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A critical exposition of D. M. Armstrong's theory of universals

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A CRITICAL EXPOSITION OF D.M. ARMSTRONG'S THEORY OF UNIVERSALS

by

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

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ABSTRACT

A CRITICAL EXPOSITION OF D.M. ARMSTRONG'S

THEORY OF UNIVERSALS

by Leslie M. Marenchin

As the title indicates, this thesis is a critical exposition of Armstrong's theory of universals. But at a deeper level it is also an argument against one of the main tenets of traditional realism since Plato: the claim that the nature of physical properties, and objects in general, are ontologically independent of any mind or belief system. Armstrong's attempt to argue for a non-relational immanent realism epitomizes this claim.

Armstrong's main argument for his position is an indirect one. He argues for the untenability of all theories opposing his and then attempts to show how his theory does not suffer from the same problems. Against theories opposing his (all forms of nominalism and transcendent Platonic realism) he puts forth four arguments: 1) the relation-regress, 2) the object regress, 3) the thought experiment, and 4) causality. These are all various attempts to show that nothing external to an object is relevant to the nature of the object.

Against 1) and 2) I argue that the regresses are not infinite and that even if they were they would not be vicious. Concerning 3) and 4) I argue that Armstrong sets up a straw man and that therefore these two arguments are just
irrelevant to his general claim. The conclusion then is that he has not given us any reason not to believe that there is no mind-dependent element in ontology.

The site having thus been cleared, I then give positive reasons for believing that there are mind-dependent components in ontology. These reasons come mainly in the form of examples for which Armstrong's theory cannot account. My primary examples are artifacts. There seems to be a certain mind-dependent element in the nature of artifacts even though they are external to us. My argument then basically is a challenge to Armstrong's theory and to any realistic theory that holds the claim in the first paragraph above: give an account of artifacts without invoking mind-dependent elements. My claim is that these elements are universals, so they are abstract and multiply exemplifiable, but they depend upon us and they are neither immutable nor external.
I dedicate this thesis to my family, 
but most especially to my mother.

"And often I have wondered
How the years and I survived.
I had a mother who sang to me
An honest lullaby."
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Even though the author of a dissertation is ultimately solely responsible for its contents, the writing of a dissertation is really a collaborative effort. So many comments, criticisms, and suggestions are offered by so many people, that it becomes difficult to know for certain when to attribute what to whom. Nevertheless I would like to recognize the following special group of people.

Ezra Pound once defined poetry as "gist and pith," and anyone who knows Richard Grandy knows also that Pound was presenting a wonderfully apt characterization of Dick. Many times his comments bordered on the laconic. And during some of our conversations I felt as if we both had been transported back to ancient Sparta. But like good poetry, not a word was wasted. His pithy comments and questions went directly to the heart of the matter. Also I think his influence on me philosophically is evident throughout the dissertation: many of the ideas put forth here are developments of ideas that really are his. Finally, I would like to thank him for his sensitivity to the problems I encountered, other than philosophical, in the last few months of the writing of this thesis.

Next, I would like to thank Baruch Brody and Harold Rorschach. Although I did not work as closely with Baruch as I did with Dick, he helped me to get clear on the basic issues and pointed me in the right direction. And Professor
Rorschach made sure my statements were compatible with physical theory.

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Truly great philosophy is, of course, timeless. I wrote this thesis from 1981 to 1987.
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NOTES
INTRODUCTION

We live in what has been called the age of uncertainty. For various reasons our grasp of reality is generally regarded as less secure than for those of previous centuries. Philosophy, unfortunately, has not escaped this insecurity. In fact, analytic philosophy in this century might best be seen as a response to our insecurities about language and the beliefs it expresses. One way to understand the problem is to think of it in terms of a slightly fanciful psychological metaphor. What most analytic philosophers have shared (except those tending towards pragmatism) is the fear of semantic alienation. That is, they fear, when we say things about the world, when we make claims about the way the world is, that we may be suffering from a delusion. They fear that our words and their meanings might have no real connection with reality, and that the tie between our words and the world is phantasmagorical. If this fear were realized we would be semantic neurotics: out of touch with reality, with no real knowledge, and motivated by irrational beliefs. In order to secure themselves from this fearful situation most analytic philosophers have undergone what might be called "referential-therapy". Referential and meaning analysis is the therapy used in hopes to guarantee that semantic alienation is not reality. By analysing the notions of meaning and reference philosophers have given accounts that attempt
to guarantee that our linguistic representations reflect or match up with the world.

This kind of worry about a supposed form of alienation is not new. Descartes had analogous problems with the skeptics. He wanted to find a link between our mental representations and the world that would insure our experiences were not merely dreams created by an evil demon. This same desire can also be found in contemporary analytic philosophy, except in a linguistic guise. Whereas Descartes suggested that clear and distinct ideas were our privileged access to the world, many analytic philosophers have tried to find privileged elements of discourse. Russell's proper names, Carnap's protocol sentences, Strawson's ordinary language, and numerous other examples are all attempts that testify to the believed therapeutic value of "referential therapy". And all of them are "Cartesian" searches to alleviate the fear of our supposed semantic alienation.

But semantics is separated into two fundamentally distinct provinces: the theory of meaning and the theory of reference. Many philosophers have thought that the best therapy is to appeal to the connotation or intension of the subjects and predicates in sentences when trying to alleviate this fear of semantic alienation. David Armstrong, however, disagrees with this diagnosis. Inspired by what are believed to be advances in recent philosophy of language, usually referred to as the causal theory of reference, Armstrong, (along with others such as Kripke,
Donnellan, and Field) by arguing that the theory of meaning should be separated from ontology, tries to institute a whole new type of therapy: primal dubbing therapy. For Armstrong et al., analysis of connotations or intensions offers us no hope as therapy. But going back to nature, so to speak, does. The link between our words and the world, according to Armstrong et al., is a natural causal one, completely divorced from notions like connotation or intension. These philosophers take their motivation from Russell in that they want to maintain the notion of a proper or genuine name (so in that sense it is still an attempt to arrive at a privileged element of discourse), but they think he went wrong in thinking that reference is established by something in the speaker's mind. Once the object has been baptized, the proper name or predicate is simply a tool that accomplishes reference, and the definition of the object is irrelevant.

Armstrong's work, however, is not primarily a work in the theory of reference or philosophy of language, it is a work in ontology. But it is connected to reference, for one of his main theses is that:

There must be an explanation why the predicate is applicable to an indefinite class of particulars which played no part in our learning the meaning of the word "red". Furthermore, this explanation must
in the end appeal to the properties (or relations) of these particulars.¹

His main work, however, is to attempt a theory of universals that is compatible with the new causal theory of reference. His attempt constitutes a resurgence of a kind of "Aristotelian" realism in that properties are "powers" that are somehow "in" particulars.

There are two severe problems this theory must face. The first is to give a plausible and coherent account of what the reference of a predicate is. The second is finding a clear criterion that will tell us, in all cases, which predicates refer to properties and which do not.

Armstrong's unique contribution lies in the attempt to solve these problems. About the first problem he says that the world consists of nothing but particulars having properties and relations. He believes there are universals, and that no universal is found except as a property of some particular. What all objects of a certain type have in common is a physical shared nature that is found by science, not meanings. About the second problem he offers a necessary condition for the existence of any object: causal efficacy in the natural realm. Abstract entities, for instance, do not exist because they all lack causal power: they cannot act in the natural realm. He then argues that there is no good reason to postulate the existence of anything that has no effect upon the spatio-temporal realm.
And, as Armstrong says:

by accepting this a posteriori Realism, the theory of universals, arguably the central problem in ontology, can be placed on a secure and more intelligible foundation than anything previously available. In particular, such a doctrine makes possible the reconciliation of an empiricist epistemology, which I wish to retain, with ontological realism about universals.2

*Universals and Scientific Realism* is a comprehensive, scrupulously detailed and peculiar argument for immanent realism. It is important to understand Armstrong's theory because his is the first comprehensive attempt to extend the causal theory of reference to the classical problems of universals, causation, and laws of nature. His criterion of causal efficacy also has consequences for the theory of explanation. Understanding Armstrong's theory will help us to evaluate whether or not the causal theorist's attempt to purify Russell's semantics by eschewing intension is justifiable. And if we know this we will be able to see the real value of his proposed new therapy, and we will be able to tell whether his method can guarantee that semantic alienation is not reality.
CHAPTER ONE:

TAKING THE COMMONPLACE SERIOUSLY

I. Taking the Commonplace Seriously

There is a certain phenomenon of our experience that is so commonplace and so pervasive, that the need for an explanation of it usually goes by unnoticed. The phenomenon has to do with the everyday particular objects of our experience: for example, trees, people, and cars. And it has to do with the apparent properties and relations of and between these everyday particulars: cars are made of metal, people can get in them and park them under green trees. David Armstrong characterizes this phenomenon as follows:

There is one sense in which everybody agrees that particulars have properties and stand in relations to other particulars. The piece of paper before me is a particular. It is white, so it has a property. It rests upon a table, so it is related to another particular . . . We start with a basic agreement, then: that in some minimal or pre-analytic sense there are things having certain properties and standing in certain relations.¹

But if one examines this phenomenon more deeply the commonplace is transformed into the complex and puzzling.
... as Plato was the first to point out, this situation is a profoundly puzzling one, at least for philosophers. The same property can belong to different things. The same relation can relate to different things. Apparently, there can be something identical in things which are not identical. Things are one at the same time as they are many. How is this possible?²

The problem then, is how to give an account of this puzzling phenomenon. How can we give an account of, or explain, how it is possible for various diverse particulars to seem to agree in attribute? To raise this question is to raise the age-old problem of universals, and traditionally there have been two major solutions to this problem: realism and nominalism. There have been various versions of these two theories but the simplest and best way to distinguish the two is to think of them in the following way: everyone admits that different particular objects in the same category seem to share something. They seem to have something in common. But do they really? Realists answer "yes" to this question, nominalists answer "no". Realists hold that what seems to be true about diverse particulars in the same category really is true. That is, there really is something that two objects can share. There really is something that is capable of multiple exemplification; a universal. A universal is the thing that binds together those
items of which a term is true. Nominalists hold that what seems to be true about diverse particulars in the same category is merely that: only appearance. There is no one thing that two objects can share, there is nothing capable of multiple exemplification. There really is no agreement in attribute, there only appears to be. So, for realists what appears to be true really is true, and for nominalists what appears to be true is merely just that, appearance.

What is the motivation for these two views? One motivation is that in the everyday commerce of our lives we emphasize the particular and the concrete. We regard ourselves as particular and concrete. I am a single entity that can only be at one place at one time and I am also a physical entity. This emphasis goes along with a certain tough-mindedness and scientific bent found in Western thought and is a strong motivation for nominalism. But there also can be found in this prejudice for the physical side of our everyday lives a certain interest in general properties. For it does matter to us whether certain objects may have the property of edibility, for instance. If one is willing to countenance these more general or universal entities then there seems to be an emphasis on abstract thought. So the different accounts of attribute agreement, nominalism and realism, no matter how elaborate they may be, "involve initially generalizations of what are really merely emphases--the emphasis on the concrete and particular in or-
ordinary physical life and the emphasis on the capacity for abstraction that exists in thought.\footnote{3}

Let's look a bit more at the theories and see how these emphases are reflected in them. There is usually said to be, in addition to the two theories already mentioned, a third, called conceptualism. Realists assert that there are entities of a general kind that exist independently of us and our ways of thinking and speaking about the world. Conceptualists point to our ability to subsume things under concepts, those concepts performing a classificatory function, thereby placing the generality in our minds. Nominalists say something similar about words which are supposed to be particular in their nature but general in their representation.

Taken singly it seems that what each theory asserts is correct, and the controversy comes in when one begins to consider what each of the theories denies.\footnote{4} For it seems there must be something true about the world, and about our words, and about our minds, if we are to give a complete account of attribute agreement. For, denying that there has to be anything about the world suggests a relativism which would conflict with claims to objectivity. And to deny that words have anything to do with attribute agreement is to leave as a mystery how thoughts are to be communicated. And finally to deny that our minds have anything to do with the solution to the problem leaves as a mystery how we can be aware of general features to begin with, and leaves out the
fact that those general features which are discriminable
depends upon features of human beings and their minds.

Consider extreme versions of each theory and one can
see even more clearly that it is what they deny that makes
them controversial and not what they assert. An extreme
version of any of these theories maintains that an account
of attribute agreement lies solely in the feature it is con-
cerned with. Extreme realism accounts for the phenomenon by
positing the existence of objective universals of which we
are somehow directly aware. But this view leaves us with
the infamous problems with Plato's Theory of the Forms,
i.e., what is the relation between these universals and the
things that are instances of them? Extreme nominalism
claims that the only things that are general are words. But
this leaves us with at least four problems: first, "it
would appear miraculous that different persons agreed in
their independent application of a general term G if these
objects had nothing in common. Second, being called "G" is
not sufficient for being a G because we can misapply ascrip-
tions. Third, to say that words are particular in their
nature but general in their representation is all very well
but we need some explanation of how that is possible. And
finally, the words themselves recur, i.e., are types and
therefore they also need to be given an account of. These
same problems would plague conceptualism.

It is my contention that three quite distinct kinds of
concerns have separately motivated the three traditional ac-
counts of the phenomenon of attribute agreement: 1) the concern for objectivity, 2) the concern that the features of human beings and their minds limit what is discernible, and 3) the concern for the possibility of communication. It will be my general thesis that all accounts of attribute agreement serves one of these masters at the expense of the others. Since I believe further that all these concerns must be met by any adequate account, I find myself dissatisfied with any of the traditional rival theories that emphasizes any one of these concerns over the others. Therefore, I would like to argue for a synthetic position that has within it components of each of the rival theories. At first blush this task might seem obviously impossible, for after all, in an important way, what the realist says the nominalist denies. But it will be shown that a complete account of the phenomenon of attribute agreement must take into consideration something form each of the three major concerns mentioned above. One can find within the philosophical tradition many metaphysical theories that actually do have emphasized within them, to a greater or lesser degree, all three of the concerns mentioned above. But because of the recent trend in analytic metaphysics to return to realism it is important again to realize that certain non-realistic components must be accepted, especially in the solution to such a central and important problem of metaphysics.
A slightly different and interesting way of throwing some light upon the various solutions of the problem of attribute agreement is to look at them in terms of the broadest and most general parameters that any purported solution would have to take into consideration. Obviously any solution must deal with the question of whether or not universals exist or whether or not only particulars exist. It also seems that any solution would have to say something about the world and how it would have to be if there were universals or if there were only particulars, i.e., if there are properties, where and what are they? Any solution must also say something about our minds. i.e., if there is a general aspect to reality, what is the relationship of our minds to it, and if there is not, then how do general concepts arise?

Any solution to the problem of attribute agreement must take into consideration the following three (at least) factors: a) multiple exemplifiability, b) mind dependence, and c) inherence. Let's examine each of these factors separately.

II. Multiple Exemplifiability

The main point of this factor can be put into the form of a question: do multiply-exemplifiable entities, universals, exist, or not? Or, are there general entities that have the capability of being found in more than one
place at one time? The nominalist's fundamental contention concerning this question can be characterized as follows:

N: All things are particular.

That is, nominalism in general denies the existence of any entity that can be multiply instantiated. Only particulars exist and each particular can be found in only one place at one time. Other presentations of this problem introduce an added complexity at this point. It is possible to make a further distinction between nominalism and extreme nominalism. Nominalism may be viewed as the position which holds that attribute agreement is grounded in the relation of similarity or resemblance of attributes. For nominalists, according to this view, two particulars of the same category never literally have the same property, but the property of one resembles exactly the property of the other. So nominalism in this sense is not denying the existence of properties per se, it merely holds that each is particular. Extreme nominalism, on the other hand, can be viewed as the position which denies the existence of properties or attributes altogether. Attribute agreement presupposes the existence of no entities over and above those that are correctly said to agree. What extreme nominalism is saying is that particular objects agree in attribute simply because of what they are, and not because they exhibit entities of one sort or another.
So, according to this further distinction, ontologically speaking, nominalism holds that properties do exist and that they are particular, and extreme nominalism holds that properties do not exist and that all that exists are particular objects. At this point, should another category, EN (extreme nominalism), be introduced that would take into account this further distinction? This question can be answered in the negative. It is not necessary to introduce a new category because the characterization N, as it is written, is more general and subsumes under it this further distinction. In both nominalism and extreme nominalism, as presented above, what is important is the idea that all things are particular. It is true that nominalism has a bigger ontology than extreme nominalism in that nominalism postulates the existence of attributes in addition to particulars. But both of these positions can be seen as merely subcategories of the position N. They both can be seen as merely slightly different contentions both opposed to Realism. Nominalism says that everything is particular including properties. Extreme nominalism also says everything is particular, except there are no properties. In both cases, however, everything is still just a particular. Therefore N is a sufficient characterization for our purposes.

