

## CHAPTER 1

### The problem of universals I

#### *Metaphysical realism*

- Realism and nominalism
- The ontology of metaphysical realism
- Realism and predication
- Realism and abstract reference
- Restrictions on realism – exemplification
- Further restrictions – defined and undefined predicates
- Are there any unexemplified attributes?

#### Overview

The phenomenon of similarity or attribute agreement gives rise to the debate between realists and nominalists. Realists claim that where objects are similar or agree in attribute, there is some one thing that they share or have in common; nominalists deny this. Realists call these shared entities universals; they say that universals are entities that can be simultaneously exemplified by several different objects; and they claim that universals encompass the properties things possess, the relations into which they enter, and the kinds to which they belong.

Toward showing us that we must endorse the reality of universals, realists point to the phenomena of subject predicate discourse and abstract reference. They claim that unless we posit universals as the referents of predicate expressions, we cannot explain how subject predicate sentences can be true, and they argue that we can explain the truth of sentences incorporating abstract referring terms only if we take universals to be the things identified by the use of those terms.

Realists, however, frequently disagree about the generality of their accounts of predication and abstract reference. Some realists, for example, deny that their account of predication holds for sentences incorporating the term 'exemplifies.' Other realists insist that their account holds only for primitive or undefined predicates or abstract terms. Furthermore, some realists hold that there are universals corresponding only to predicates that are actually true of

existing objects; whereas other realists believe that there are both exemplified and unexemplified properties, kinds, and relations.

#### Realism and nominalism

The objects we talk and think about can be classified in all kinds of ways. We sort things by color, and we have red things, yellow things, and blue things. We sort them by shape, and we have triangular things, circular things, and square things. We sort them by kind, and we have elephants, oak trees, and paramecia. The kind of classification at work in these cases is an essential component in our experience of the world. There is little, if anything, that we can think or say, little, if anything, that counts as experience, that does not involve groupings of these kinds. Although almost everyone will concede that some of our ways of classifying objects reflect our interests, goals, and values, few will deny that many of our ways of sorting things are fixed by the objects themselves.<sup>1</sup> It is not as if we just arbitrarily choose to call some things triangular, others circular, and still others square; they *are* triangular, circular, and square. Likewise, it is not a mere consequence of human thought or language that there are elephants, oak trees, and paramecia. They come that way, and our language and thought reflect these antecedently given facts about them.

There are, then, objective similarities among things. Prior to our classifying them in the ways we do, the familiar objects of the everyday world agree in their characteristics, features, or attributes. This is not a claim born of any metaphysical theory. It is, on the contrary, a prephilosophical truism, but one that has given rise to significant philosophical theorizing. Indeed, a question that goes back to the origins of metaphysics itself is whether there is any general explanation for the prephilosophical truism that things agree in attribute. Suppose it to be a fact that certain objects agree in attribute; they are all, say, yellow. Is there some fact more basic or fundamental than this fact such that it is because and only because the more fundamental fact holds of these objects that they are all yellow? And if there is, is it possible to generalize from this case? That is, is there a very general type or form of fact such that, given any case of attribute agreement, that case obtains because and only because some fact of the relevant very general type or form obtains?

An affirmative answer to this question is suggested in Plato's *Parmenides*, where we read that "there exist certain Forms of which these other things come to partake and so to be called after their names; by coming to partake of Likeness or Largeness or Beauty or Justice, they

become like or large or beautiful or just."<sup>2</sup> What is being proposed here is a general schema for explaining attribute agreement. The schema tells us that where a number of objects,  $a \dots n$ , agree in attribute, there is a thing,  $\phi$ , and a relation,  $R$ , such that each of  $a \dots n$  bears  $R$  to  $\phi$ , and the claim is that it is in virtue of standing in  $R$  to  $\phi$  that  $a \dots n$  agree in attribute by being all beautiful or just or whatever. It turns out that many philosophers since Plato have found this schema attractive.<sup>3</sup> They have not always used Plato's language. Where he speaks of things partaking of a Form, they have said that things *instantiate*, *exhibit*, or *exemplify* a single property, quality, or attribute. Nonetheless, the form of explanation being recommended is precisely the one Plato proposes. Different things are qualified or characterized in some way by virtue of their all standing in a relationship to the quality or characteristic in question. Attribute agreement gets grounded in a characteristic or quality *common to* or *shared by* the agreeing objects.

Philosophers who endorse the Platonic schema have traditionally been called *metaphysical realists* or simply *realists*;<sup>4</sup> but while many philosophers have found the realist's explanation of attribute agreement in terms of shared or common entities attractive, the form of explanation proposed by Plato has also had its critics. These critics have been known as *nominalists*. They argue that there are deep conceptual problems with the metaphysical machinery implied by the Platonic schema. Some nominalists take those problems to point to the need for a quite different theoretical explanation for attribute agreement, one making no reference to shared or common entities; whereas others take them to show that no theoretical account at all is required here, that the phenomenon of attribute agreement is a basic or fundamental fact not susceptible of further analysis. The debate between metaphysical realists and nominalists is perhaps the oldest sustained debate in metaphysics. Certainly the issues on which the debate has turned are as important as any in metaphysics. We need to become clear on these issues, and we will begin by attempting to delineate the main contours of the perspective labeled metaphysical realism.

## The ontology of metaphysical realism

Metaphysical realists want to insist that an adequate account of attribute agreement presupposes a distinction between two types or categories of objects: what are called *particulars* and what are called *universals*. The category of particulars includes what the nonphilosopher typically thinks of as "things" – familiar concrete objects like human beings, animals, plants, and inanimate material bodies; and the realist tells us

that what is peculiar to particulars is that each occupies a single region of space at a given time. Universals, by contrast, are construed as repeatable entities. At any given time, numerically one and the same universal can be wholly and completely exhibited or, as realists typically put it, exemplified by several different spatially discontinuous particulars. Thus, different people can exemplify the same virtue at the same time; different automobiles can simultaneously exemplify the same shape; and different houses can, at a given time, exemplify literally the same color. The virtue, the shape, and the color are all universals. The claim of the metaphysical realist is that familiar particulars agree in attribute in virtue of their jointly exemplifying a single universal. So there are nonrepeatable entities that stand in a special relation to repeatable entities, and this fact is what grounds attribute agreement among the familiar objects of the everyday world.

Realists typically want to claim that there is more than one kind of universal. All the cases of attribute agreement we have mentioned involve what are called *one-place* or *monadic* universals. They are universals that particulars exemplify individually or one by one; but there are also relations, universals that are exemplified by several individuals in relation to each other. Thus, *being a mile apart* is something that is exemplified by a pair of objects: one thing is a mile away from another; and it is a universal: many pairs of objects can be so related at any given time. Likewise, *being next to* is a spatial relation between objects: one object is next to another and, again, it is a universal: many pairs of objects can agree in entering into it. Both these relations are what are called *symmetrical* relations; given any pair of objects,  $a$  and  $b$ , such that  $a$  bears either relation to  $b$ ,  $b$ , in turn, bears that same relation to  $a$ . But not all relations are symmetrical. Many relations are such that pairs of objects enter into them only when taken in a certain order. Thus, *being the father of* is an *asymmetrical* relation: if one thing,  $a$ , is the father of another thing,  $b$ , then  $b$  is not the father of  $a$ . As logicians put it, it is the ordered pair,  $\langle a, b \rangle$  ( $a$  and  $b$  taken in just *that* order), that exhibits the relation. The three relations we have considered are all two-place or dyadic relations; but obviously there can be three-place, four-place, and, generally,  $n$ -place relations.

Relations, then, are *polyadic* or *many-place* universals. But colors, virtues, and shapes are all monadic. Each is exhibited by objects taken individually. Now, many realists lump all monadic universals together under the title 'property'; but some realists (typically those influenced by the Aristotelian tradition) insist on a further distinction here. We are asked to distinguish between properties and kinds. Kinds are things like the various biological species and genera.<sup>5</sup> Whereas objects

exemplify properties by *possessing* them, things exemplify kinds by *belonging to* them. Philosophers who draw this distinction frequently tell us that while kinds constitute the particulars that exemplify them as *what* they are, properties merely modify or characterize particulars antecedently so marked out; and they often claim that kinds are *individuating* universals. What is meant is that kinds constitute their members as individuals distinct from other individuals of the same kind as well as from individuals of other kinds. Thus, everything that belongs to the kind *human being* is marked out as a discrete individual, as one human being countably distinct and separate both from other human beings and from things of other kinds.

