at the first step, logically determined by the postulated states of affairs. If *a* instantiates F, and instantiation is a universal-like entity, then we are logically forced to say that *a*, F, and instantiation instantiate instantiation, and so on. But perhaps we can allow this while denying that to “*a*, F,

and instantiation instantiating instantiation” any extra state of affairs in the world corresponds. As we go on expanding the regress, our statements remain true, but no new truth-maker, or ontological ground, is required for all these statements to be true. (Armstrong 1989, 109–110)

In other words, according to Immanent Realism, each  $f$ - $n$  fact must be explained in terms of the  $f$ - $(n+1)$  fact of the sequence

$f_1$   $a$  is  $F$

$f_2$   $a$  instantiates  $F$ -ness

$f_3$   $a$  and  $F$ -ness instantiate instantiation

$f_4$   $a$  and  $F$ -ness and instantiation instantiate instantiation and so on.

Armstrong proposes here to stop the regress at level  $f_2$  by denying that  $f_2$  requires an extra state of affairs beyond the one we already offered for  $f_1$  and  $f_2$ . But, as a matter of fact, if we are justified to refuse to offer an extra truthmaker for  $f_2$ , for the same entity which makes  $f_2$  true also make  $f_3$ ,  $f_4$  and all other items of the sequence true. This may be true. But then, why should we not simply stop at  $f_1$  to begin with? For similarly, any plausible truthmaker of  $f_1$  will do the same job, making all items of the series, including  $f_2$ , true. Armstrong’s solution sounds arbitrary.

Can truthmaking provide an answer to the question of the fundamentality profile of universals, as stated by F4? It doesn’t seem so, at least from an historical perspective. There are obviously two possible answers to the question of whether universals are fundamental or not. On the one hand, a positive answer (universals are fundamental) can apparently only be defended by transcendental realists like Jubien (1997) and Alvarado (2020). On the other hand, both immanent realists (Neo-Aristotelian like Lowe) and nominalists (Schulte 2019) agree that universals are derivative. However, neither on the positive nor on the negative side there are arguments for the fundamentality profile of universals based on considerations of truthmaking. The simple reason is that truthmaking is too restrictive: it is a link between an existing entity and a truth-bearer. So far, it is unable to impose an order of priority between all levels of entities or categories in reality. To achieve a level structure over categories, we do not need a relation which connects sentences to their ontological correlates, but instead a link between the very categories themselves, as is offered by grounding.

### 3.3 Grounding

Grounding has probably been the most prominent tool of analytic metaphysics used in the last decade. Many problems earlier discussed in terms of ontological commitment are nowadays revisited and discussed in terms of grounding. Following the suggestion of Schaffer (2009), instead of asking “What exists?” metaphysicians now focus on the question “What grounds what?” As mentioned above, grounding is a hyperintensional relation of metaphysical explanation and

non-causal determination which connects facts or true propositions: if  $p$  grounds  $q$ , then  $p$  occurs, and by necessity (and relevantly),  $p$  determines the occurrence of  $q$ . Further, grounding establishes an order of ontological priority: when  $p$  grounds  $q$ ,  $p$  is more fundamental than  $q$ .

Grounding is the most natural candidate for the *explanans* of the Problem of Universals conceived in terms of F3 or F4. As a matter of fact, F3 is explicitly a question of grounding. Curiously, F3 was formulated this way even before the recent growing interest in grounding. The very divide between realists and nominalists has usually been decided in terms of grounding for predicative facts: while for realists a predicative fact like  $a$  is  $F$  is grounded in a fact about instantiation of universals, nominalists must search for an alternative grounding fact without universals as constituents, like facts about classes, predicates, resemblance of particulars, and so on. In fact, the main solutions to the Problem of Universals are usually classified according to the ground they offer for simple predicative facts. For Class Nominalism,  $a$  is  $F$  because  $a$  is an element of the class  $F$ ; for Resemblance Realism,  $a$  is  $F$  because  $a$  resembles other  $F$ 's; for transcendental realism,  $a$  is  $F$  because  $a$  participates in transcendental  $F$ -ness, and so on. Ostrich nominalism assumes that  $a$  is  $F$  is a fundamental fact. So, grounding has always been somehow present in the debate on universals.

Curiously, the idea that realists must appeal to instantiation or participation facts for grounding simple predicative facts has recently been challenged. For Dixon (2017), a realist should defend “upward grounding”, i.e., that  $a$  is  $F$  grounds  $a$  instantiates  $F$ -ness, instead of “downward grounding”, viz. that  $a$  instantiates  $F$ -ness grounds  $a$  is  $F$ . He presents two arguments for this: (1) instantiation is analogous to truth ( $a$  instantiates  $F$ -ness because  $a$  is  $F$  the same way  $p$  is true because  $p$ ), and (2) the regress argument (if  $a$  is  $F$  because  $a$  instantiates  $F$ -ness, then  $a$  instantiates  $F$ -ness, because  $a$  and  $F$ -ness instantiate instantiation, and so on). Thus, the realist should better assume the existence of universals for other reasons (like explaining natural laws, as references for abstract reference, etc.) and not for grounding simple predicative facts.

