Getting Realistic about Nominalism

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ABSTRACT

In this paper I examine critically the relationship between the realist and nominalist views of abstract objects. I begin by pointing out some differences between the usage of existential statements in metaphysics and the usage of such statements in disciplines outside of philosophy. Then I propose an account of existence that captures the characteristic intuitions underlying the latter kind of usage. This account implies that abstract object existence claims are not as ontologically extravagant as they seem, and that such claims are immune to certain standard nominalistic criticisms.

I. What Do People Really Mean by "Exist"?

There appears to be a marked difference between the way in which philosophers use the word "exist" and the way in which many other people use that word. This difference often shows itself when beginners in philosophy encounter philosophical positions that deny the existence of seemingly familiar things. Take, for example, nominalism — a view according to which multiply exemplifiable entities, such as properties and relations, really do not exist. (This definition may not do justice to all versions of nominalism, but it is close enough for our present purpose.) A strict nominalist has to deny, for example, that there are such things as colors. He can admit that there are colored objects; he even can admit that we usefully speak as though there were colors. But he must deny that there actually are colors, conceived of as multiply exemplifiable entities.

A newcomer to philosophy might hear about the nominalist view of colors, and say in amazement, "How can anyone claim that there are no such things as colors? Look around the room — there they are!" To lessen this incredulity, a nominalist might explain that he is not denying that we experience a colorful world, or that we can usefully talk as if there are colors. He may claim that he is not really denying the truth of what the beginner is trying to say about the world when the beginner says "Look around the room — there they are!" The nominalist is only denying that there are entities called colors, in addition to the colored objects that we find around us.

A similar incredulity occurs when some philosophers deny that mathematical objects, like numbers, are real. The reaction of a newcomer to philosophy might be "Do you *really* think that there aren't any numbers? Then what do you count with, anyhow?"

In my opinion, these beginners' reactions point up a difference between two slightly different readings of statements asserting existence. To see what this difference is, first take note of the fact that the phrase "there is" and the colloquialism "there is such a thing as" often are used interchangeably in non-philosophical English. The phrase "there is such a thing as" is not always used to assert the existence of an entity — or at least when it is

used, one cannot quite be sure than an entity is being posited. As examples of such usage, consider the following sentences: “There‘s such a thing as meanness in the world.” "There is such a thing as cold." "There is such a thing as hope." For each of these sentences, a speaker who asserts the sentence is asserting a fact about certain phenomena in the world — but it is not clear that the speaker means to postulate entities named "meanness," "cold," or "hope." In view of this, it is interesting that colloquial usage does not draw any distinction, or at least any clear distinction, between the meaning of “there is such a thing as” and the meaning of "there is." This near-equivalence of "there is" and "there is such a thing as" may help us, in a roundabout way, to understand why the beginner in philosophy finds the nominalistic claim "There are no colors" to be amazing. To the beginner, denying the truth of "There is a color" is tantamount to denying an obvious fact about phenomena in the world — namely, the fact that we can find the phenomena of color out there in the world. No color-perceiving lay person, and certainly no color-perceiving artist, would want to do this.

In metaphysics, however, it is standard to use "there is" in a slightly different way — to indicate the existence of an entity, or entities. This is the othe part of the reason why the philosophical beginner finds it so hard to swallow the nominalist’s claim that there are no colors. The nominalist simply does not mean that our world is colorless. He simply means that there are no *entities* which one can call colors, *in addition to* the colored entities in the physical world. Occasionally, philosophers seem to use "there is" in an even more conservative sense, to indicate a kind of existence that is somehow irreducible. (Consider the following sentence, which some philosophers have believed: "Elementary particles really exist; strictly speaking, tables and chairs do not.") But even philosophers who do not go this far tend to use “there is” to indicate the existence of an entity. A nominalist philosopher can plausibly deny that there are colors, because when she says that there are no colors, she doesn't mean that we don't find coloration, or colored things, in the world around us. Instead, she means that there are no real entities called colors that exist in addition to colored objects. Judging by the way that lay people often talk about colors, it is not at all clear that "There are no colors" means exactly the same thing to most

lay people that it means to most philosophers.