So attribute agreement can involve a variety of different types of universal. Several particulars can agree in belonging to a single kind; they can agree in possessing a single property; and several pairs, triples, or generally, *n*-tuples of particulars can agree in entering into a single relation. And realists want to claim that attribute agreement of any of these forms is subject to degrees. A dog and a cat agree in kind: both are mammals; but their agreement in kind is not as close as that tying two dogs. According to the realist, what gives rise to the difference in degree of agreement is the fact that the universals particulars exemplify exhibit varying degrees of generality. The more specific or determinate a shared universal, the closer is the resulting attribute agreement. Universals, then, come in hierarchies of generality. Presumably, every such hierarchy terminates in fully determinate universals, universals such that they have no less general or more determinate universals under them, and the particulars that jointly exemplify any such fully determinate universal will agree exactly in color, shape, kind, spatial relation, or whatever.

So particulars exemplify different sorts of universals of varying degrees of generality; but realists want to claim that the universals that serve to explain the attribute agreement among particulars can themselves agree in exemplifying further universals. Thus, the properties of red, yellow, and blue have various properties of tone and hue; they all belong to the kind *color*; and they enter into relations like *being lighter than* and *being darker than*. And, of course, the universals exemplified by colors can be more or less determinate, thereby explaining why, for example, red is closer to orange than blue is.

Thus, the original insight that familiar particulars agree in attribute by virtue of jointly exemplifying a universal gives rise to a picture of considerable complexity. Particulars and *n*-tuples of particulars exemplify universals of different types: properties, kinds, and relations. Those universals, in turn, possess further properties, belong to further

kinds, and enter into further relations; the same is true of these further properties, kinds, and relations; and so on, seemingly, without end. And the seemingly endless series of universals that have come on the scene enter into complicated hierarchies of generality inducing thereby complex patterns of attribute agreement of varying degrees of generality. What began, then, as an apparently innocent extension of common sense has blossomed into a full-scale metaphysical theory, an ontology, that is a long distance from common sense.

Some might balk at the complexity of the theory, but realists want to insist that the complexity of the structure has a theoretical pay-off. The structure represents a fruitful theory, one with the resources for explaining a wide range of phenomena. Although the phenomena realists claim their account explains are diverse and numerous, we will consider just two. Both bear on semantical issues, and both have played significant roles in the history of metaphysical realism. The first concerns *subject-predicate discourse*; the second bears on *abstract reference*. According to the realist, both phenomena give rise to pressing philosophical questions, and the realist insists that the theoretical machinery associated with metaphysical realism provides straightforward and satisfying answers to those questions.

## Realism and predication

The subject-predicate sentence is about as basic a form of discourse as there is. The following sentences are examples of this form of discourse:

- (1) Socrates is courageous
- (2) Plato is a human being
- (3) Socrates is the teacher of Plato.

Using a sentence like one of these, we pick out or refer to a particular and go on to say something about it – to characterize or describe it in some way, to indicate what kind of thing it is, or to relate it to something else. Using (1), for example, we refer to Socrates and we say of him that he is courageous. This characterization of (1) suggests that it is only the subject term 'Socrates' that plays a referential role or picks out an object in (1), but metaphysical realists want to insist that such an account is incomplete. Any satisfactory analysis of (1), they claim, will show the predicate term 'courageous' to have referential force as well.<sup>6</sup>

Suppose that (1) is true. Pretty clearly, its truth depends on two things: first, what (1) says and, second, the way the world is. Both of

these things are matters of structure; what (1) says is a matter of the terms that enter into its composition and the order in which they are placed. The relevant way the world is, on the other hand, is a matter of nonlinguistic structure; it is a matter of how things in a certain sector of the world are and how they are related to each other. So the truth of (1) involves a linguistic structure and a nonlinguistic structure, and the realist insists that it is because we have a correspondence between the two structures that (1) is true. It is because the linguistic structure of (1) corresponds to or mirrors the nonlinguistic structure of a certain sector of the world that (1) is true.<sup>7</sup> Pretty clearly, if we are to have the requisite correspondence, there must be a thing correlated with the proper name 'Socrates,' but the realist argues that (1) can be true only if 'courageous' is likewise correlated with some nonlinguistic object. As it occurs in (1), 'courageous' is not playing a purely formal role, the kind of role associated with terms (like the conjunctions 'or' and 'if' or the definite and indefinite articles) that do not enter into any relation with objects out in the world. Its role in (1) is to make contact with the world by referring to or picking out an object. So if (1) is to be true, both its subject term and its predicate term must have a referent, and the referents of these two terms must be related in a way that insures that what (1) says is true. But, then, as it occurs in (1), 'courageous' picks out an entity such that, in virtue of being related to it, the referent of 'Socrates' is as (1) says he is – courageous.

Metaphysical realists, however, are quick to point out that 'courageous' is a general term; it is a term that can be applied to individuals other than Socrates and so can figure as predicate in true subject-predicate sentences other than (1). Suppose, for example, that not just (1), but also

(4) Plato is courageous

is true. The argument presented for the case of (1) applies here as well. 'Courageous' is playing a referential role in (4) no less than in (1). But what is the relation between the referents of these two occurrences of 'courageous'? Pretty clearly, what we say about Plato when we predicate 'courageous' of him in (4) is precisely what we say about Socrates when we predicate 'courageous' of him in (1). And, according to the realist, that implies that whatever referential force 'courageous' has in (1) and (4), it is the same referential force in the two cases. The realist concludes that 'courageous' picks out a single entity in (1) and (4), a single entity such that in virtue of being related to it, both Socrates and Plato count as courageous.

And, of course, the same line of argument applies in the case of other true subject-predicate sentences where 'courageous' plays the predicate role. In every such sentence, 'courageous' has referential force or picks out an object; and provided the term is being used in a single sense in all these sentences, it has a single referential force in all of them. In every such sentence, it picks out or refers to a single entity, an entity such that in virtue of a relation between it and the referent of the sentence's subject term, the sentence is true. But what metaphysical machinery is required to tell this story of the truth conditions for sentences like (1), (4), and their ilk? Realists insist that the ontological framework central to their account provides the materials for such a story. Assume that there are repeatable entities or universals and a relation of exemplification tying them to particulars, and our account of the truth conditions for sentences like (1) and (4) goes smoothly. It is because 'courageous' has as its referent a certain universal – the virtue of courage – and because each of Plato and Socrates exemplifies that universal that (1) and (4) are true.

Realists want, of course, to extend the story we have told about (1) and (4) to provide a general account of subject-predicate discourse. Predicates refer to universals, and what makes a subject-predicate sentence true is just that the referent of its subject term exemplifies the universal that is the referent of its predicate term. And the realist will typically claim that there are different kinds of universals that can be the referents of predicate terms. The predicates of subject-predicate sentences like (1), where we characterize an object or say how it is, take properties as their referents. Other subject-predicate sentences are like

(2) Plato is a human being

enabling us to identify what a thing is or to say what kind of thing it is. Their predicates take kinds as their referents. Finally, there are subject-predicate sentences like

(3) Socrates is the teacher of Plato,

which enable us to say how different objects are related to each other; their predicates refer to relations.

If this analysis is to be complete, however, we need an account of the kind of referential relation that ties predicates to properties, kinds, and relations. Our paradigm of the referential relation is that between a name and its bearer, the sort of relation that ties 'Socrates' to the man Socrates; and some realists have wanted to claim that it is precisely this

relation that predicates bear to universals.<sup>8</sup> Their typical example is a sentence like

(5) This is red,

where we specify the color of some particular. We are told that (5) incorporates two names tied together by the copula 'is': 'this' names a certain particular, 'red' names a certain universal, and the copula expresses the relation of exemplification that ties the particular named by 'this' to the universal named by 'red.' On this account, the insight that subject-predicate truth involves a correspondence between a linguistic structure and a nonlinguistic structure gets a very strong expression; for on this view we have a one-to-one correspondence between the linguistic expressions out of which (5) is composed and the nonlinguistic items that are supposed to make (5) true. But while the claim that universals are named by predicates might seem attractive for a sentence like (5), when we turn to other subject-predicate sentences, we find that the analysis does not generalize very well. Consider, again,

(1) Socrates is courageous.