Realism, although it is an alternative contention, is not the mirror-image of nominalism (N). The realist need not deny that there are particulars. He need only show that
there is at least one universal. Therein lies the characterization of realism.

R: Universals exist.

That is, there are multiply exemplifiable entities. There are general entities that are capable of being shared among spatially and numerically diverse particulars.

Notice that from these sparse fundamental contentions not much else seems to be implied. That is, nothing is implied about where universals exist, if they do. Nothing is implied about generality only being nominal (or conceptual). All that N says is that everything is particular. All R says is that there genuinely is something identical in things which are not identical. And that is all.

III. Mind Dependence

The main point of this component can also be put into a question. Do the particular objects of our world fall into categories of our creation, or is it merely that we recognize that there are various kinds of objects in the world? Are categories mind dependent or not? At least two answers to this question may be proposed.

MD: The structure of the world in mentally determined and conventionally imposed.

and,
~MD: The structure of the world is independent of any mind or belief system.

According to MD there are certain sets of objects people find it convenient to put into one category because of their interests and beliefs (and because of the structure of their perceptual apparatus). And according to ~MD human beings perceive there are various kinds of objects in the world so the objects are categorized naturally. For both MD and ~MD "There is an isomorphism between thought and kinds of objects in the world, but they disagree about whether this is because thought mirrors the structure of the world or because thought imposes structure on the world." 7

It might be suggested at this point that, perhaps, the mutual exhaustiveness of MD and ~MD is unfortunate because it leaves no room for any position which denies such an isomorphism. That is, it is possible for there to be a position which claims that not only does thought not mirror the structure of the world, and, not only does thought not impose some structure on the world, but that there may be no isomorphism between thought and the world at all. It certainly is logically possible for there to be a position like this, but it is difficult to see why a theory such as this would be interesting to humans. If there really were no relationship at all between the things we think and the structure of the world, if there were neither mirroring nor imposing, then what importance could it have for us at all?
If it were somehow known that the things we think and say and do were completely divorced from the structure of the world, then what difference could there be for us? So perhaps the mutual exhaustiveness of MD and ~MD is not so unfortunate.

Another point that should be brought up is the vagueness of MD and ~MD. They need further qualification because they fail to take into account the distinction between an individual mind and what is socially conventional. That is, there seems to be two possibilities: 1) A person holding MD might be claiming that each individual mind determines the structure of the world and according to his own conventions creates categories for particulars to fit into. Or he might be claiming 2) that the structure of the world is determined by society and categories are made according to social conventions.

So, something needs to be added to MD. This further distinction can be incorporated in the following way.

$\text{MD}_I$: The structure of the world is mentally determined by each individual mind and imposed by individual conventions.

and,

$\text{MD}_S$: The structure of the world is mentally determined by society and imposed by social conventions.
~MD would simply remain the negation of both of these positions:

~MD: The structure of the world is independent of any mind or belief system ("any" meaning neither individual nor social).

Notice that these contentions say nothing about whether universals exist or not. One says the structure of the world is somehow dependent upon each of our minds, the other claims social dependence, and the final denies both. Whether there are universals or not is a separate issue.

The final component that will be mentioned is:

IV. Inherence

As with the others, let's start off with a question. So as not to beg the question; by the word "property" here I do not mean universal. What is meant, for example, is merely some specific color some object exhibits. Is the possession by a particular object of its properties dependent upon something external to the object or are properties somehow "in" the particulars that exemplify them? A preliminary characterization of some possible answers are:

I: An object has a property in virtue of something inherent in it.

and,
E: An object has a property in virtue of its relation to something external to it.

Before going further a possible objection must be fore-stalled. One might argue that this distinction is very similar to the one that came before it. For, one might argue, if the categories an object is put into depend for their (the category's) existence on some mind or belief system, either individual or social, then an object is what it is in virtue of something external to it. Thereby making this further distinction between I and E unnecessary.

These two distinctions (MD/~MD and I/E) do seem to be similar, but in fact they are distinct. For none of the components is neither necessary nor sufficient for any of the others. Take the following example: an object may have its properties in virtue of something external to it without having to accept mind dependence. Particular objects might have their properties in virtue of their relationship to the Plato's Forms, for instance. Also, one might accept mind dependence while still maintaining that the properties an object has are inherent in it. Just because we put objects into categories of our construction does not mean there is nothing in the object for us to appeal to when we are categorizing. Therefore, this new distinction of I and E is different from the previous distinction (MD and ~MD) and deserves separate attention.
Let us examine these positions more, for they both need qualification. When the word "relation" appears in statement E it does not refer to relational properties such as being to the left of. If relational properties were the subject of E then of course any object would have them in virtue of the objects relation to something external. E is concerned with non-relational properties, the properties an object would have even if there were no other objects in the world. A desk, for instance, is made of a certain substance, say, wood. The property of being made of wood is non-relational. Plato's theory of Forms is a perfect example to illustrate the kind of relational property E is concerned with. For Plato, the Forms exist in a realm beyond space and time. But the particular objects in the spatio-temporal world are what they are in virtue of their participation in the Forms. It is in this sense that Plato would hold E but not I.

Also in statement E the word "external" is ambiguous. There seems to be at least six possible interpretations: as was already mentioned, Plato's Forms are, in some sense, external. So, E could be interpreted as claiming that particular objects have their properties in virtue of something "external" as in "outside" space and time. Another possible interpretation is that objects could have properties in virtue of something in our minds as in conceptualist theories. And also as was already mentioned, there is a further distinction within the mind dependence component.
Objects could have properties in virtue of social convention or individual convention. Another possible interpretation is that objects have their properties in virtue of something linguistic. Also one could hold what might be called Theistic conceptualism and claim that an object has its properties in virtue of something "external" to it in that they are in the mind of God. And finally objects could have properties in virtue of the relationship of part to whole. That is, one could, like Quine, maintain that an object is red in virtue of it being a part of the entire group of objects that are red and are spread out across the universe. Each red object is red in virtue of it belonging to the "external" group. At this point it is not necessary to try to exclude any of these possibilities. One of the ancillary purposes of this introduction is to show how varied and variable each of the traditional rival theories of attribute agreement are, and therefore a catalogue of possible interpretations is appropriate.

The whole distinction of I and E itself needs further qualification. For I and E are not necessarily mutually exhaustive. For instance, under some interpretations, Plato's theory is regarded as having a little bit of both elements. It is true that for Plato the Forms are (fully) real and that the objects of the spatio-temporal realm are less real. But even the objects of the spatio-temporal realm must possess something within them, however imperfect, that justifies our putting them into a specific category. To put it
another way, according to Plato objects in this world are what they are in virtue of their participating to a greater or lesser extent in some pure Form. But even if some particular object in this world participates in a certain Form to a negligible degree there is still some miniscule "something" within the object that justifies our putting it into a certain category. In this very natural interpretation of Plato both elements (I and E) are present and therefore they are not mutually exhaustive.

Therefore let us adopt a further distinction within the inherence component. This further distinction can be characterized as follows:

I and E: An object has its properties in virtue of something inherent in it, to a certain extent, and in virtue of its relation to something external to it, to a certain extent.

The proviso "to a certain extent" in this characterization is, unfortunately, vague, but it is intended to grasp the give and take quality of this synthetic distinction. Some clarity concerning this vague proviso would be helpful, but at this point it is not necessary. The mere existence of a distinction that is a little bit I and a little bit E is sufficient for the purposes here. Notice that the issue of "where" properties are is distinct from the questions raised
in the other components. Whether an object has a property in virtue of something external to it or in virtue of something inherent in it is separate from the question of whether or not there can be multiply exemplifiable entities, and also separate from the question of whether the structure of the world is mirrored in or imposed by our minds.

V. A Catalogue of Solutions

Keeping the distinctions of multiple exemplifiability, inherence, and mind dependence in mind, one can see that hidden within the broad traditional account of realism and nominalism there are at least eighteen distinct theories. The chart which follows attempts to give a comprehensive view of all of the possible positions. (See page 24.)