If we examine more closely these two usages of "There are colors," we begin to discern more clearly what the lay person and the philosopher may really mean by this sentence. In prephilosophical usage, existence statements like "There are colors" are used to express facts about the real world. Sometimes, these facts seem obviously true. According to common non-philosophical usage, "There are colors" safely can be asserted if one can find color in the world — or, more precisely, if the real world is, at least in part, colored. I think this is the way that most non-philosophers use "There are colors." They are prompted to assert this sentence because they see color, or because they believe that something is colored. They assert "There are colors" without taking any thought upon the problem of whether colors are separate entities, or are in any sense ultimately real. To say that there are no colors, or that colors do not exist, is for most people tantamount to saying that we live in a colorless world. This is why the philosopher's denial of the truth of "There are colors" may meet with the non-philosopher's incredulous response: "You mean there are no such things as colors? But *look* at them!" When the philosopher says that there are no colors, what he means is that there are no entities that can be regarded as colors, above and beyond the concrete physical objects in the world. This is not what most non-philosophers mean by "There are no colors" — at least if we can guess something about what they mean from how they speak.

It appears that existential statements are used a little differently in metaphysical discourse than in ordinary discourse. To improve our understanding of what this difference really is, we will consider nominalism again.

II. When Nominalists Go Bad

Consider the following example.

An artist has a painting hung in a gallery. Some time later, an art critic writes that the colors used in the painting are similar to those used by 19th-century house painters. Then the artist, who also happens to be a nominalist, rebuts this charge as follows: "It is not

true that I used colors of that kind, for *there are no such things as colors*."

Clearly, this rebuttal is silly. It would be silly even if both artist and critic were nominalists — and even if nominalism were in fact true. But are we sure that we understand *why* the rebuttal is silly? It is clear that the critic is trying to say something, and that what the artist is saying in rebuttal does nothing to prove the critic wrong. How can we best understand the fact that the artist's rebuttal misses the point?

The explanation that many nominalists probably would offer runs along these lines: The critic's statement can be true even if there are no such things as colors. What makes the critic's statement true is not a fact about items called "colors," but circumstances of other sorts. The precise nature of these circumstances depends upon which version of nominalism is assumed correct [1]. If Resemblance Nominalism is true, then these circumstances could involve resemblances between the painting and other physical objects. If Predicate Nominalism is true, the circumstances could involve facts about language and linguistic objects. If Class Nominalism is true, then the circumstances could involve facts about what objects belong to which classes. But these circumstances, whatever they are, do not involve multiply exemplifiable entities known as colors, over and above the particular entities (painting, patches of paint, perhaps classes, etc.) involved.

Later I will have more to say about nominalistic explanations. But for now, I just want to use this example to draw attention once again to a fact about philosophical language. When philosophers discuss questions about what really exists, they often use existential statements in a way *markedly different* from the way in which non-philosophers use such statements. An artist or an art critic feels free to assert statements about colors, even if those statements directly entail that colors exist. Philosophers also make such assertions, but for the philosopher, these assertions are much more tentative and problematical. They are assertions that may need to be defended. And some philosophers (at least when they speak in their capacity as philosophers) do not dare to make such statements and mean them.

One can think up many other examples similar to that of our artist. One can imagine a philosophically minded biologist who claims that, contrary to common experience,

composite flowers *do not* exhibit spiral patterns — because patterns are abstract objects, and there are no abstract objects. Or, one can imagine a nominalist lawyer who argues in court that his client had no legal duty to avoid stealing, because a legal duty is an abstract object and there are no abstract objects. Such arguments obviously do not constitute good biology or good law.