It is not plausible to suppose that its predicate is a name. Where a term names an entity, it can play the role of subject term in a subject-predicate sentence; and in that role, it refers to the item that it names. 'Courageous' does not, however, pass that test; it is not grammatically suited to occupy the subject position. If any term names the universal the realist wants to correlate with the predicate 'courageous,' it is the term 'courage'; and just as 'courageous' cannot play the subject role, 'courage' cannot function as a predicate. Nor is the case of 'courageous' idiosyncratic. Consider

(6) This coin is circular,

(7) Plato is wise,

and

(8) Alcibiades is exhausted.

In none of these cases is it plausible to claim that the predicate functions as a name of the universal it is supposed to refer to. In each case, there is another term ('circularity,' 'wisdom,' 'exhaustion') that is more

plausibly construed as the name of the relevant universal. The fact that we cannot take the predicates of (1), (6), (7), or (8) to be names of universals suggests that 'red' is not playing that role in (5) either; and the fact is that it is not. 'Red,' along with other color words is ambiguous; it can function as a noun (as in 'Red is a color'), and in that use it is plausibly construed as a name of the relevant color; but it can also function as an adjective (as in 'red house' and 'red complexion'), and in that use it does not name anything. In (5) the term has its adjectival use and so is no more a name there than 'courageous' is in (1).

We have been focusing on the grammatical obstacles to construing predicates as names; but those obstacles have semantical roots. A name is a singular term; it picks out its bearer and nothing else. Predicates, by contrast, are general terms and, as such, they enter into a referential relation with each of the objects of which they can be predicated. In the semanticist's jargon, they are *true of* or *satisfied by* those objects. But if their entering into that relation precludes their serving as names of universals, is there any other kind of referential relation that they might, nonetheless, bear to universals? Many realists have insisted that there is. They have claimed that in addition to being true of or satisfied by the objects of which they can be predicated, predicate terms *express* or *connote* universals.<sup>9</sup> Thus, 'courageous' is referentially linked to all and only courageous individuals by the relation of satisfaction; but realists have claimed that it also expresses or connotes the universal all those individuals have in common, the virtue of courage. Likewise, 'circular' is satisfied by all and only the individuals that are circular, but realists tell us that it bears the further semantical relation of expression or connotation to the universal those individuals all share, the shape of circularity.

Toward clarifying the claim that predicates express universals, realists argue that to apply a predicate term to an object is to do more than merely identify the object as a member of a set of objects; it is to identify as well the universal in virtue of which objects belong to the set. Thus, when we say that an object is triangular, we are not merely saying that it belongs to a set of objects. We are also pointing to the property shared by all the members of the set and saying that the object in question exhibits that property. According to the realist, the fact that the use of a predicate term involves more than the mere identification of the items it is true of is shown by the fact that subject-predicate sentences like our (1)–(8) admit of paraphrases in which the reference to a universal is made explicit. (1), for example, can be paraphrased as

(1') Socrates exemplifies courage,

and (6) can be paraphrased as

(6') This coin exemplifies circularity.

In both cases, the original subject-predicate sentence gives way to a sentence in which there occurs a singular term that bears what appears to be the naming relation to the universal the realist takes the predicate of the sentence to refer to or pick out. Now, realists want to claim that the possibility of such paraphrases is general, so that any subject-predicate sentence of the form '*a* is *F*' can be paraphrased by a sentence of the form '*a* exemplifies *F*-ness.' But if paraphrases of this sort are always possible, then to predicate a general term, '*F*,' of an object is just to say that the object exemplifies the universal, *F*-ness. And this implies that even if predicates do not name universals, their use in the context of a subject-predicate sentence has the force of introducing universals into discourse, of mentioning or referring to universals. There is, then, a referential relation here, one weaker or less direct than, but parasitic on the naming relation. That relation is what the realist calls expression or connotation. And the realist will, once again, typically claim that predicates can express or connote different kinds of universals. The predicate of a sentence like (1) expresses or connotes a property, and to assertively utter (1) is to say that a given object exemplifies that property by possessing or having it. The predicate of (2), by contrast, expresses a kind; and to assertively utter (2) is to say that some object exemplifies that kind by belonging to it. Finally, the predicate of (3) expresses a dyadic relation; and to use (3) to make a claim is to say that a particular pair of objects exemplify that dyadic relation by entering into it.

So predicates express or connote properties, kinds, and relations; and where we have a true subject-predicate sentence, the universal expressed by the predicate is exemplified by the referent of the sentence's subject term. The realist claims that this account does what we want it to do; it explains how subject-predicate sentences can manage to correspond to the world, and it does so in a natural or intuitively satisfying way. What makes the account so natural, according to the realist, is its connections with the realist's interpretation of attribute agreement. General terms play the predicate role; and, on any theory, general terms mark cases of attribute agreement: all the items of which a given general term is true agree in attribute or are similar in some way. But the items that agree in attribute, according to the realist, all exemplify some one universal; and, on the realist's account, the general term that marks a given case of attribute agreement expresses or

connotes precisely the same universal that supports or grounds that case of attribute agreement. So we have an account of predication that goes hand in hand with our account of attribute agreement, and the two accounts mesh in just the way they must if we are to provide a satisfactory account of subject-predicate truth. The universal that is the referent of a predicate term is precisely the universal that must be exemplified by the referent of a subject term if that referent is to be something that instances the case of attribute agreement marked by that predicate term.

### Realism and abstract reference

Realists want to claim that an ontology of universals provides us with the resources for explaining more than predication. They think their metaphysical theory enables us to give an intuitively satisfying account of the phenomenon of abstract reference.<sup>10</sup> This phenomenon makes its most obvious appearance in the use of what are called *abstract singular terms*. Examples of abstract singular terms are expressions like 'triangularity,' 'wisdom,' 'mankind,' and 'courage.' They are all singular terms: they can play the subject role; and they tend to pair off with expressions that can play the predicate role – general terms. Thus, we have 'triangularity'/'triangular,' 'wisdom'/'wise,' 'mankind'/'man,' 'courage'/'courageous,' and 'red' (in its noun use)/'red' (in its adjectival use). Now, intuitively, the terms making up each of these pairs seem to be related in a quite distinctive way: the abstract singular term appears to be a device for picking out a certain property or kind and the general term appears to be an expression true of or satisfied by all and only the objects that exemplify that property or kind. The realist insists that this intuitive account is correct and claims that unless we take abstract singular terms to be devices for referring to universals, we cannot provide a satisfactory account of the sentences in which they appear. The following are examples of such sentences:

- (9) Courage is a moral virtue
- (10) Triangularity is a shape
- (11) Hilary prefers red to blue
- (12) Mankind is a kind
- (13) Wisdom is the goal of the philosophic life

and so are the sentences we mentioned in our account of the referential force of predicates:

(1') Socrates exemplifies courage

and

(6') This coin exemplifies circularity.

Realists point out that sentences like these are often true, and argue that only the metaphysical realist has the resources for explaining how they can manage to be true. The realist insists that if we are to provide an account of what these sentences say, we must hold that, as they occur in these sentences, abstract singular terms are functioning in precisely the way the intuitive account tells us they function: they are playing referential roles of the most straightforward sort; they are functioning as names of universals. But if they are playing that sort of role, the sentences in which they occur can be true only if the universals they name actually exist. So only the philosopher who endorses an ontology of universals can account for the truth of sentences in which abstract singular terms appear.

Consider (9). In (9), we pick out a certain property, the property exemplified by all and only courageous individuals, and we go on to say what kind of thing it is; we say that it is a moral virtue. So (9) is a claim about a certain property, the property the intuitive account tells us is named by the abstract singular term 'courage'; and that claim can be true only if that property exists; for surely the claim that courage is a thing of a certain kind could not be true if there were no such thing as courage. Likewise, in (10) we pick out the property exemplified by all and only triangular objects and we say of that property that it is a shape. Thus (10) is a claim about a certain property, the property the intuitive account tells us is the referent of the abstract singular term 'triangularity'; and the truth of (10) presupposes that the referent of that abstract term exists. It could hardly be true, after all, that triangularity belongs to a certain kind if triangularity did not exist. And analogous points could be made regarding (11)–(13), (1'), and (6'). In each case, we have an abstract singular term, and the sentence in question manages to say what it does only because the relevant abstract term is functioning in the way the intuitive account tells us it functions, only because it is playing the referential role of naming a universal. Accordingly, each of these sentences can be true only if the universal named by the constituent abstract term exists. And, of course, there are many other such sentences; and like our sample sentences, their truth presupposes the existence of the universals the intuitive account takes to be the referents of their constituent abstract

singular terms. But obviously many such sentences are true, and only the metaphysical realist, only the philosopher who holds that universals exist, can tell us how this is possible.