Position 1

The first position holds that there are multiply exemplifiable entities and that these entities can be found in particulars, but the categories are dependent upon our conventions at large. Kant's theory seems to be a paradigm of this position.

Position 2

Universals also exist according to this point of view and so also are they in particulars. But these universals have their roots in a kind of solipsism, for they are dependent upon an individual mind. Perhaps the early Russell fits this position. (Neutral monism? Spinoza?)
Position 3

Universals exist independently of any mind from this point of view, but they are also in particular objects. Aristotle, Strawson, and Armstrong fit this bill.

Position 4

The existence of universals in position 4 depends upon the collective mind of society as a whole, but they are not found in spatio-temporal particulars. This position seems to be most readily associated with Hegel. And also if you interpret "society" as a specific society of a specific epoch and place, the position could be associated with Whorf. But it may also be associated with Berkeley in the following way. For Berkeley there are no material objects in the external world, so a fortiori properties are not inherent in them. But universals do exist in the mind of God, and since he is not an individual human, he can be seen as taking on a certain social aspect. If this interpretation of Berkeley's view is not acceptable, then perhaps he would fit better into position 5.

Position 5

The fifth position claims all the same things as position 4 except that the mind dependent universals are dependent upon an individual mind.

Position 6

Plato is the paradigm case for this position. For Plato, objective universals exist independently of any mind, and they are not found in the spatio-temporal realm. Frege,
the early Wittgenstein, and Russell (during the same period) all seem to have shared this view.

Position 7

This position states that there are multiply exemplifiable entities and in particular objects they are slightly inherent and slightly ex-herent (to coin a phrase). These universals are put into categories of our culture's construction.

Position 8

Position 8 holds the same as 7 except that the categories are of each individual's construction.

Position 9

As was mentioned earlier, to some philosophers, Plato is a proponent of this position. Universals are real, not dependent on any mind or belief system, but they are found, to a certain extent outside the particular and, to a certain extent, in the particular.

Position 10

This point of view denies the existence of multiply exemplifiable entities. The properties a material object has are all particular and which categories there are depends upon social convention. Also properties are found in objects. This position can be associated with many philosophers: Locke, Peirce, the later Wittgenstein, Goodman, and Sellars.

Position 11

This position is the same as the previous one except
that the mind dependent categories depend upon each individual human. This position can most probably be associated with Hume.

**Position 12**

The structure of the world is not dependent upon any mind or belief system. The properties an object has exist independently of us, and they are found in particulars. But there are no universals, each property is also particular. Stout and Field are proponents of this view.

**Position 13**

Traditionally extreme nominalism has been associated with this position. Categories depend upon social conventions. There are no universals, therefore they are not in particular objects. Duhem seems to have held this position, as well as the Quine of *Two Dogmas* and perhaps Whorf.

**Position 14**

There are no universals, *a fortiori* they can not be in particulars. The categories particulars are put into depend upon each individual human mind. Perhaps this view can be associated with Locke.

**Position 15**

This position has a good chance of being regarded as incoherent. There are no universals, so they can not be in particulars. But also categories are not dependent upon anyone's beliefs. They are not dependent upon any
individual mind or also any social convention. This position comes closest to giving no solution at all to the problem of attribute-agreement.

**Position 16**

This position holds that there are no multiply exemplifiable entities and that an object has the properties it exhibits in virtue of something external to the object and in virtue of something inherent in the object. And finally the categories we put the objects into are adopted by social convention. (Bradley?)

**Position 17**

17 is the same as 16 except that the conventional categories adopted are individual rather than social (also who?)

**Position 18**

This final position also holds there are no multiply exemplifiable entities and that an object has its properties in virtue of something external and internal. But the categories objects are put into have no dependence upon any language or belief system. (Who?)

VI. **Four Requirements for a Satisfactory Solution to the Problem of Attribute-Agreement**

One would think that with all of these possible positions (and no doubt even more distinctions are possible, the list above may not be exhaustive) one would be able to
find a satisfactory solution lurking amongst them. And indeed this does seem possible. But before attempting a solution, more can be said about what is needed, what questions need to be answered in order for any solution to be a satisfactory one. The basic requirements that any solution will have to deal with are:

1) Any solution must deal with the question of whether or not universals exist or whether or not only particulars exist.
2) Any solution would have to say something about the world and how it would have to be if there were universals (i.e., what is their ontological status), or if there were only particulars. (Conceptualism and nominalism fail here.)
3) Any solution must also say something about our minds, i.e., if there is a general aspect to reality, what is the relationship of our minds to it, and if there is not, then how do general concepts arise? (Realism and nominalism fail here.)
4) Any solution must also have something to say about words and their relationship to reality. (Realism and conceptualism fail here.)
Traditionally the three rival theories have asserted or denied the importance of these various requirements. Realists assert there are general entities that exist independently of our minds and our words. Conceptualists assert that our minds have the ability to subsume things under concepts which perform a classificatory role. And nominalists claim that words perform the classificatory function that conceptualists say our concepts do.

Each of the traditional rival theories asserts the importance of one of the requirements over the others but, as was said earlier, what makes each theory controversial rather is what the theories deny. An extreme version of any of the theories maintains that the explanation of the possibility of generality lies solely in the feature with which it is concerned. Realism explains the possibility of generality by positing the existence of universals of which we are somehow directly aware. But because realism denies that the possibility of generality has anything to do with our minds it leaves as a general mystery how we can be aware of such general features at all. It also says nothing about the fact that which general properties are discriminable to us has to do with the features of our perceptual apparatus and our minds. And because realism denies that words are relevant to the possibility of generality it can not give an account of how general thoughts about the world can be realized and communicated.
An extreme nominalist would have to claim that the possibility of generality lies solely in the relation between words and things. But this raises the question as to how it is possible for a word to be particular in its nature but general in its representation. And because nominalism denies that generality has anything to do with the world it suggests a conventionalism that seems to be incompatible with objectivity. And by denying that generality has anything to do with our minds, nominalism suffers from the same problems as does realism mentioned above.

An extreme conceptualist would have to claim that the possibility of generality lies solely in the relationship between concepts (in our minds) and things. But this raises a problem similar to nominalism: how is it possible for a concept to be particular in its nature but general in its representation? And because conceptualism denies that generality has anything to do with words or the world, it suffers from the same problems mentioned above concerning realism (communication) and nominalism (conventionalism) respectively.

In what follows I will attempt to come closer to a theory that has within it elements of all three of the traditional rival theories, thereby compensating somewhat for the failures of each pointed out above. It would be a Herculean task to come up with a theory that completely and coherently comines elements from each of the traditional
rival theories. Therefore I will focus on showing how realism and conceptualism are not as far apart as they are usually considered to be. As was noted earlier, because, in a very clear sense, what realism says, both nominalism and conceptualism deny (i.e., the existence of universals), many readers will think this project is doomed from the start. But this criticism is superficial. For, part of what I hope to show is that the three traditional rival theories are much richer than they are usually thought to be. Consequently it is possible to devise a theory that is comprised of elements from all three theories and yet maintain the compatibility of these elements (Chapter Five).

But first, what follows in the next three chapters is a critical evaluation of Armstrong's theory. His theory is a particularly good place to start because he too is attempting to find a middle ground of sorts between nominalism and realism. I will argue that certain aspects of Armstrong's theory cannot be retained while also arguing that certain aspects of it must be. These results alone will allow us to eliminate many of the theories from the catalogue of solutions (page 24). Then in Chapter Five, to the elements of his theory that must be retained, I will attempt to add and make compatible, elements from the other theories that I think must also be retained.
CHAPTER TWO:

THE ONE OVER THE MANY

I. Outline of Armstrong's Argument

Armstrong's defense of realism has both a positive and a negative component. The negative component consists of two closely related but separate claims: 1) all forms of nominalism and of transcendent realism are incoherent, and 2) even if they were intelligible the ontologies of all forms of nominalism are inadequate to explain the phenomenon of abstract reference. The positive component also consists of two closely related but separate claims: 3) because all nominalisms and transcendent realism are incoherent we are justified in embracing an immanent realistic ontology, and 4) only by adopting a realistic ontology can we give an account of abstract reference.