Real nominalists are more sensible than the nominalists in the above examples. If real nominalists want to explain the silliness of the preceding biological and legal arguments, they must do so in one of two ways. One way is to offer an account of how statements that seem to be about abstract objects can be true even if, strictly speaking, there are no abstract objects. The other way is to go ahead and deny that statements about spiral patterns or legal duties are literally true — but perhaps to allow that these statements nevertheless are legitimate for use in certain kinds of discourse. I do not intend, quite yet, to accept or reject either of these approaches. I am using the preceding examples from art, biology and law only to point up the important fact that the *use* of existence statements in philosophical discourse tends to be markedly different from the use of such statements in the discourse of other fields. Only an ontologist would ever try to deny that some flowers exhibit spiral patterns. A botanist or a mathematician — the experts most directly concerned with flowers and with spirals — would not.

III. Objects and Situations

The above examples show that existence statements can be used in two different ways. One of these ways corresponds to the way that existence statements actually are used by scientists, mathematicians, lawyers, and others. When existence statements are used in this way, it is appropriate to assert an existence statement when a situation of a specific kind obtains in the world. When speaking in this way, one can assert "There exist colors" if the physical world is in part colored; one can assert "There are numbers" if it is possible to think of numbers and to engage in ordinary numerical reasoning. The other way corresponds to the way in which metaphysicians typically use existence statements. When

one follows this way, it is correct to assert "There exist X's" only if there is an entity which is an X. Those who use existence statements in this second way are forced, in many cases, to regard the first kind of usage as strained, figurative, or otherwise not quite literal.

The relationship between these two ways of speaking is more complex than it might at first seem. It appears that the second way actually is a variant of the first way. According to the second way, "There are X's" can correctly be asserted if a certain *situation* obtains in the world — namely, the situation of the existence of an entity that is an X. Thus, a language user following the second way actually is following a special variant of the first way — a variant in which the only appropriate situation for asserting "There is an X" is the situation of there being an entity that is an X.

A more serious complication arises from a kind of circularity involved in the second way of using existence statements. Suppose that a color nominalist is trying to convince an artist (who, in this new example, is *not* a nominalist) that it is a mistake to claim that there really are colors. The artist, we will suppose, reads "There are colors" in the first way, and therefore implicitly holds "There are colors" to be true if and only if a situation of some particular kind obtains. It does not matter exactly what the artist takes this kind of situation to be; let us simply call situations of the appropriate kind "C-situations." (The situation of there being a yellow patch on a painting is an example of a C-situation.) The nominalist argues that the artist's position is wrong, and that "There are colors" is true if and only if there is a real entity that is a color. This tells us that the nominalist doesn't view C-situations as situations which can ensure that "There is a color" is true. According to the nominalist, the only situations that can do that are situations of the existence of an entity that is a color. Let us call these latter situations "E-situations." According to the nominalist, E-situations do not occur, so it follows that "There is a color" is false, and that there are no colors. However, the artist doesn't see the point of this argument — because the artist believes that it is the C-situations that make "There are colors" true, and therefore make it true that there is a color! In the artist's opinion, it is only the C-situations that count in determining whether there is a color. Hence as long as some C-situation obtains, the nominalist's argument can have no force for the artist.

By accepting that C-situations are what makes “There is a color” true, the artist implicitly accepts that that a C-situation *is* a situation of the existence of a color. On the artist's view of things, the situations in the world which make "There are colors" true are precisely the C-situations. Therefore, on the artist's view of things, the situations which can correctly be described as situations of the existence of a color are, in fact, just the C-situations. The nominalist claims that a situation of the existence of a color, rather than a C-situation, is necessary for “There is a color” to be true. But for the artist, a C-situation *is* a situation of the existence of a color.

The upshot is that the nominalist's argument cannot be convincing for the artist. The nominalist claims that "There are colors" is literally true only if there really are colors — the mere obtaining of a C-situation will not suffice. The artist, on the other hand, thinks that a C-situation *is* a situation of the existence of a color. Thus, the nominalist's argument that only color existence situations will do cannot have any force for the artist.