So the fact that sentences incorporating abstract singular terms can be true is something realists claim only they can explain. They insist, however, that what we have called abstract reference is not restricted to sentences like those we have been considering. There are sentences incorporating no abstract singular terms which, nonetheless, appear to involve a reference to things like properties, kinds, and relations.<sup>11</sup> The following are examples of the sorts of sentences the realist has in mind:

- (14) That tomato and that fire engine have the same color
- (15) Some species are cross fertile
- (16) There are undiscovered relations tying physical particles to each other
- (17) He has the same character traits as his cousin

and

- (18) That shape has been exemplified many times.

Although none of these sentences includes a singular term that names a universal, the realist tells us that they are all claims about universals, claims about the colors, character traits, and shapes things share, the biological kinds to which they belong, and the relations into which they enter and insists that none of these sentences can be true unless the universals in question actually exist. Thus, (14)–(17) are straightforward assertions of the existence of universals meeting certain conditions; none of them can be true unless there exist universals meeting those conditions; and while (18) is not an explicit existence claim, its truth presupposes the existence of at least one multiply exemplifiable entity, a certain shape. So, again, we have the claim that there are sentences whose truth implies the existence of the sorts of things the realist calls universals; the realist points out that many sentences like (14)–(18) are true and concludes that only the philosopher who endorses an ontology of universals can explain this fact.

The sentences that exhibit the phenomenon of abstract reference, then, include both sentences with and sentences without abstract singular terms; but in both cases, the realist's contention is the same: that to account for their truth, we must endorse the ontology of metaphysical realism. A couple of comments about this line of argument are in order. First, it is independent of the realist's account of predication.

The realist's claims about sentences like (9)–(18) presuppose no particular theory of predication. Even if we suppose that the only semantical property associated with predicates is that of being true of or satisfied by the items of which they are predicated, the fact remains that intuitively the use of sentences like (9)–(18) has the force of making claims about entities other than familiar concrete particulars. Indeed, it is plausible to think that this argument is actually presupposed by the realist's analysis of predication. As we have seen, when realists attempt to explicate and justify the claim that predicates take universals as their referents, they appeal to the fact that ordinary subject-predicate sentences of the form '*a* is *F*' can be paraphrased by way of sentences of the form '*a* exemplifies *F*-ness.' But it is only because sentences of the latter form incorporate abstract singular terms and because we take the truth of sentences incorporating such terms to commit us to the existence of universals that we take the appeal to these paraphrases as evidence for the realist's theory of predication.

Second, the realist's claims about sentences involving abstract reference cannot be properly evaluated in isolation from alternative accounts of the role of abstract referring devices; for the warrant for those claims must be the failure of alternative analyses of sentences like (9)–(18). If a satisfactory nominalist account of the content and truth conditions of such sentences is forthcoming, then the realist's claim that the truth of these sentences commits us to an ontology of universals is gratuitous. The same is true of the earlier argument from subject-predicate truth. An adequate account of how subject-predicate sentences can correspond with nonlinguistic fact that does not construe predicates as referentially tied to universals would call into question the realist's claim that we need universals to account for subject-predicate truth. So both arguments are best understood as challenges to the nominalist to come up with systematic and intuitively attractive theories of predication and abstract reference, theories that give us an account of the metaphysical grounds of subject-predicate truth and the use of abstract referring devices without making reference to common or shared entities. As we shall see in the next chapter, nominalists have recognized the burden placed on them by the realist's argument in these two arenas and have expended considerable effort showing that such an account is possible. And given the way that the realist's account of abstract reference enters into the realist's account of predication, it is not surprising that nominalists have been most concerned to provide an account of the role of abstract singular terms; As we shall see, the realist's claim that our intuitive understanding of sentences like (9)–(18) presupposes the existence of universals is just an opening

salvo. Realists realize that they must respond to alternative accounts of such sentences; but they are prepared to do so and are confident that their own analysis will be vindicated by the examination of nominalist accounts of abstract reference.

### Restrictions on realism – exemplification

Our discussion suggests that metaphysical realists constitute a unified group defending a single doctrine, but the fact is that realists have disagreed among themselves on a range of issues. The most important bears on the generality of the theory. Our treatment of realism suggests that realists want to apply the Platonic schema across the board, so that for every case of what we would prephilosophically call agreement in attribute, the realist will posit a separate universal. Likewise, we have implied that every general term that can function predicatively in a true subject-predicate sentence expresses or connotes a distinct universal and that every semantically distinct abstract term names a unique universal. But many realists have been unwilling to endorse such an unrestricted version of the theory. They have insisted that we place restrictions on the theory, so that universals correspond to only some of the ways things can be said to be, to only a limited pool of general terms, and to only some of the abstract terms in our language. Furthermore, the restrictions imposed on the theory have varied, so that by examining the different ways the theory has been restricted and the rationale for each restriction, we can bring to light the different forms metaphysical realism has taken.

We should begin by noting that no version of metaphysical realism can consistently endorse the completely unrestricted application of the Platonic schema or hold that every nonequivalent predicate term or every nonequivalent abstract term is associated with a separate and distinct universal. An entirely unrestricted version of the theory lands one in a notorious paradox. We can bring out the paradoxical nature of an unrestricted realism by focusing on the realist's analysis of predication. Suppose we endorse that analysis in its full generality and hold that a universal corresponds to every general term that can occupy the predicate position in a true subject-predicate sentence. Consider now the general term 'does not exemplify itself.' This term is, to be sure, syntactically complex; but we could, if we wished, introduce a single expression to replace the complex predicate, so the syntactic complexity is really an irrelevant detail. We have here a perfectly respectable general term, one true of or satisfied by all and only the things that do not exemplify themselves; and it is a general term that can function



predicatively in true sentences. The expression is true, for example, of Bill Clinton, the number two, and the Taj Mahal. Since none of these things is selfexemplifying, each satisfies the predicate 'does not exemplify itself'; and the relevant subject-predicate sentences will all be true. There are, on the other hand, things, certain universals, to which the predicate does not apply. Presumably, the property of being incorporeal exemplifies itself: it has no body and so is incorporeal. Likewise, if there is such a thing as the property of being self identical, it is identical with itself and so exemplifies itself. Accordingly, neither of these things satisfies the predicate 'does not exemplify itself.'

Now, since there are true subject-predicate sentences where this term functions predicatively, a totally unrestricted version of the realist's theory of predication will tell us that there is a property expressed or connoted by this predicate expression. For convenience, let us call it the property of being non-selfexemplifying. The assumption that there is such a property leads immediately to paradox; for the property must either exemplify itself or fail to do so. Suppose it does exemplify itself; then, since it is the property a thing exemplifies just in case it does not exemplify itself, it turns out that it does not exemplify itself. So if it does exemplify itself, it does not exemplify itself. Suppose, on the other hand, that it does not exemplify itself; then, it turns out that it does exemplify itself; for it is the property of being non-selfexemplifying. So if it does not exemplify itself, it does exemplify itself. But, then, it exemplifies itself just in case it does not, a deplorable result.<sup>12</sup> To avoid the paradox, we have no option but to deny that there is a universal associated with the general term 'does not exemplify itself.' The realist's account of predication cannot hold for *all* general terms that function predicatively in true subject-predicate sentences.

It is frequently claimed that still further restrictions have to be imposed on the realist's theory. The claim is that, without additional restrictions, the realist's theory lands us in a vicious infinite regress. The contention is very old; it can be found in Plato's *Parmenides* and has been repeated again and again since the time of Plato.<sup>13</sup> The difficulty that is supposed to confront the realist bears on the core notion of exemplification. One way of stating the difficulty takes its origin in the realist's use of the Platonic schema for explaining attribute agreement. According to the schema, where a number of objects agree in all being *F*, their agreement is grounded in their multiple exemplification of the universal *F-ness*. The difficulty is that, for any given application of the schema, that application explains one case of attribute agreement, the original objects all being *F*, only to confront a new case, their all exemplifying *F-ness*. But, then, we have to appeal to a further universal,

the exemplification of *F-ness*, and we have to say that the second case of attribute agreement holds among our original objects in virtue of their jointly exemplifying this second universal; but, then, we explain our second case of attribute agreement only to confront a third case, our original objects all agreeing in exemplifying the exemplification of *F-ness*. So we need to appeal to a third universal which will, in turn, generate still another case of attribute agreement with the resulting need for still another universal, and we are off on an endless regress through cases of attribute agreement and supporting universals. Conclusion? If we endorse the Platonic schema, the explanation that schema is supposed to provide can never be completed.