In defense of 1) Armstrong uses the argument of the One Over the Many. There seems to be something shared by all of the numerically distinct physical objects in a certain category. For example, all crows are black. They all appear to exhibit the very same property of blackness. All crows appear to be identical in their blackness yet they are numerically distinct. There seems to be a one that is found in many. The problem is, how to account for this apparent one over many. Armstrong argues that no form of nominalism or transcendent realism can give a coherent account of this apparent sameness, and that therefore none of these
positions is tenable. In general he wants to show that nothing causally external to an object is relevant to what properties an object has. And if he can show that the positions of those who argue that something causally external is relevant are incoherent, then he has given us good reason to believe his general claim. The argument for this general claim is basically inductive. He argues that all forms of nominalism and transcendent realism are incoherent and therefore should all be rejected. If this can be established, the induction is indeed a strong one. They are all incoherent, says Armstrong, for four different reasons: i.) the relation regress, ii.) the object regress, iii.) the thought experiment, and iv.) causation. Let us look at a preliminary sketch of each of these.

The first two reasons are really just two versions of the same argument. All forms of nominalism and transcendent realism are what Armstrong calls "relational" accounts of what it is for an object to have a property. For example, a predicate nominalist would claim that an object has a property in virtue of its being called a certain name. A transcendent realist, like Plato, would claim that an object has a property in virtue of its degree of participation in some Form. In both accounts, objects have their properties in virtue of something external to them. But Armstrong argues that all relational accounts merely postpone the problem of attribute agreement, not solve it. The problem is not solved because each relational account reintroduces
another type notion at a deeper level. Types are the very things that are to be given an account of, therefore the solution proposed by all relational accounts is no real solution at all.

A third reason to think that all relational accounts are incoherent is that we can imagine in thought that an object has some property, and that it would retain that property, even if the entity in virtue of which the object supposedly has the property ceases to exist. For instance, according to Armstrong, a predicate nominalist claims that objects have their properties in virtue of their falling under specific predicates. An object is white because we call it white. But suppose the predicate did not exist. At this point Armstrong asks, would not the object still be white? The answer is obvious, and therefore there is a third reason to believe that things external to an object are irrelevant to what properties an object has.

A fourth incoherence, according to Armstrong, has to do with causality. If it is true that the natural causal order is independent of the classifications we make, and what causes what depends solely upon properties, then it follows that, for example, predicate nominalism, the thesis which states that objects have their properties in virtue of the predicates they fall under, is false. It is false because predicates can not determine properties if the properties an object has are independent of our classifications.
The general argument for 3), the closely related positive counterpart of 1), is also basically inductive. The arguments for 3) are the same as the arguments for 1), i.e., that all forms of nominalism and transcendent realism are incoherent, except that there is a further step in this induction: as in the previous one, Armstrong argues that all forms of nominalism and transcendent realism are incoherent for the four reasons mentioned above (actually, at this stage of his argument the incoherence is already taken to be established), but the conclusion of this new induction is that we are therefore forced to accept his own brand of immanent realism, a version of realism which holds that nothing external to an object is relevant to what properties an object has. This argument depends upon how exhaustive Armstrong's list of nominalisms and realisms is.

In defense of the second negative component 2) Armstrong seeks to show the incompleteness of the accounts provided by his nominalistic opponents. Armstrong claims there are certain statements which are generally granted to be true, and also appear to involve reference to universals, but for which there is also no satisfactory nominalistic translation. He holds that it is impossible to paraphrase these sentences in such a way that the apparent reference to universals is eliminated. Therefore, since terms referring to abstract entities occur essentially in these sentences, we have no option but to suppose realism is true. And further, since the option of transcendent realism has
already been eliminated, we have no choice but to suppose that his special brand of immanent realism is true.

Component 4) is very closely related to 2). It is that we can give an account of abstract reference only by adopting a realistic ontology. This argument also depends upon how exhaustive Armstrong's list of nominalisms and realisms is.

Ultimately, what Armstrong wants to claim then is that attribute agreement is a phenomenon that can be accounted for coherently, only by means of adopting his special brand of immanent realism: there are entities that are multiply exemplifiable, and yet physical that are somehow "in" the particular objects that instantiate them. In what follows I will examine Armstrong's claims in detail. I will examine component 1), and conclude that Armstrong has not given us good reason to believe that nothing causally external to an object is relevant to what properties the object has. In Chapter Three I will examine component 3), and show that his list of possible positions is not exhaustive because he fails to assess adequately the richness of the views involved. There is at least one other position in between his versions of nominalism, transcendent realism, and immanent realism that can be coherently maintained. In Chapter Four I will examine components 2) and 4), and show that for many of the statements Armstrong points to as paradigm cases that involve essential use of terms which appear to refer to universals, there are suitable
nominalistic paraphrases. Finally in Chapter Five I will develop this "in between" position mentioned above and show how it avoids some of the criticisms that can be leveled at Armstrong's theory, and further, show how the new position solves some problems Armstrong's theory cannot.

II. Armstrong's Arguments for Realism

Armstrong's main argument for universals is the "One Over the Many". Keeping in mind the distinctions of multiple exemplifiability, mind dependence, and inherence mentioned in the first chapter, it is possible to distinguish within this argument a positive and a negative side, and also within the negative side various stages of the argument. On the negative side the regress arguments, the thought experiment, and the argument from causation are all designed to show the incoherence of the mind dependence factor in traditional nominalism and to defend the inherence factor usually associated with Aristotelian realism. A separate argument is put forth to take care of the multiple exemplifiability factor. It too is a negative argument in that it tries to show the incoherence of the traditional nominalist claim that all things are particular. On the positive side, as has already been mentioned, Armstrong argues that only by adopting a realistic ontology can we account for the phenomenon of abstract reference. The negative arguments clear the site, and the positive arguments lay the foundation for Armstrong's positive
theory. I propose to examine each argument separately beginning with the general argument of the One Over the Many.

III. The One Over the Many: Formulation of the Problem

A statement of the argument can be found in at least three places.¹ Here is a concise one from a recent article.

I would wish to start by saying that many different particulars can all have what appears to be the same nature and draw the conclusion that as a result, there is a prima facie case for postulating universals. We are continually talking about different things having the same property or quality, being of the same sort or kind, having the same nature, and so on. Philosophers draw the distinction between sameness of token and sameness of type. But they are only making explicit a distinction which ordinary language (and so, ordinary thought) perfectly recognizes. I suggest that the fact of sameness of type is a Moorean fact: one of the many facts which even philosophers should not deny, whatever philosophical account or analysis they give such facts. Any comprehensive philosophy must try to give some account of Moorean facts. They
constitute the compulsory questions in the philosophical examination paper.\textsuperscript{2}

So for Armstrong the One Over the Many problem is identified with the problem of giving some account of Moorean facts of apparent sameness of type. In our pre-analytic non-philosophical thought and speech we think and say again and again throughout over lives that different things have the same property or that different things are of the same kind. And very often what we say or think is true. These truths are what Armstrong calls Moorean truths, and they are not the kinds of truths even a philosopher should doubt (unless that philosopher is working on some problem in epistemology). The next question is, "what account or analysis can we give of such truths?" These truths have a puzzling peculiarity. They appear to attribute something which is the same to different particulars. They appear to say that there is something identical in things which are not identical. There seems to be a one which runs through many. These peculiar truths must be accounted for. Any comprehensive philosophy must do that for us. And any system that fails to answer this compulsory question must be rejected.

This way of conceiving of the problem has historical precedence, but is it necessarily the best way to think about the problem? M.C. Bradley\textsuperscript{3} has pointed out that because terms like "property" and "relation" are
metaphysically heavily loaded terms, there is no strong reason to think that there are entities that these terms refer to, even if there is pre-analytic agreement among most speakers. Bradley is in effect claiming that setting up the problem as Armstrong does presupposes too much. Just because one naturally tends to think that objects have properties and one tends to talk that way does not mean than one must take such talk seriously metaphysically.

One may be prepared to use the word 'proposition' to secure easy if rough communication with one's interlocutor, but without thinking that there are any such things, and without therefore feeling any obligations to analyse or paraphrase what one says in terms of sentences . . . Likewise, it seems, with 'property'. Readiness to talk in the philosophical market place about a thing's properties does not imply an undertaking to provide a serious analysis of such talk. 4

In order to circumvent this problem Bradley suggests the problem of universals be introduced in terms of the notion of general term or predicate. He wants to bring the problem into the linguistic realm, for there is no doubt that there are such things a predicates, and that they apply to a multiplicity of distinct things.
Strictly speaking, Bradley is, or course, correct. In addition to formulating the problem as Armstrong does it is also possible to formulate it in terms of explicating the application of general terms. And with a slight limitation, Bradley himself admits that the range of solutions to both problems would remain similar "and many of the same pros and cons apply; but by no means all." But Armstrong is well aware of two different possible formulations of the problem.