The real difference between the positions of the artist and the nominalist in this example is a disagreement about what kinds of situations must obtain in order for "There are colors" to be true. The artist thinks it is the C-situations that are required. The nominalist thinks it is another kind of situations, which he might label "situations of real existence of a color." However, the artist *also* holds (implicitly or explicitly) that the C-situations are exactly the situations of real existence of a color. Both the artist and the nominalist hold, at least implicitly, that "There is a color" is true only if there really is a color. (Certainly, when the artist sincerely asserts "There is a color," he means what he says.) The real locus of the disagreement between the artist and the nominalist is the issue of whether C-situations are situations of the existence of a color. The nominalist's claim, that "There are colors" is true only if there are entities that are colors, cannot convince the artist that C-situations are insufficient to ensure that "There are colors" is literally true.

The nominalist might try to convert the artist by an alternate strategy: conceding that "There are colors" is true, but claiming that it is true for reasons other than the real existence of a color. (For example, it could be true because of resemblances among objects, or for some other reason that can be described without mention of colors.) But

this nominalist argument, like the previous one, should have no force for the artist, because the artist believes that a situation which apparently does not involve a color can nevertheless be a situation of the existence of a color. Even if the artist conceded that "There are colors" is true for reasons not apparently involving colors, that would not be enough to convince the artist that there are no colors. At most, the artist might have to concede that the situation of the existence of a color (a C-situation) also can be described as a situation of another kind (say, a situation in which certain resemblances hold among objects). The nominalist might be able to force the artist to admit that there is another way of describing a color-existence situation — a way that does not involve any mention of colors. But the availability of such a description does *not* imply that the supposed color-existence situation really is not a color-existence situation.

The preceding paragraphs may lead us to wonder whether situations involving the existence of a color can be described in ways that do not involve any mention of colors, but that are *equally correct* from an ontological standpoint. The idea that this can be done is not a new idea. H. H. Price ([1969], pp. 30-31) once proposed that a certain kind of realism and a certain kind of nominalism might be merely alternative "terminologies" for "saying the same thing" (p. 30). What I am proposing here is not quite the same as Price's idea; the difference between my position and Price's will become evident later. But Price's suggestion at least implies that one can describe a situation of the existence of a property in other ways not involving properties, without entirely abolishing the ontological import of the description in terms of properties.

Non-philosophical discourse provides examples of situations that can be redescribed in ways that do not mention certain things that are really and genuinely involved in those situations. One such example comes from physics [2]. Consider the situation of the existence of an electric charge inside a closed surface in space. One can describe this situation alternatively as a situation in which a certain quantitative property of the closed surface (known as the “surface integral of the electric field“) is not zero. (The fact that one can do this is a consequence of Gauss's Law of electromagnetism.) This new description does not mention electric charge at all — yet it describes *precisely the same*

physical situation. Analogously, it may be possible to redescribe the situation of the existence of a color in some way that makes no mention of colors. Yet the existence of such a description does not imply that there really are no colors — any more than our ability to describe the presence of electric charge without mentioning electric charge implies that there really is no electric charge anywhere in the universe.

The preceding argument is not a head-on refutation of nominalism. That argument does not rule out the possibility that there are conditions K not explicitly involving colors, such that "There are colors" is true when and only when those conditions K hold. However, the argument does show that even if this is the case, we are not *forced* to accept that colors do *not* exist. Instead, we are free to regard K as the conditions for the real existence of a color. If we wish to regard K in this way, then the nominalistic counterargument, based on the claim that only the real existence of a color can make "There are colors" true, cannot stop us from believing that colors exist whenever the conditions K hold.

These arguments teach us the following very general lesson. Suppose that we regard "There are X's" (where "X's" is a placeholder for "colors," or "numbers," or the like) as being true if and only if some circumstances (call them "X-circumstances") obtain in the world. After doing this, we are free to assert that the X-circumstances are the circumstances under which there exists an X. Once we have made this move, we are immune to any skeptic who tries to persuade us that "There are X's" is false by arguing that only the actual existence of an X, and not mere X-circumstances, can make this sentence true. The skeptic's claim that the circumstance of existence of an X will do, but X-circumstances will not, is a claim that no longer makes sense to us. Also, we are immune to any skeptic who allows that "There are X's" is true while claiming that this statement is true for other reasons besides the existence of an X. This skeptic cannot rule out the possibility that the circumstances which make "There are X's" true are in fact circumstances of existence of an X, described in some way that does not seem to involve an X.