It should be obvious that the same difficulty appears to plague the realist's attempt to explain subject-predicate truth. The realist wants to claim that an arbitrary subject-predicate sentence,

(20) *a* is *F*

is true only if the referent of '*a*' exemplifies the universal (*F-ness*) expressed by '*F*.' But, then, our original sentence, (20), is true only if a new subject-predicate sentence,

(21) *a* exemplifies *F-ness*,

is true, and it looks as though we have not completed our explanation of the truth of (20) until we have exhibited the ground of the truth of this new sentence. However, (21) incorporates a new predicate ('exemplifies *F-ness*') and it expresses a new universal (the exemplification of *F-ness*). The realist's theory tells us that (21) can be true only if the referent of '*a*' exemplifies the new universal. But that condition is satisfied only if

(22) *a* exemplifies the exemplification of *F-ness*

is true, so it seems that our account of the truth of (20) requires an account of the truth of this third sentence. Once again, we appear to be off on an infinite regress, and once again, we have the apparent conclusion that the realist's theory cannot do what it is supposed to do.

The two regresses we have outlined might seem to have a simple moral: we must reject the metaphysical realist's account of attribute agreement and predication; and the regresses have frequently been exploited by philosophers of a nominalist bent to point up precisely

this moral; but realists have often argued that the regresses have a quite different moral. They concede that the regresses must be avoided, but they think that there is an easy way to do this. We need merely to set restrictions on the use of the Platonic schema and its associated theory of predication. Confronted with the first regress, we can deny that every distinct form of attribute agreement involves a separate and distinct universal. In particular, we can deny that where the agreement consists in a number of objects exemplifying a universal, there is a further universal supporting the agreement. Likewise, in confronting the second regress, we can deny that every semantically distinct general term expresses a distinct universal. While conceding that there is a universal corresponding to the predicate of any sentence whose form is that of (20), we can deny that there are further universals corresponding to the predicates of sentences of the form of (21) or any of its successors.

So the claim is that if we restrict the applicability of the Platonic schema and the realist's theory of predication, we can avoid these regresses. One might, however, challenge the idea that any restriction is called for here. If the regresses just delineated are real, it is difficult to see why the realist should be bothered by them. Consider the contention that the use of the Platonic schema is viciously regressive. The realist claims to have a schema for providing a complete account of any given case of attribute agreement; but the alleged regress does nothing to call that claim into question. If there is, as the argument claims, an infinity of cases of attribute agreement lying behind any given case, that fact does not jeopardize the realist's use of the Platonic schema to provide a full and complete explanation of the initial case of attribute agreement. When realists tell us that our sample objects are all *F* because they all exemplify *F-ness*, they have given us a complete explanation of the original case of attribute agreement. If, as the argument claims, the explanation introduces a new case of attribute agreement, realists are free to apply the Platonic schema to the second case; but they are under no obligation to do so. In particular, the success of the original application of the schema to explain the first case of attribute agreement does not hinge on their explaining the second; and the same holds for each of the cases of attribute agreement allegedly following upon this one. So if the regress is real, it is not vicious; and, accordingly, no restriction on the use of the Platonic schema is called for.

A similar point can be made in reply to the claim that realists must set restrictions on the application of their theory of subject-predicate truth. Even if the regress allegedly requiring the relevant restriction is

real, it is not vicious. If, as the argument claims, the realist explanation of the truth of (20) brings a new true subject-predicate sentence, (21), on the scene, the realist's success in explaining the truth of (20) does not presuppose an explanation of the truth of (21). If the aim had been to eliminate or analyze away the subject-predicate form of discourse, then the emergence of (21) would be genuinely problematic. But the realist is hardly committed to supposing that it is possible to eliminate that form of discourse. Indeed, if there is a regress here, it is one that infects every attempt, realist *or* nominalist, at delineating the ontological grounds of subject-predicate truth.<sup>14</sup> Consider a nominalist theory of subject-predicate truth. For each subject-predicate sentence of the form '*a* is *F*,' it will identify some condition, *C*, and will tell us that the original sentence is true only if *C* is fulfilled; but then there will be a new subject-predicate sentence ('*a* is such that *C* is fulfilled'), and our original sentence can be true only if the second sentence is true. Accordingly, that theory will be every bit as regressive as the realist's. And in neither case is the alleged regress vicious. So even if there is a regress here, no restriction on the range of applicability of the realist's theory of predication is required.

But if they are not vicious, the two regresses seem to have the upshot that behind any case of attribute agreement or any true subject-predicate claim, there lies an infinite series of distinct universals. Some realists might find that fact worrisome; and in the interests of keeping the number of universals to a minimum, they might feel that the relevant restrictions need to be imposed on the realist's theories of attribute agreement and predication. But if realists are concerned about a bloated ontology, it is open to them to deny that the relevant regresses are even real. They can challenge the idea that when we say that objects agreeing in being *F* all jointly exemplify the universal, *F-ness*, we have thereby identified a second case of attribute agreement. We can say that in applying the Platonic schema to identify the ontological ground of a given case of attribute agreement, we are providing a fully articulated and metaphysically more perspicuous characterization of that case rather than introducing a new case. And in a similar vein, they can claim that the predicate of (21), 'exemplifies *F-ness*' is only syntactically or grammatically distinct from that occurring in (20), '*F*.' Semantically, they can claim, the two predicates are equivalent and so do not rest on distinct ontological foundations.

Neither of the first two attempts at arguing that the realist theory lands us in a regress that requires a restriction on that theory carries much force, then. There is, however, a third way of arguing this claim. According to most realists, this third argument poses genuine

problems for their account, problems that can be resolved only by restricting the range of the theory. According to the realist, for a particular,  $a$ , to be  $F$ , it is required that both the particular,  $a$ , and the universal,  $F$ -ness, exist. But more is required; it is required, in addition, that  $a$  exemplify  $F$ -ness. As we have formulated the realist's theory, however,  $a$ 's exemplifying  $F$ -ness is a relational fact. It is a matter of  $a$  and  $F$ -ness entering into the relation of exemplification. But the realist insists that relations are themselves universals and that a pair of objects can bear a relation to each other only if they exemplify it by entering into it. The consequence, then, is that if we are to have the result that  $a$  is  $F$ , we need a new, higher-level form of exemplification (call it exemplification<sub>2</sub>) whose function it is to insure that  $a$  and  $F$ -ness enter into the exemplification relation. Unfortunately, exemplification<sub>2</sub> is itself a further relation, so that we need a still higher-level form of exemplification (exemplification<sub>3</sub>) whose role it is to insure that  $a$ ,  $F$ -ness, and exemplification are related by exemplification<sub>2</sub>; and obviously there will be no end to the ascending levels of exemplification that are required here. So it appears, once again, that the only way we will ever secure the desired result that  $a$  is  $F$  is by denying that exemplification is a notion to which the realist's theory applies.

The argument just set out is a version of a famous argument developed by F.H. Bradley.<sup>15</sup> Bradley's argument sought to show that there can be no such things as relations; whereas, the argument we have been elaborating has the more modest aim of showing that the realist's story of what is involved in a thing's having a property, belonging to a kind, or entering into a relation cannot apply to itself. Now, some realists have held that while real, the regress just cited is not vicious.<sup>16</sup> They have taken the regress to be no more threatening than the first two regresses we have outlined. These realists have, however, been in the minority. Most realists have seen the regress as vicious. It is not altogether clear just why; for on the surface, the regress appears to have the same formal structure as the earlier two regresses. Of course, realists have sometimes mistakenly thought that those two regresses are problematic, so it is not surprising that they should find the third regress worrisome. What is puzzling is that realists who show no concern over the original pair of regresses should be bothered by this regress. Perhaps, they have felt that this regress, unlike the earlier two, makes it impossible to explain the thing we initially set out to explain –  $a$ 's being  $F$ . Perhaps, they have felt that unless realists can point to some connecting mechanism whose connecting role is secured without dependence on some further, higher-level connecting mechanism, they have not succeeded in explaining why the particular,  $a$ , is  $F$ . It is not,

however, obvious that this line of thinking is correct; for it is reasonable to think that once the realists have told us that  $a$  is  $F$  because  $a$  and  $F$ -ness enter into the relation of exemplification, they have completed their explanation of the fact that  $a$  is  $F$ . There is, of course, something new the realist might want to go on and explain – the new fact that  $a$  and  $F$ -ness enter into the relation of exemplification; however, the failure to explain this new fact would seem to do nothing to jeopardize their explanation of the original fact that  $a$  is  $F$ .