Also according to F4, not the existence of universals, but their fundamentality is at stake in the debate between realists and nominalists. Such a stance is explicitly defended by Schulte (2019). His Grounding Nominalism is defined not as the claim that universals do not exist, but as the claim that they are not fundamental. This is certainly a straightforward application of grounding for the defense of nominalism, since it is certainly easier to maintain that universals are not fundamental than to argue that they do not exist. However, since in the orthodox view the only adequate relata of grounding relations are facts, and not objects or properties, it is far from clear what it can mean to say that universals are derivative or fundamental. One obvious way to decide the fundamentality profile of universals is to consider that facts that contain universals are more fundamental than facts that do not contain them. Someone may claim that  $a$  is  $F$  in virtue of the fact that  $a$  instantiates  $F$ -ness and accept universals as fundamental. Recall that a realist may accept the existence of universals but still hold that universals are not fundamental (for traditional

Aristotelians universals are less fundamental than particular substances) or that facts of instantiation are derivative, as Dixon (2017) suggested.

But there are also more complex ways grounding may be employed to contribute to an explanation of the Problem of Universals. Even if we assume that this problem is essentially about existence, as stated in F1, grounding may play an important role. Remember Quine's dismissive attitude concerning the apparent commitment of true sentences like "This house and that rose have something, redness, in common" or "There are cross-fertile species". Why should we take "'This house is red' seriously, but not 'This house and that rose have something in common'"?

One strategy for explaining this different treatment of sentences is offered by Imaguire (2018). According to Priority Nominalism, the quantificational criterion should only be applied to fundamental truths: "This house and that rose have something in common" is grounded on "This house is red" and "That rose is red". Plausibly, this house and that rose have something in common because this house is red and that rose is red, and not the other way round. So, only the commitment of these last sentences should be taken seriously. The situation is similar to that of the sentence "The average woman has 2.4 children". Although this sentence is plausibly true, most people are not willing to accept the existence of this remarkable woman. In terms of grounding, arguably the fact that the average woman has 2.4 children is grounded in the facts that Anne has two children, and Barbara three, and so on.

The core motivation of this proposal is based on the fact that if we applied the quantificational criterion of existence to all sentences we must consider true, we will be led to an unlimited multiplication of entities. Suppose a universe with a single particle, call it "*a*". Given this single particle, all of the following sentences are true: "*a* exists", "the fact that *a* exists obtains", "*a* is identical to itself", "identity occurs between *a* and itself", "transitivity is a formal property of the identity between *a* and itself", and so on. As a result, we should conclude that there is the particle *a*, the fact that *a* exists, identity, transitivity, and so on, i.e., infinitely many entities will be introduced by simply describing reality. This sounds bizarre.

Although this proposal may sound original, at least if stated explicitly in terms of grounding, it is interesting to note that the idea that only quantification on the fundamental level should be taken seriously is implicitly present in all traditional solutions to the problem. For traditional (non-Dixon's) realists, there are universals because the fundamental fact "*a* instantiates F-ness" entails quantification over F-ness; for class nominalists there are classes, because the fundamental fact "*a* is member of the class F" entails quantification over classes, and so on. Thus, in all solutions an existent entity is one that we quantify over on the fundamental level. Ostrich and priority nominalists agree so far with all solutions and assume a simple predicative fact as fundamental.

One may be surprised that such an old issue as the Problem of Universals may still inspire previously unexplored approaches. But, thanks to the new tool of grounding, this is indeed the case. As far as I can see, no one has tried to explore the connection of the "how is it possible" formulations with the grounding approach. Grounding is usually conceived as a factive relation (only actual, not merely possible



facts are connected), but this does not preclude the possibility of asking for the ground of the actual (and not merely possible) fact that the One Over Many fact (that  $a$  and  $b$  are both  $F$ ), or any of its variants, is possible.

#### 4. Conclusion

Far from being a univocal problem, the Problem of Universals is the designation of a cluster of interconnected issues in ontology (in fact, for reasons we did not discuss here, it also involves issues in logic and semantics). I discussed the four main formulations of the problem and the three most prominent approaches. Some connections between the formulations and the approaches are fairly obvious. On the one hand, once we conceive the problem as an issue of existence, as stated in F1, the explanation in terms of ontological commitment or truthmaking seems a straightforward reaction, for these two approaches connect true sentences with existence. On the other hand, if we conceive the issue as a problem of fundamentality, as suggested by F3 or F4, an explanation in terms of grounding seems indispensable.

However, more complicated connections arise as soon as we try to dispose of some difficulties of the proposed theories. As we have seen, for some metaphysicians, truthmaking may yield an explanation of the “how is it possible” question. For others, grounding may be useful for solving some predicaments of the traditional notion of ontological commitments. Instead of simply accepting the commitment of any truth of a theory, we are justified in restricting the quantificational criterion solely to fundamental truths.

As we saw in section 2, the four formulations are systematically connected to one each another. So, plausibly any adequate solution to the problem has to say something about each formulation and has to give reasons for the adopted *explanantia*. Further, it may combine different explanations in order to build a systematic theory around the issue of the status of universals. Many theories have been proposed, but still many options remain open. Over and over again, philosophy teaches us that no question is so old that it cannot inspire a new answer.

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