IV. Objects and Situations Again

The above argument shows that certain lines of nominalistic argument, taken by themselves, cannot succeed in refuting the claim that abstract objects exist. Even if it turns out that our reason for regarding "There are colors" as true is a set of circumstances that doesn't involve colors at all, we still can maintain that colors really exist — provided that we identify a color's existence with the set of circumstances that makes "There exist colors" true. In other words, we must regard colors as things which exist if and only if certain circumstances obtain — circumstances which also can be described in a way not involving colors. We must not regard the latter circumstances as merely implying the existence of a color; we must regard them as *being* the existence of a color [3]. The existence of a color is a situation of a particular sort. It is the situation of a color's existing. This situation, we must suppose, *is* the situation which makes "There are colors" true — even if that situation is one that can also be described *without* any reference to colors.

Let me try to make the ideas in the preceding two paragraphs a little clearer. Suppose that a nominalist claims that "There are colors" is true only because resemblances of certain kinds hold among particular physical objects. (Resemblance Nominalism treats color statements in just this way [4].) Suppose, further, that a person named John who thinks colors really exist hears this argument and become convinced of its conclusion. Then John has two choices. He can stop believing that colors exist, on the grounds that "There are colors" is true only because of circumstances that do not involve colors. Or, he might conclude that the circumstances which make "There are colors" true are the very circumstances that *constitute* the existence of colors. If he takes the latter path, then he must accept that the circumstance of some physical objects' resembling each other in a certain way is precisely the circumstance of the real existence of a color. A color, in other words, is an entity that can exist by virtue of the fact that physical objects resemble each other in certain ways. A color is the kind of thing that can exist by virtue of circumstances that can be described without any reference to colors. The existence of a color is, after all,

a state of affairs; that state of affairs is identical to the state of affairs of physical objects' resembling each other in certain specified ways. This position of John's amounts to the following: If one wants to describe the state of affairs of the existence of colors, one doesn't have to describe it as "the existence of entities which are colors," or something like that. One also can describe it as "the resembling of physical objects by one another in such-and-such ways" (where "such-and-such ways" should be replaced by an appropriate listing of the required resemblances). Both of these descriptions point to the same state(s) of affairs.

This position that John must take is not as strange as it seems. Abstract items like colors are not the only items whose existence is equivalent to states of affairs that seemingly do not involve them. Consider our earlier example about electric charges [2]. According to Gauss's Law of electromagnetism, there is a net electric charge inside a closed surface in space if and only if the electric field on that surface meets a certain condition — namely, the surface integral Φ of the electric field over that surface must be nonzero. If Gauss's Law is true, then it is a physically necessary truth that there is a net electric charge inside a surface if and only if Φ is nonzero for that surface. If Gauss's Law is taken as a definition of electric charge (physicists sometimes speak as if it were [5]), then this truth is even logically or conceptually necessary. By saying "The electric field on some surface has a nonzero surface integral," we are specifying exactly the same state of affairs that we would specify by saying "There exist electric charges." Thus, we can describe the state of affairs of the existence of electric charges without even mentioning entities or things called electric charges. Yet the state of affairs that we describe in this way *is* just the state of affairs of existence of an electric charge.

No physicist should argue that electric charges are utterly unreal just because we can specify the state of affairs of the existence of electric charges by talking about electric fields instead of about electric charges. Similarly, no philosopher should argue that colors are unreal just because we can specify the state of affairs of the existence of colors by talking about resemblances instead of about colors. For colors as for electric charge, the existence of the thing in question is a state of affairs that can also be described without

reference to the thing itself.

One can think of less technical examples in which the existence of something is a state of affairs which also can be described without reference to that thing. This often happens in cases involving wholes and parts. For example, the state of affairs of the existence of a book can also be described as the state of affairs in which pages meeting certain criteria are united in a certain way. But this fact does not force us to deny that books exist, or to claim that books are somehow less real than pages. Some philosophers may want to make such claims, but these claims are not forced upon us by the identities that hold between the relevant states of affairs.