But whether we find the reason compelling, the fact remains that our third regress looms large in the history of metaphysical realism. Realists have typically believed that they have no option but to stop the regress before it gets started.<sup>17</sup> Toward stopping the regress, they have insisted that the realist account does not apply to the notion of exemplification itself. Obviously, some justification for this restriction is called for; and the justification given is that exemplification is not a relation. Realists claim that while relations can bind objects together only by the mediating link of exemplification, exemplification links objects into relational facts without the mediation of any further links. It is, we are told, an unmediated linker; and this fact is taken to be a primitive categorial feature of the concept of exemplification. So, whereas we have so far spoken of exemplification as a relation tying particulars to universals and universals to each other, we more accurately reflect realist thinking about the notion if we follow realists and speak of exemplification as a 'tie' or a 'nexus,' where the use of these terms has the force of bringing out the *nonrelational* nature of the linkage this notion provides.

So realists typically deny that their own account applies to the case of exemplification. Now, whether we find the restriction well motivated, we must concede that there is a bonus to this restriction; for if the realist account does not apply to the notion of exemplification, then our earlier claim that the Platonic schema cannot apply to the predicate 'does not exemplify itself' looks less like a desperate and *ad hoc* attempt at avoiding paradox. If there are reasons for supposing that the schema does not apply to the concept of exemplification, then it is only natural to suppose that it does not apply to concepts built out of that notion; and since in claiming that exemplification is not a relation, realists have some justification for denying that the schema applies to it, they would seem to have plausible grounds, independent of the threat of paradox, for excluding from the range of the schema the notion of being non-selfexemplifying.

### Further restrictions – defined and undefined predicates

As I have suggested, most realists would endorse the restrictions we have so far placed on metaphysical realism; but some realists want to place further restrictions. Consider, for example, the predicate 'bachelor.' As we have formulated it, the realist's account tells us that there is a universal correlated with this predicate. Which universal is that? The property, presumably, of being a bachelor. But that universal is a property a thing has just in case it has the property of being male, the property of being a human being, and the property of being unmarried. So how many properties do we have here? We need the properties of being male, of being a human being, and of being unmarried to accommodate the predicates 'male,' 'human being,' and 'unmarried'; but do we need the further property of being a bachelor? We can give a perfectly satisfactory account of the predicate 'bachelor' by reference to the other three, apparently more basic properties, so is it not redundant to add a fourth property to our inventory? Isn't that additional property just needless clutter? But the doubt about the need to postulate an extra property for the predicate 'bachelor' can be extended quite naturally to the case of 'unmarried.' If we concede the need for a property to correspond to the predicate 'married,' do we need to posit an additional negative property in the case of 'unmarried'? Can we not say instead that 'unmarried' is true of a thing just in case it lacks the property corresponding to the predicate 'married'? Again, is it not redundant to add the negative property to our ontology? And, of course, if we concede, as it seems we must, that the predicate 'married' can be defined in terms of other more basic predicates, then the doubts we have raised about 'bachelor' and 'unmarried' can be extended even further.

These doubts have led some realists to set very severe restrictions on the analysis of predication so far delineated. They have insisted on a distinction between what they call *undefined* and *defined* predicates.<sup>18</sup> The idea is that there are certain predicates that are not defined in terms of other predicates; these primitive predicates get their meaning by being directly correlated with universals. All other predicates are defined in terms of these primitive predicates. On this view, then, there is not a separate and distinct universal correlated with every semantically nonequivalent predicate; it is only in the case of the primitive or undefined predicates that this is so. The semantical properties of defined predicates can be explained by reference to the universals correlated with the primitive predicates in terms of which they are defined.

Although this way of restricting the realist analysis of predication may initially seem attractive, it has its problems. The central difficulty is that predicates do not come neatly divided into those that are basic or primitive and those that are defined. The philosopher must make the division, and it is arguable that any such division will be somewhat arbitrary. What one formalization of a language takes to be a basic or undefined predicate, another can, with equal adequacy, construe as a defined expression. This fact raises doubts about the distinctively metaphysical force of any attempt at dividing predicates into those that are primitive and those that are defined. If the distinction between undefined and defined predicates is to be a guide to what universals there are, it can hardly rest on the arbitrary decisions of a formalizer.

To avoid the charge of arbitrariness, then, the realist who finds this distinction useful will need to provide some philosophical justification for identifying certain predicates as basic. One important kind of justification that has been provided here is epistemological. Realists who have endorsed a strongly empiricist program in the theory of knowledge have insisted that the basic or primitive predicates are those that express features or characteristics that, from the empiricist's perspective, are epistemologically basic. Accordingly, it is predicates expressing colors, sounds, smells, simple shapes, and the like that are construed as primitive. Corresponding to each such nonequivalent predicate, there is said to be a distinct and separate universal; and it is claimed that all other predicates can be defined by reference to these universals.

Although the view just laid out was popular among realists in the first half of this century, it does not have many defenders nowadays. Those who endorsed the view found that a large number of predicates resist analysis in terms of merely sensory or perceptual properties. The theoretical predicates of science and moral or ethical predicates are just two cases that proved problematic for realists of the empiricist persuasion. Finding it impossible to analyze these predicates in purely perceptual terms, these realists were forced to deny that the predicates have any genuinely descriptive meaning and to endorse highly implausible accounts of their role in language. Thus, they claimed that the theoretical predicates of science are merely tools or instruments for taking us from one set of statements involving purely perceptual predicates to another such set, and that ethical predicates are nothing more than linguistic vehicles for venting our feelings or emotions about persons, their actions, and their lifestyles.

But it is not simply the empiricist themes at work in this proposal that left philosophers skeptical of the idea that a distinction between

defined and undefined predicates is ontologically important. However one goes about the business of dividing predicates into primitive and defined, one is committed to the idea that every nonprimitive predicate can be defined wholly and completely by reference to the predicates taken to be primitive. But the fact is that few of the predicates of our language are like 'bachelor' in being susceptible of definition in terms of less complex predicates. Although it was invoked to make a slightly different point, Wittgenstein's famous discussion of the predicate 'game' brings out the difficulty here:

Consider for example the proceedings that we call "games." I mean board-games, card-games, Olympic games and so on. What is common to them all? Don't say: "There *must* be something common, or they would not be called 'games'" – but *look* and *see* whether there is anything common to all. – For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that. To repeat: don't think but look! Look, for example, at board-games, with their multifarious relationships. Now, pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost. – Are they all "amusing"? Compare chess with noughts and crosses. Or is there always winning and losing, or competition between players? Think of patience. In ball-games there is winning and losing; but when a child throws his ball at the wall and catches it again, this feature has disappeared. Look at the parts played by skill and luck; and at the difference between skill in chess and skill at tennis. Think now of games like ring-a-ring-a-roses; here is the element of amusement, but how many other characteristic features have disappeared! and we can go through the many, many other groups of games in the same way; can see how similarities crop up and disappear.<sup>19</sup>

'Game' is pretty clearly not going to turn out to be a primitive predicate; but if Wittgenstein is right, the attempt to identify a set of more basic predicates whose associated properties will enable one to provide necessary and sufficient conditions for the applicability of the predicate 'game' is bound to be frustrated. 'Game' has a looser, less regimented semantical structure than a term like 'bachelor,' a structure that cannot be captured by any formal definition; and Wittgenstein wants to claim

that, on this score, it is typical of most of the predicates of our language.

In the light of Wittgenstein's remarks, it is not surprising that the distinction between primitive and defined predicates does not play a major role in the work of contemporary realists. Some simply deny that the sort of restrictions those invoking the distinction meant to set on realism are appropriate.<sup>20</sup> They are *holists* about universals; that is, they reject any attempt at reducing one set of universals to another. On the one hand, they are impressed by the fact that where we can provide formal definitions for predicates, any attempt at distinguishing between defined and undefined predicates is bound to be arbitrary. Accordingly, while perhaps conceding that the Platonic schema and its associated theory of predication do not apply to the notion of exemplification, they insist that the universals associated with predicates like 'bachelor' and 'unmarried' are every bit as respectable, every bit as real as those associated with predicates like 'blue' and 'red.' On the other hand, they agree with Wittgenstein that many predicates resist formal definition in terms of other, more basic predicates. However, unlike Wittgenstein, they find this fact no source of embarrassment for the realist. Thus, in response to Wittgenstein's demand to identify a universal common to all the things called games, they point to the property of being a game; and they deny that the impossibility of reducing this property to other more familiar universals is, in any way, problematic.