It is natural for the Nominalist to pose his problem in linguistic terms. Locke summed up the matter with admirable and quite unusual succinctness when he said: 'since all things that exist are only particulars how come we by general terms . . ?'.

Bradley is right about there being different formulations of the problem but his criticism fails to assess Armstrong's motivations adequately. This is evident from the quote above. Armstrong is obviously aware of the linguistic formulation of the problem. But what motivates him to set up the problem the way he does is his belief that semantics and ontology should be separated. For Armstrong language is irrelevant to what exists. Properties are real entities that exist independently of any mind, belief, or language system. He is much more concerned with the actual physical properties (there is no other way to say it) that
an object has. Putting the problem in linguistic terms is all right as long as it is understood as merely a heuristic device. More will be said about the separation of semantics and ontology in a later section, but for now it is important at least to see Armstrong's motivations.

IV. Aune's Criticism of the One Over the Many

In two recent books Bruce Aune has put forth a criticism of the argument from the One Over the Many which, if successful, would stop Armstrong's program from even getting started. Aune sees the argument from the One Over the Many as follows:

If a number of different things can truly be described by the same predicate, they must be the same in some way: they must have a common feature by virtue of which the same description is applicable to them. Thus, if the paper on which I am writing, the typewriter I am using, and one of the books on the shelf in front of me are all truly described by the predicate "white", they must share a common feature that justifies this description. Without a common feature a common description could hardly be applicable to them all. If we ask what this common feature is, the obvious answer is 'the color white, or whiteness'.

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So, if several things fall under a description they must possess some determinate feature by virtue of which the description correctly applies to them. And these features must somehow be in the objects, for it is by virtue of possessing these features that the objects can be appropriately described.

According to Aune then "the One Over Many argument is fundamentally based on a certain conception of predication." If one predicates something of a subject and the resulting statement is true, then there must be something, a determinate feature, in virtue of which the predicate is truly applicable. In another paper Aune formalizes the One Over Many assumption as follows:

**AOOM:** If a predicate $P$ is contingently applicable to a subject $X$, then $X$ must possess some universal or higher-order feature $F$ that explains or justifies this application of the predicate.

This assumption, says Aune, is exceedingly plausible, but it generates such serious difficulties that realism, if it is based on AOOM, must be rejected.

The serious difficulty is what Aune calls "the Chinese Boxes absurdity". AOOM says that a subject must contain some feature or features if some predicate truly applies to the subject. But these features themselves must have
positive features of their own if they are to account successfully for such a fact. Features must have features themselves because, if some feature accounts for the fact that some subject is truly described by some predicate, then that feature must differ from the feature that accounts for some other different subject being truly described by a different predicate. And if these two features differ then they must differ in some respect. "Thus, one feature must have a higher-order feature that the other lacks, and vice versa."\(^{13}\)

From this situation, says Aune, we can see that a vicious infinite regress develops. First let us see how the infinite regress develops. Suppose that some predicate \(P\) applies to a subject \(X\) in virtue of some feature \(F\). Since \(F\) has its own positive character, it (the positive character) is truly describable by some higher-order predicate \(P^*\). But by AOOM, the feature \(F\) itself must possess some higher-order predicate \(F^*\) by virtue of which \(P^*\) is truly applicable. But then \(F^*\) must also have its own positive character, and so on ad infinitum. "Since we are supposed to assume that the features by virtue of which a predicate is applicable to a subject are 'present in' that subject, we are led to the amazing result that every particular is like an infinitely complicated Chinese box: an infinite system of boxes within boxes".\(^{14}\)

But how is this infinite regress vicious? Aune never quite says that the regress is vicious. He uses words such
as "amazing", "incredible", "bogus", and "utterly useless as an explanation." But it is clear that he intends his regress to do more than merely compromise the ontological economy of Armstrong's theory. Aune intends the regress to be used as a reason for rejecting completely the argument from the One Over the Many. For he says

If we look closely at the One Over Many argument, we can quickly see what has gone wrong. The argument purports to provide an ultimate explanation of why a predicate (any predicate) is applicable to a subject (any subject), but the 'explanation' it offers simply introduces a new subject of further (and unknown) predicates. The explanation is bogus because it tacitly assumes what it purports to explain . . . As an explanation this claim is utterly useless.  

Even though Aune may have chosen different words, it is obvious that for him, the One Over Many argument lacks any value.

This seems to be a decisive criticism. The question is, however, is Armstrong necessarily saddled with AOOM? Certain points can be made to mitigate Aune's criticism.

The first is that Armstrong explicitly denies AOOM. One of the major and most controversial claims of Armstrong's theory is his claim that semantics and ontology
should be separated. And this claim bears directly on the validity of AOOM. Armstrong says that,

... there is something which looks too good to be true about the ... formula. A predicate, a man-made thing, is applied to certain particulars and is applicable to an indefinite number of further particulars. It is then assumed by many Realists that we are automatically entitled to conclude that an objective property ... corresponds to the predicate. But no philosopher with any Empiricist sympathies can feel happy with a conclusion so easily reached. There seems to be no honest toil in it.16

The question of what properties there are in the world is to be decided by total science, not simply by consulting our predicates. We must distinguish between the meaning of a predicate on the one hand and the property in virtue of which the predicate applies to particulars on the other. "Ontology and semantics must be separated--to their mutual benefit."17

So, when Aune claims that there must be a universal if it is possible to apply a predicate correctly to a particular, he is, strictly speaking, simply missing the point of one of Armstrong's main theorems. Therefore it
seems highly improbable that Armstrong must be saddled with AOOM. His full view on this matter is as follows:

The position I wish to reject may be formulated in an admittedly extremist fashion: predicates stand in a one-one correlation to universals. . . For each predicate-type, there exists its own peculiar universal. For each universal, there exists its own peculiar predicate. . . the correct view I take to be this. Given a predicate, there may be none, one or many universals in virtue of which the predicate applies.\textsuperscript{18}

AOOM is incompatible with Armstrong's claim, but not completely. Aune is aware\textsuperscript{19} that Armstrong is at pains to show that certain predicates, for instance, \textit{being identical with itself}, do not apply in virtue of any universal. (What is needed at this point, of course, is an argument to show that \textit{being identical with itself} does not apply in virtue of a property. But the main point at this stage is merely to show that Armstrong has anticipated Aune's criticism somewhat and that Aune needs to say more. The question of whether or not there really are predicates that can correctly apply to a particular but in virtue of no universal will be examined more closely in the forthcoming section on the separation of semantics and ontology.) But even if there are predicates that do not apply in virtue of
any universal, Armstrong admits there are predicates that apply in virtue of one or many universals. He only wants to point out that one cannot automatically presume there is a universal just because there is a predicate, and in AOOM Aune assumes exactly that.

So this line of defense for Armstrong is partially successful, and the question still remains: must Armstrong necessarily be saddled with AOOM (in the cases where he admits that predicates apply in virtue of one or many properties)? Armstrong denies that he must be for the following reason. He says about AOOM that

It may be that some such principle is true, at any rate provided that the predicates involved are restricted to purely general predicates. But I make no attempt to formulate and argue to such a principle, or to argue from it. I did argue from something much less formal: from the apparent fact of repetition in the world, that is, from the apparent sameness of the different.²⁰

Armstrong is concerned to account for the natural, physical, non-linguistic fact that, for instance, two distinct material particulars are both blue. He is concerned to account for Moorean facts, i.e., repetition in the world. This brings us back to the criticism stated earlier by Bradley, i.e., looking at the problem the way
Armstrong does may not be the best way because to use such terms as "property" does not commit us to taking such terms seriously metaphysically, and that we should set the problem up as a linguistic one. And we are also reminded of Armstrong's rejoinder that first philosophy should be separated from the linguistic realm. Armstrong simply is not arguing from the application of predicates to the existence of universals. As was already mentioned, but not yet examined in detail, Armstrong wants to separate semantics and ontology for their own mutual benefit. The existence of a property does not depend upon the correct application of a predicate. As yet, no arguments for the separation of semantics and ontology have been given, but at this point we can at least conclude with a conditional statement. If the separation of semantics and ontology is a viable thesis, even though it is possible to pose the problem of universals in a linguistic guise, then both Bradley's and Aune's criticisms miss the mark.