Aside from these particular examples, one might even argue that the existence of any material object is redescribable in this way. It sometimes is the case that there exists a material object occupying a spatial region R. We assert that this is the case only when observations of the region R reveal results of certain kinds. Thus we should be able, in principle, to state conditions which are necessary and sufficient for the existence of a material object occupying R, such that these conditions do not mention material objects occupying R. If there are such conditions, then the existence of a material object occupying R is a state of affairs which has an alternative description making no mention of material objects that occupy R. But even if we knew of such conditions, this would not be good reason to deny the reality of material objects occupying R — especially if we feel sure of the existence of material objects in other places. (Some idealists might want to make this denial, but the mere existence of the conditions just described does not force us into idealism.)

The existence of an object is a situation — or, if one prefers, a state of affairs or a set of circumstances. In many cases, one can think of the existence of an object as a situation describable in terms that have nothing to do with the object in question. But this fact does not imply that the object is unreal.

The arguments in this section show that most nominalistic critiques of the reality of abstract objects are doomed to be ineffectual. It is impossible to show that abstract objects of a certain kind do not exist, either by claiming that there are abstract-object-free

truth conditions for abstract object statements, or by arguing that abstract object statements are not literally true because the situations prompting their assertion can be described without abstract objects. Both of these principal lines of nominalistic critique fail, because both of them tacitly depend upon the same erroneous assumption: that a situation described without recourse to objects of a certain kind cannot also be a situation of the existence of an object of that kind. If one denies this assumption, then one can get around the nominalistic critique. We have seen that this assumption fails in a number of interesting cases.

By now it should be a bit clearer how my position differs from Price's suggestion which I mentioned earlier. Price suggested that a nominalistic and a realistic description of the same facts may be merely descriptions in alternative languages, with no final fact of the matter about which description is correct ([Price 1969], pp. 30-32). Like Price, I am proposing that certain situations can correctly be described either in a way involving abstract objects or in a way not involving them. However, unlike Price, I am arguing that the two descriptions are fully compatible with one another, and can be true simultaneously. There is no question of either description being true merely in one language or from one standpoint. Both descriptions simply are right, and can be stated in the same natural or formalized language, where one cannot derive a contradiction from them.

It is worth noting that our new view of the existence of abstract objects leaves open the question of whether properties and relations can exist uninstantiated. For all we know, some abstract objects may exist thanks to situations that do not require the existence of physical objects. Some philosophers have held that a property or relation exists if its exemplification is possible (see for example [Armstrong 1989], pp. 80-81, where Armstrong takes the opposing view). One can ask whether the situation of the existence of some abstract object might be a situation of the mere *possibility* of certain physical circumstances. The fact that these circumstances are possible might remain the case even if there are no physical objects, thus ensuring the existence of the abstract object. I will not pursue this idea further here. I mention it only to show that our view of abstract

objects does not automatically rule out uninstantiated properties and relations.

V. Some Remaining Qualms

Even after reading the above arguments, one may feel some intuitive qualms about the claim that a situation of the existence of an object may also be a situation of a seemingly different kind. There seems to be a palpable difference between (say) the situation of the existence of a stone, and the situation of the existence of a color. It seems as though the situation of existence of a stone obtains because the stone is just *there* — present in the world — while the situation of the existence of a color obtains for a subtler reason: because some physical objects are colored. The existence of a stone seems to be a situation centered on a *thing*. The existence of a color seems different; it seems to be more diffuse, based on a variety of scattered facts (that particular physical objects resemble each other, say), and not centered on one particular item like a stone. Could it be that the first of these situations (with the stone) is a situation of existence of an object, and the second situation (with the color) is not?

My answer to this line of criticism is simple: If one is asking the question, then one has not taken the argument of the previous section seriously. It is incorrect to say that the existence of a stone cannot be described as a diffuse, "non-centered" situation incorporating a variety of facts that are not about stones. One can regard the existence of a stone as a complex situation based on facts about what goes on within and outside of a certain region of space. Also, it is circular to argue that situations of color existence are not really situations of object existence on the grounds that situations of color existence do not center on one object. To deny that a situation of color existence centers on one object is to deny that colors are entities — which is to assume what this line of criticism would claim to prove.