But other contemporary realists have insisted that even if the attempt to divide predicates into those that are primitive and those that are defined fails as an ontologically revealing way of restricting the realist's account, restrictions need to be placed on the application of the Platonic schema.<sup>21</sup> They agree, then, that our use of only some predicates has genuinely ontological force, and they claim that it was not in the attempt to restrict the range of realism that empiricists went wrong. Where they went wrong was in their identification of the ontologically interesting predicates with merely perceptual or observational predicates and in their claim that the relationship between ontologically revealing predicates and other predicates is one of definition or translation. These realists accuse their more holistic or antireductive colleagues of *apriorism*, the view that we can determine what universals there are by mere armchair reflection on the structure of our language. According to the holists, to determine what universals there are, we need merely look to the stock of predicates at our disposal: to every such nonequivalent predicate, there corresponds a separate and distinct universal. In opposition to this alleged apriorism, it is claimed that the

question of what universals there are is an empirical question to be settled by scientific inquiry. It should come as no surprise that those metaphysical realists who rail against linguistic apriorism are typically also *scientific realists*. They hold, that is, that the empirical sciences, in particular physics, represent the criterion of what there is. Accordingly, they claim that the ontologically significant predicates are those essential to the formulation of the correct physical theory. It is, then, the predicates of physics in its finished form that have ontological force.

But if we accept this claim, what are we to make of the predicates that play no role in physical theory? For obvious reasons, the idea that there are translation rules taking us from strictly physical predicates to nonphysical predicates has not been seen as a viable option for the philosopher who seeks to couple metaphysical realism with an austere scientific realism. Instead, we find philosophers who defend the two forms of realism presenting a number of different and competing views about the relationship between the ontologically significant framework of physical theory and the nonscientific framework of common sense. I will mention just two. The first, less radical, view will not deny that there are universals correlated with predicates and abstract terms that are not a part of physical theory; but it gives ontological priority to the properties, kinds, and relations of physics. Those universals are construed as ontologically basic or fundamental, and other universals are taken to be dependent on them. The claim is that while the universals that do not enter into physical theory may not be reducible to or analyzable in terms of universals that do, the latter fix or determine the former. What physical kinds a thing belongs to, what physical properties it possesses, and what physical relations it enters into determines uniquely what nonphysical kinds, properties, and relations it exhibits. As it is usually put, nonphysical universals *supervene* on physical universals. On this view, once one has identified all of the physical facts (that is, all the facts recognized by the true physical theory), one has fixed all the facts, nonphysical as well as physical. So while nonphysical properties, kinds, and relations may not be analyzable in terms of the universals of physics, the latter provide the ontological foundation on which the former rest.<sup>22</sup>

A second, more radical account is that of the *eliminativist* who refuses to construe those predicates and abstract terms that cannot be accommodated by reference to the universals invoked in physical theory as having any ontological force.<sup>23</sup> As the eliminativist sees it, our ordinary nonscientific language is the expression of a theory of how the world is; and like any theory it can be displaced by a theory that provides a more

accurate representation of the structure of reality. According to the eliminativist, our best theory of the nature of the world is that delineated by mature physics. To the extent that our nonscientific account of the world is incompatible with mature physical theory, it is false. Those among its predicates and abstract terms that purport to refer to universals that cannot be incorporated in the picture of the world projected by physics are terms without a reference; the universals they purport to express or name simply do not exist. The eliminativist denies that there is anything puzzling about this. It is simply one more case where the theoretical posits of one theory are rejected in favor of those of a more adequate theory.

### Are there any unexemplified attributes?

While the differences we have noted have played an important role in the history of metaphysical realism, the single most important issue dividing realists bears on the idea of *unexemplified* universals. In delineating the main contours of realism, our focus has been on actual cases of attribute agreement and on the use of general terms and abstract singular terms in sentences that are actually true. One important tradition, however, would insist that this emphasis on the actual is misguided; it leads us to suppose that all universals are in fact instantiated or exemplified. Realists of this persuasion want to insist, however, that, in addition to the exemplified universals, there are many properties, kinds, and relations that are not, never have been, and never will be exemplified.<sup>24</sup> Some of these lack instances only *contingently*; that is, they are such that they might have been exemplified, but in fact are not. Thus, there doubtless are many complex ways physical objects might have been shaped, but never were; the corresponding shapes, these realists claim, are all contingently unexemplified universals. But many of these realists have gone on to claim that, in addition to universals that only contingently go unexemplified, there are attributes that are *necessarily unexemplified*, attributes such that nothing could have ever exemplified them. It is, for example, impossible that anything be both round and square. That is a way nothing could be; these realists insist that there is a corresponding attribute, one that is necessarily unexemplified.

So some realists believe that there are uninstantiated properties, kinds, and relations. Since there is some evidence that Plato believed that this is so, let us call realists of this persuasion Platonists.<sup>25</sup> Opposed to them are realists who insist that every universal has at least one instance at some time or other. It is plausible to think that

Aristotle endorsed an ontology involving only exemplified universals; for he tells us that if everything were healthy, there would be no such thing as disease, and if everything were white, the color black would not exist.<sup>26</sup> Let us, then, call realists who reject the Platonist's unexemplified universals Aristotelian realists.

What are the issues separating Aristotelian realists from Platonists?<sup>27</sup> As a start toward answering this question, let us ask why Aristotelians object to uninstantiated universals. Aristotelians typically tell us that to endorse Platonic realism is to deny that properties, kinds, and relations need to be anchored in the spatiotemporal world. As they see it, the Platonist's universals are ontological "free floaters" with existence conditions that are independent of the concrete world of space and time. But to adopt this conception of universals, Aristotelians insist, is to embrace a "two-worlds" ontology of the sort we find in Plato himself. On this view, we have a radical bifurcation in reality, with universals and concrete particulars occupying separate and unrelated realms. Such a bifurcation, Aristotelians claim, gives rise to insoluble problems in both metaphysics and epistemology. It is difficult to understand how there could be any kind of connection between spatiotemporal objects and beings completely outside space and time. Nonetheless, the realist is committed to there being such connections. After all, the cornerstone of metaphysical realism, the realistic interpretation of attribute agreement, tells us that the ontological ground of spatiotemporal particulars being the way they are, being the sorts of things they are, and being related to each other in the ways they are just is their being connected or tied to properties, kinds, and relations. Furthermore, it is highly problematic how beings like ourselves who belong firmly to the spatiotemporal world of concrete particulars could ever have cognitive access to the nonspatial, nontemporal beings that Platonists tell us properties, kinds, and relations are. Since it would seem that there can be no causal relations between spatiotemporal particulars like ourselves and beings outside space and time, it looks as though the only story we could tell about our knowledge of universals is one that makes that knowledge innate or *apriori*. But Aristotelians have traditionally been skeptical of the idea of innate knowledge. They want to insist that our knowledge of properties, kinds, and relations, like all our knowledge, has an empirical origin. Indeed, Aristotelians want to deny that we can separate or cut apart our knowledge of universals from our knowledge of concrete spatiotemporal particulars. As they see it, we grasp particulars only by grasping the kinds to which they belong, the properties they exhibit, and the relations they bear to each other; and we grasp the relevant kinds,

properties, and relations, in turn, only by epistemic contact with the particulars that exemplify them.

How, in turn, do Platonists defend the idea of uninstantiated or unexemplified universals? One important strategy is to argue that precisely the same sorts of semantical considerations that lead us to posit exemplified universals support the claim that there are unexemplified universals. The Platonist will argue that it is not simply the predicates of true subject-predicate sentences that take universals as their referents; the same is true of false sentences of this form. Suppose there is an object, *a*, and a person, *P*, such that *P* falsely believes that

(20) *a* is *F*

is true. *P* might well assertively utter (20). Although what *P* asserts in uttering (20) is false, *P* has asserted something. But what? Had (20) been true, in assertively uttering (20), *P* would have asserted that the object, *a*, exemplifies the universal, *F-ness*. The Platonist will argue that what *P* asserts in uttering (20) cannot depend on whether (20) is true or false, so what *P* falsely asserts in uttering (20) has to be the same thing *P* would have asserted had (20) been true. Thus, *P* asserts, falsely it turns out, that *a* exemplifies *F-ness*. But, the Platonist will go on, *F* might have been a general term, a shape-predicate, say, true of or satisfied by no object that exists, has existed, or will exist. So the semantical considerations that lead us to suppose that there are exemplified universals support an ontology of unexemplified universals as well; and, the Platonist may go on to argue, *F* could just as well have been a predicate that is necessarily true of nothing, so that the same argument would seem to justify the belief that there are necessarily unexemplified properties, kinds, and relations.