But perhaps there is something still to be said for Aune's criticism. Perhaps an alternative AOOM\(^1\) could be formulated in non-linguistic terms. A plausible formulation is as follows:

AOOM\(^1\): If a subject \(X\), appears to have some property \(P\) then \(X\) must possess some universal or higher-order feature \(F\) that
explains or justifies this appearance of the property.

One might object to this formulation by pointing out that many times particular physical objects do not actually have the properties they appear to have. Sometimes things appear to be one color when really they are another, for instance. This is, no doubt, true, but it is irrelevant to the point at hand. What is important for this formulation is that it contain no linguistic element. And it does not. Therefore let us just assume that a particular object actually has the properties it appears to have. So, if my coffee cup appears white, then it must have within it some universal or higher-order feature F that explains or justifies its white appearance.

The question now becomes: can a vicious (or bogus) infinite regress be generated from this formulation? It might be developed as follows: some subject X, appears to have a certain property in virtue of X possessing some feature F. Since F has its own positive character, F must have this positive character in virtue of some higher-order universal F* and so on ad infinitum. One could imagine Aune's non-linguistic doppelganger saying: since we are supposed to assume that the features by virtue of which a subject has a certain appearance are "present in" that subject, we are led to the amazing result that every
particular is like an infinitely complicated Chinese box: an infinite system of boxes within boxes.

It does appear that an infinite regress can be generated. So the ontological economy of AOOM\(^1\) is more than compromised. But the important question is: is the regress vicious (or bogus)? It seems as if one could adopt Aune's remarks about viciousness (or bogusness) and apply it to this revised regress. Again one could imagine Aune's non-linguistic doppelganger saying that if we look more closely at the revised One Over Many argument, we can quickly see what has gone wrong. The argument purports to provide an ultimate explanation of why an object has a certain property, but the "explanation" it offers simply reintroduces a new object with a further property. The explanation is bogus because it tacitly assumes what it purports to explain. As an explanation this claim is utterly useless.

So, even though Aune himself did not propose AOOM\(^1\), it seems that his basic idea, if revised appropriately, does cause some problems for Armstrong. But I believe that even with this new revised version of the One Over Many, something can be said in Armstrong's defense. In another, but very similar, context Michael Loux\(^2\) has directed his attention to questions of this type and has argued that infinite regresses need not necessarily be vicious (or bogus). Paradoxically, while defending nominalism from "vicious" attacks, Loux says that the nominalist can
concede that the pair of individual attributes introduced by his account agrees with some other pair of individual attributes exhibiting some specific form of resemblance relation; but insisting that this fact has no relevance at all for the original case of attribute agreement, he will deny that his account of the original case of attribute-agreement presupposes any account of this new case of attribute-agreement.22

In other words Loux is saying that, even though in nominalism an infinite hierarchy is generated, it does not mean that the regress is vicious. It is not necessary to go back and appeal to each level of the infinite regress in order to give an account of specific case of attribute-agreement at a certain level in the hierarchy. If, necessarily, we must appeal to each previous level in the hierarchy, then the regress would be vicious. But an account of some specific case of attribute-agreement does not necessarily presuppose any account of a former case at a previous level. The levels of the hierarchy, along with the accounts given of each level, are distinct.

These remarks can be applied to ACOM1. Just because a specific explanation of some case of attribute-agreement reintroduces a new object with a further property, does not mean that the explanation is bogus. Suppose an account of a case of attribute-agreement at a certain level has been
given. Perhaps it is unfortunate that that account brings up other problems. But those other problems are distinct from the original one, even if they are of the same type. It is not necessary for one to appeal to a case at a higher level in order to give an account of a case at the initial level.

Perhaps an analogy would make this point clearer. I am thinking of Loux's remarks in terms of proofs in deductive logic. The analogy could be made in the propositional calculus and in other orders of deductive logic, but for the sake of simplicity I will use Aristotelian logic. When one does a proof in Aristotelian logic one explains or justifies each move in the proof by appealing to one of the logical moves on the traditional square of opposition or by appealing to one of the logical equivalences of conversion, obversion, or contraposition. Let us say it's a fairly long proof and somewhere near the end a certain line is justified by one of the moves mentioned above. Now, in order to justify this line it is not necessary to appeal to all of the other justifications of the previous lines. Each line is distinct, and so is the justification for it. Loux's suggestion about justifying each level in the infinite regress is similar to this. Just as we would not say that the justification of a certain line of a deductive proof is incorrect unless we appeal to all of the previous justifications, so we also would not say that an explanation or account of a certain level in an infinite regress is
bogus or useless unless we appeal to all of the previous levels.

One might respond by claiming that the analogy breaks down in the following way. A proof, by definition, must have a finite number of steps, otherwise it would not be a proof. And it is no misnomer to call the regress generated by AOOM\(^1\) infinite. But Armstrong could take this criticism with equanimity. As was already admitted, the ontological economy of AOOM\(^1\) is compromised by the existence of the infinite regress. But as long as it is not vicious or bogus it is no threat to Armstrong's realism.

Therefore we can conclude that Armstrong's theory can, at least, get off the ground. It may not soar as high as Armstrong would have liked, but it does fly.
CHAPTER THREE:

ARMSTRONG'S ARGUMENT AGAINST

NOMINALISM AND TRANSCENDENT REALISM

I. Nominalism and Transcendent Realism

For the time being then we will concede that giving an account of apparent attribute-agreement is compulsory for any comprehensive philosophy, and that we need not pose the problem in linguistic terms. We are now in a position to examine Armstrong's attempt at clearing the site for his comprehensive philosophy. We now can examine the major negative component of his general argument. The negative component of Armstrong's argument is that all forms of nominalism and transcendent realism provide no real solution to the problem of attribute-agreement. They provide no real solution because they are all, at their heart, incoherent. They are incoherent for four different reasons: 1) the relation regress, 2) the object regress, 3) the thought experiment, and 4) causation. According to Armstrong, all forms of nominalism and transcendent realism are what he calls relational accounts. They all purport to explain the possession by an object of some property, by appealing to something external to the particular material object. And for the reasons just mentioned, all relational accounts are incoherent. Therefore the site is cleared for Armstrong's own special brand of immanent realism.
Armstrong's argument then is basically an indirect one. He is attempting to show the implausibility of all the views opposed to his. Almost half of his first volume is devoted to showing how the various forms of nominalism: predicate, class, concept, mereological, resemblance, and transcendent (Platonic) realism are untenable. This list is intended to be exhaustive. One way of showing that Armstrong's argument fails would be to come up with some new position he does not consider. Although I do think there are coherent positions he does not take seriously, my argument does not depend upon bringing new answers to light. Instead I will show that all the arguments Armstrong gives to show that nothing external to a particular is relevant to what properties it has, are spurious. If this is correct then his argument is unacceptable even if one can come up with new positions, because presumably he would use the same arguments against the new positions as he did against the original ones.