Another qualm about my argument arises from Occam's Razor. Many people would prefer not to believe in abstract objects because such objects are supposed not to be necessary for our understanding of the world. Abstract objects are thought of as excess

metaphysical baggage. But we already have the reply to this argument. Take colors as an example again. If we suppose that colors are not necessary to explain the facts about the world, then we are tacitly assuming that the fact of the existence of colors is not among the facts about the world. However, if the situation of existence of a color can be redescribed in terms not involving colors but involving physical objects, then the fact that there is a color is a fact of the physical world. We cannot escape from this fact by refusing to postulate further objects. Whenever we postulate colored objects, we let colors in through the back door. To kick them out again would require a denial of the real physical situations that constitute the existence of colors.

VI. Why Nominalism Seems So Plausible

Despite its ability to dodge Occam's Razor, the thesis I have presented in this paper may still seem intuitively implausible to some. The reasons why it seems implausible may shed light on the reasons why some people want so badly to deny the existence of abstract objects.

One intuitive feeling that can impede our understanding of abstract objects is what might be called the "physiomorphic illusion." This is the deep-seated feeling that if something exists, then it must exist in much the same way that a concrete physical object exists. We tend to picture abstract objects (if we picture them at all) as extra items sitting there in the ontology of the world, alongside or above the physical objects, acting as *additional* building blocks from which the world is constructed. If we try to draw a diagram of our ontology with pencil and paper, the abstract objects typically come out as additional dots, somewhere near the dots representing concrete physical objects. We do not normally think of an abstract object as an entity whose existence is *not* just a matter of adding one more item to the universe of physical objects.

Various philosophers already have warned us of the danger of this illusion. Price ([1969], p. 31) wrote that realist language "may mislead us into supposing that 'there are' characteristics in the sense in which 'there are' dogs, or planets." Russell ([1976], pp. 98-

100) once acknowledged that abstract and concrete objects exist in fundamentally different ways. (In that same passage, Russell even declined to apply the word "exist" to universals, preferring a different terminology instead (p. 100).) But despite these warnings, the physiomorphic illusion persists. When we try to think about abstract objects, we typically end up thinking of them as additional items added to an otherwise concrete world.

This intuitive illusion appears to have afflicted friends and foes of abstract objects alike throughout the history of metaphysics. For example, some philosophers tend to think that if we allow abstract objects into our picture of the world, then we are allowing *extra things* into our picture — and nowadays that is supposed to be a naughty thing to do. Allowing abstract objects into our world picture is anathematized in much the same way that admitting gremlins would be anathematized. Some other philosophers, who believe in abstract objects, tend to picture those objects as items which must be postulated separately from the concrete objects in the world. By relying on this picture, these philosophers open themselves up to attacks from the gremlin-phobes. All these troubles would be alleviated if people would realize that abstract objects are not simply "extra things" that inhabit the world alongside the physical objects that science recognizes. Abstract objects exist *in a different way* from physical objects. We encounter abstract objects as the forms, patterns, qualities and relationships in the concrete world — not as extra things or extra pieces of stuff. We claim that we know that abstract objects are not concrete objects — yet we stubbornly persist in envisioning them as being so much like concrete physical objects that postulating them would be tantamount to adding additional bits of stuff to the world that we already know.

Philosophers who admit the existence of a physical world exhibiting forms, patterns and relationships, but who still look askance at abstract objects, may in some cases be in the grip of the physiomorphic illusion that anything that exists must exist *like a thing* — in much the same way that things exist. According to the view of abstract objects that I am defending here, this illusion is indeed only an illusion.

VII. Possible and Fictional Objects

If abstract objects exist, then there are multiple kinds of existence in the world. Concrete, actual physical objects exist in one particular way — a way that presumably involves (among other things) persistence through time and interaction with other physical objects. Properties and relations exist in a different way; central to their existence is the fact that they exist if and only if certain situations obtain, or could obtain, in the world of concrete entities.