The Platonist will typically insist that all universals, whether exemplified or not, are *necessary beings*. Unlike the *contingently* existing particulars of common sense that exist, but need not, properties, kinds, and relations are such that their nonexistence is impossible. Toward showing this, the Platonist tells us that for every property, the claim that it is a property is not just true, but necessarily true. Now, the Platonist insists that just as the truth of a claim about an object presupposes the actual existence of the object, the necessary truth of a claim about this or that object presupposes the necessary existence of the object. A necessary truth, the Platonist insists, is one that could not fail to be true; and where a necessary truth is a claim about a given object, the object in question could not fail to exist. So every property is such that it could not fail to exist; every property is a necessary

being; and analogous points hold with regard to kinds and relations. So the Platonist insists that we distinguish between the existence of a property, kind, or relation and its exemplification or instantiation. Whereas the latter may be contingent, the former never is.

In criticizing Aristotelians, the Platonist will argue that by failing to draw this distinction, the Aristotelian makes the existence of a universal depend upon the existence of something to exemplify it and thereby turns things upside down. Universals were brought on the scene to explain attribute agreement among particulars, to explain why concrete particulars are the way they are. Universals, then, are supposed to be ontologically prior to the particulars that exemplify them. On the Aristotelian view, however, things turn out just the reverse. The existence of a universal turns out to depend on there being particulars that are this or that sort of things, are characterized in this or that way, or are related to each other in this or that way. Such a view undermines the core insight motivating metaphysical realism.

Finally, although some realists (including, perhaps, Plato himself) are willing to endorse a "two-worlds" ontology, many Platonists will claim that Aristotelians are just wrong to suppose that the metaphysical problems of a "two-worlds" theory have to infect an ontology of unexemplified universals. They will insist that, on their view, the nexus of exemplification serves to tie universals and particulars, and they will claim that although this notion is ontologically basic or primitive, it is a perfectly respectable notion, one that the Aristotelian no less than the Platonist is committed to. And they will argue that the Aristotelian's contention that the Platonist faces insoluble epistemological problems is overblown. They will insist that while some universals have no instances in the spatiotemporal world, many do; and they will claim that our knowledge of exemplified universals can be captured by a thoroughgoing empiricism. As they see it, we come to have cognitive access to these universals simply by experiencing the spatiotemporal particulars that exemplify them; whatever other knowledge we have of universals is grounded in our knowledge of these exemplified universals. Thus, we come to know about some unexemplified universals by extrapolation from our empirically based knowledge of instantiated properties, kinds, and relations. If there are universals that have no identifiable relations to the exemplified universals we meet in our day-to-day commerce with the world, then Platonists will concede that we have no knowledge of such universals; but they will deny that this is surprising. They will claim, rather, that this is just what we would have expected.

## Notes

- 1 An exception, of course, is the conceptual schemer we discussed in the Introduction.
- 2 *Parmenides* 130E–131A in Hamilton and Cairns (1961).
- 3 For twentieth-century expressions of the view we meet in the *Parmenides*, see Russell (1912) (chaps IX and X), Strawson (1959: chaps V and VI), Donagan (1963), Wolterstorff (1973), Loux (1978a), and Armstrong (1989a).
- 4 The terms 'realism' and 'metaphysical realism' are the standard labels for this view; but the terms are also used to refer to a view about the nature of truth, the view that there is a mind-independent world correspondence which renders each of our beliefs determinately true or false. Used in this sense, realism stands opposed to what is called *antirealism*. The conceptual schemers we discussed in the Introduction take an antirealist stance on the nature of truth; whereas the defenders of a traditional conception of metaphysics as the attempt to characterize the general structure of reality are, in this latter sense, realists; but philosophers who are realists about truth can be, and often are, nominalists about attribute agreement. See Chapter Seven, where the contrast between realism and antirealism is explained in depth.
- 5 Other examples of kinds include the various ontological categories; they are simply the highest or most general kinds. Obviously, the philosopher who denies that there are kinds will need to find some metaphysically neutral way of characterizing what he is doing when he does metaphysics or attempts to identify the categories of being.
- 6 For a very clear statement of the view that subject-predicate discourse presupposes the existence of universals, see Donagan (1963: especially pp. 126–33). Where, as here, a paper appears in Loux (1976a), page references are to that volume.
- 7 For a more extensive treatment of correspondence and truth, see Section III of Chapter Four, and Chapter Seven.
- 8 This kind of account is defended by Gustav Bergmann. See, for example, "The Philosophy of Malebranche," in Bergmann (1959: 190–1).
- 9 See, for example, Wolterstorff (1973: 85); chap. V of Strawson (1959); and Loux (1978a: 30–3).
- 10 For an extended treatment of abstract reference and its ontological underpinnings, see chap. IV of Loux (1978a).
- 11 See, for example, Roderick Chisholm, "Properties and states of affairs intentionally considered," in Chisholm (1989: 141–2).
- 12 This is just the property version of what is called Russell's Paradox. In its more familiar class version, the paradox has as its upshot the moral that there is not a class for every membership condition. If there were, then there would be a class whose members are all and only the classes that are



not members of themselves. But if there were such a class, then either it would be a member of itself or it would not be a member of itself. In either case, we would have a contradiction.

- 13 See *Parmenides* 131E–132B in Hamilton and Cairns (1961). For more recent discussions of realism and infinite regresses, see Strawson (1959: chap. V); Donagan (1963: 135–9); Loux (1978a: 22–7); and Armstrong (1989a: 53–7).
- 14 This point is nicely made in Armstrong (1989a: 54–5).
- 15 Bradley (1930: 17–18).
- 16 See Wolterstorff (1973: 102).
- 17 See, for example, Donagan (1963: 138); Strawson, *Individuals* (1959: 169); and Bergmann's "Meaning," in Bergmann (1964: 87–8).
- 18 See, for example, Donagan (1963: 128–9); and Bergmann, "Two types of linguistic philosophy," in Bergmann (1954: 122).
- 19 Wittgenstein (1953: 66).
- 20 See, for example, Loux (1978a: 20–1).
- 21 See, for example, Armstrong (1989a: 87).
- 22 For a helpful discussion of supervenience, see Jaegwon Kim, "Concepts of supervenience," in Kim (1993: 53–78).
- 23 The issues discussed here are typically discussed in the philosophy of mind, where the status of the qualitative features of consciousness present problems for philosophers who endorse a strong version of materialism and hold that what exist are simply the objects postulated by our best physical theories. For a nice discussion of these issues and a statement of the eliminativist strategy, see Paul Churchland (1990: especially chap. II).
- 24 See, for example, Donagan (1963: 131–3) and Loux (1978a: chap. V).
- 25 See *Phaedo* 73A–81A and *Republic* 507B–507C in Hamilton and Cairns (1961).
- 26 See *Categories* 11 (14<sup>a</sup>8–10) in McKeon (1941). A contemporary version of the Aristotelian view is defended in Armstrong (1989a: 75–82).
- 27 Most of the issues central to the dialectic that follows are discussed in Donagan (1963), Armstrong (1989a), Loux (1978a), and Chisholm, "Properties and states of affairs intentionally considered," in Chisholm (1989: 141–2).

### Further reading

For the classical sources of metaphysical realism, the beginning student should read Plato's *Phaedo*, Books V–VII of the *Republic* and the opening sections of the *Parmenides*. Aristotle's discussions of Plato's views make for difficult reading, but the intrepid student is directed to *Metaphysics A.6*, *Metaphysics B*, and *Metaphysics Z.13–16*. Modern defenses of realism are often technical, but the student who reads chapters IX and X of Russell (1912), Donagan (1963), Armstrong (1989a), and Chisholm, "Properties and states of

affairs intentionally considered," in Chisholm (1989) should have a good foundation for reading any of the literature mentioned in the notes. The pieces by Russell and Armstrong can be found in *Metaphysics: Contemporary Readings*.