There may be still other kinds of existence corresponding to other kinds of entities in which metaphysicians traditionally have been interested. Such entities include (among others) possibilia and fictional characters. Consider Sherlock Holmes, who sometimes comes up in philosophical discussions of fictional characters. Does Sherlock Holmes exist? If you mean Sherlock Holmes the actual man, then no. If you mean Sherlock Holmes the fictional character, then to deny his existence is to deny the blatant fact that there is a Holmes character in several novels. Perhaps we can extend the ideas in this paper to fictional characters as well as abstract objects, and then claim that the situation of the existence of a fictional character is a situation that can be redescribed in terms of facts about *stories*.

A similar suggestion can be made with respect to possibilia, such as possible worlds. Intuitively, a possible world of a given kind exists if and only if our world could have been a certain given way. Thus, the situation of the existence of a possible world might be taken to be the situation (perhaps only possible) of the world's being a certain way. To make this idea more rigorous, one might claim that the situation of the existence of a possible world is the situation of its being possible that all the propositions in a certain class are true. This class would then be the class of propositions that are true in that possible world. (Not every class of propositions could determine a possible world in this way.) If the conditions for existence of a possible world are like this, then different kinds of possible worlds (logically possible, physically possible, etc.) might have different kinds of existence situations. For example, the situation of the existence of a logically possible

world might be the situation of its being logically possible that all the propositions in a certain class are true. I am not claiming that this is the correct or the best account of the existence situations of possible worlds. I mention this account only to suggest that the existence of possible worlds might, in principle, be understood along the lines that I have laid out in this paper.

VIII. Concluding Remarks

In this paper, I have tried to call into question some familiar ideas about the relationship between nominalism and realism. While attempting this, I arrived at a new view of abstract objects. This view is more liberal than nominalism but is more conservative than some forms of realism. In a sense, this view is a hybrid of realism and nominalism. According to this new view, we are safe in assuming that abstract objects exist even if the nominalists' reductions of abstract object statements are correct. However, when we assert the existence of abstract objects, we are not asserting as much as we might think. This is the case because the existence of abstract objects is intertwined in a certain way with situations in the world of concrete entities. Abstract objects, conceived in this way, do not threaten the scientific outlook; Occam's Razor cannot succeed in cutting them off. Abstract and concrete objects exist in strikingly different ways, but both occupy important places in the totality that we call the world.

Notes

[1] See [Armstrong 1989] for an introduction to various versions of nominalism. I am following Armstrong's nomenclature for these versions.

[2] This physics example was inspired by, and is based on information from, remarks in [Misner *et al.* 1973], pp. 367-368.

[3] Note that we do not have to suppose that this situation *is* the color — only that the situation is a *situation of the existence* of a color. Armstrong ([1989], p. 95) has suggested that a "thick particular" actually is a state of affairs. In view of this, one might be tempted to make a similar claim with regard to properties, and say that a property is a situation of a particular kind. I will remain neutral regarding this further claim; the argument of this paper does not depend upon this claim, but appears to be compatible with it. My argument also does not commit us to the view that a particular of any sort is a state of affairs or a situation.

[4] See [Armstrong 1989], chapter 3, for details.

[5] Some remarks on p. 368 of [Misner *et al.* 1973] almost, but do not quite, amount to such a definition.

General note: In writing this paper I have presupposed some general background information about realism, nominalism, and the problem of universals. Readers unfamiliar with these topics might consult introductory works on the problem of universals, such as [Armstrong 1989], or works on general metaphysics.

References

Armstrong, D.M. 1989. *Universals: An Opinionated Introduction.* Boulder, CO: Westview Press.

Misner, C.W., Thorne, K.S., and Wheeler, J.A. 1973. *Gravitation.* San Francisco: W.H. Freeman and Co.

Price, H.H., 1969. *Thinking and Experience.* (2nd ed.) London: Hutchinson & Co.

Russell, B. 1976. *The Problems of Philosophy.* (Reprint ed.) London, Oxford, N.Y.: Oxford Univ. Press.