The list above is fairly extensive, but for the purposes of examination we need only to pick one version since, as I will show, each account falls to the same criticisms. Predicate nominalism will be the test case because of its simplicity and obvious connection to Armstrong's related thesis of the separation of semantics and ontology. But before examining the relation regress, etc., let us first look at the methodology he employs.
II. Methodology

According to Armstrong predicate nominalists give the following analysis of attribute-agreement:

\[ a \text{ has the property, } F, \text{ iff } a \text{ falls under the predicate } 'F'. \]

When a predicate nominalist says he has an account of attribute agreement he means, according to Armstrong, that he has a reductive analysis. The "right hand side (of the identity statement) must be taken to be a logical analysis, a reductive analysis, of the left hand side."\(^2\) The aim of a reductive analysis is meaning identity. That is, the right hand side of the biconditional is supposed to be an analysis, in simpler terms, of the problematic terms of the left-hand side, and the meanings of the two sides are supposed to be identical. The meaning of the problematic schema is made precise by the other schema and the biconditional is supposedly necessarily true. For example, when Frege gave his set-theoretical interpretation of truths in mathematics he was giving what Armstrong would call a reductive analysis. Frege's definition of a number as a set of equi-pollent sets reduces the problematic notion of number to the more precise notion of a set. And according to Armstrong all forms of nominalism and transcendent realism use this analytical method.
M.C. Bradley has suggested that there are other ways of treating theories of attribute-agreement that have no aim at identity of meaning:

Thus Carnap in the *Aufbau* required merely identity of truth-value between *analytsans* and *analytsandum*. . ; in a similar way Goodman in *The Structure of Appearance* required merely extensional isomorphism, and Quine has regularly worked with the idea of *paraphrase*—capturing what needs capturing, but with no aim or claim at meaning identity.³

And he also sees a problem in general with reductive analyses:

Indeed it is not clear how the traditional analytic approach could be applied in some cases of fundamental philosophical importance. . . the problem is not the complexity of the right-hand side, but rather that there is no natural rapport between the subject matters of left and right to give our necessary instincts something to bite on. . ⁴

In spite of this Armstrong is adamant:
All that the nominalist can hope to do is to give a reductive analysis or account of what it is for something to have a property or to be of a certain kind or sort: a reductive analysis of types.⁵

At this point we are only talking about predicate nominalism, but it is clear that Armstrong regards reductive analyses to be the appropriate methodology for any purported solution to the problem of attribute-agreement. Unfortunately he gives no explicit argument as to why we should regard all accounts as reductive analyses, and Bradley's suggestions seem to be plausible alternative methodologies. By questioning Armstrong's motives for choosing only to see the problem as a reductive analysis Bradley opens the door for a substantive and decisive criticism. And in the next section I argue that Armstrong's methodology causes insuperable problems for him.

III. Regresses and Reductive Analysis

The first two arguments that Armstrong gives (the relation regress and the object regress) to show that all forms of nominalism and transcendent realism are incoherent, are very similar. Consequently they fall to the same criticisms. But for the sake of clarity they will be examined separately.
IV. The Relation Regress

Because nominalistic and transcendent realist accounts of attribute-agreement are considered to be reductive analyses of types, they are susceptible, says Armstrong, to a certain problem. The problem is as follows:

If, then, in the course of an attempted Nominalist Analysis it should happen that covert appeal is made to the notion of property, kind or type, the analysis has failed to achieve its purpose.6

Any nominalistic analysis will fail to achieve its purpose because covert appeal is always made to the very notion the account is trying to explicate. The relation regress in predicate nominalism works like this. According to Armstrong a predicate nominalist holds, for instance, that all white things are white in virtue of their relationship to the predicate "white". Each white thing falls under the predicate "white". And this relation of "falling under" is another example of the very phenomenon that is to be reduced. Covert appeal has been made to the very phenomenon the account is trying to explicate, therefore no progress has been made, and the reduction fails.

On pain of inconsistency the predicate nominalist is forced to analyse this new type notion according to his schema. At this point, says Armstrong, there are two possibilities: the new instances of the relation of
"falling under" are either 1) the same or 2) a different type of relation that holds between the original particulars and predicates.

But are there really two possibilities? If the new instances of the relation falling under are the same, then the account is circular. And the circularity would be vicious because one would necessarily be appealing to the very notion one is trying to give and account of. But even if Armstrong were right about this situation, resulting in a vicious circle (and no doubt he is), it would not mean he has struck a blow against predicate nominalism. For predicate nominalism to be consistent, the newly posited type notion can not be of the same type as the original. For nominalists properties and relations are one and all particular. So this situation is not even a real possibility.

The only position a predicate nominalist could consistently hold is the case where the relations are of a different type. If they are of a different type, says Armstrong, then a vicious infinite regress results.

So since, according to Armstrong, predicate nominalists profess to give a reductive analysis of types, and, because in every account covert appeal is made to the very notion that needs to be explicated, predicate nominalism fails to achieve its purpose. And what is worse (or better if you are an immanent realist like Armstrong) these theories, all nominalisms and transcendent realism, can be completely
eschewed because they all fail to give a coherent solution to the compulsory question. The apparent solution, for Armstrong, is no solution at all.

Time and again nominalisms of all kinds fall to the relation regress. Class nominalism covertly appeals to the type notion "is a member of". Resemblance nominalism appeals to the type notion of "resemblance". And in general, Armstrong can say the following about why all relational analyses fail:

It appears, then, that the Relation regress holds against all Relational analyses of what it is for an object to have a property or relation. If a's being F is analysed as a's having R to a Ø, then RaØ is one of the situations of the sort that the theory undertakes to analyse. So it must be a matter of the ordered pair <a,Ø> having R' to a new Ø-like entity: ØR. If R and R' are different, the same problem arises with R' and so ad infinitum. If R and R' are identical, then the projected analysis of RaØ has appealed to R itself, which is circular.7

It is important to realize that if Armstrong is right, he has a very powerful argument. For not only is he pointing out an infinite regress or a circularity, which is an unhappy state of affairs for any philosophy, he is
also claiming that all of these attempts to solve the problem of attribute-agreement really are not solutions at all. They appear to be attempts to solve this problem, but in reality they are spurious. So not only, for example, does nominalism entail an infinite regress, but it is not even a coherent position.

V. The Object Regress

Whereas the relation regress involves the relation between the object and the predicate, the object regress involves only the predicate. Therefore it differs from the relation regress but it is the same in that the major flaw, according to Armstrong, is that it generates at each new level an unanalyzed predicate. His argument is as follows:

The Object Regress arises because the Predicate Nominalist must be understood to mean that the whiteness of white objects is constituted by their special relationship to tokens of the predicate type "white". But what account can he give of this type? It can not remain an unanalysed notion. . . . If he is to remain a Predicate Nominalist then he must say that all the tokens are of this type because they fall under a higher-order predicate "white". But this new predicate is again a type. The regress is infinite. Since reference to an
unanalysed type always appears on the right-hand side of the analysis, the regress is vicious.  

We can see that in both the relation and the object regress the problem results because of Armstrong's conception of what it means to give an account of attribute-agreement. In both cases the regress is dependent upon reductive analysis. In both cases covert appeal is always made to an unanalysed type notion and the conclusion is that no real analysis has been made.

VI. Russell's Proof for the Existence of Universals

At this point I would like to make a short excursus into the arguments for the existence of universals by another twentieth century philosopher, Bertrand Russell. The negative component of Armstrong's arguments for the existence of universals is very similar to Russell's, and insight can be gained into Armstrong's arguments by examining what has been said about Russell's. Russell's arguments will be gleaned primarily from The Problems of Philosophy.  

Russell's argument for universals is a negative one. That is, his argument is intended to show the futility of nominalism. Russell claims that all nominalists, whether they realize it or not, put forth arguments, despite all nominalistic appearances, that presuppose a realistic component.
Suppose, because we have a penchant for philosophy, we want to give an account of the perplexing situation of the apparent sameness of property in diverse particulars. Suppose also we have a penchant for nominalism and we want to explain repetition in nature by claiming that, for instance, each white thing is white because it has the right sort of resemblance to an initial particular white thing. But, says Russell, it is also a fact that there are many white things and this right sort of resemblance which the (Armstrong would say "resemblance") nominalist puts so much weight on, would have to hold between many different white things. And this situation exactly satisfies the definitions of a universal: multiple exemplifiability. Therefore, the relation of resemblance is a true universal, and since we must admit one, Russell sees no point in being abstemious beyond that. ¹⁰

As Michael Loux¹¹ has pointed out, this argument, as a refutation of (resemblance) nominalism, simply begs the question. Russell just assumes that resembling objects enter into a relation of resemblance that is multiply exemplifiable. Russell's contention that resemblance is multiply exemplifiable would be seen, by a nominalist, as gratuitous. If relations constitute a distinct category of attributes the nominalist will interpret them as one and all particular. And he will deny that the resemblance obtaining between one pair of objects is numerically identical with
the resemblance obtaining between another pair of objects. But on this point Russell responds by saying

It will be useless to say that there is a different resemblance for each pair: for then we shall have to say that the resemblances resemble each other and thus at last we shall be forced to admit resemblance as a universal.\textsuperscript{12}

Here Russell is pointing to a supposed infinite regress in the nominalist contention. It arises like this. Suppose we have a case of attribute-agreement between two objects. If the nominalist countenances relations he will say the objects agree in attribute because they exhibit attributes that enter into a relation of resemblance. Take two pairs of those. Would not the resemblance relations of those two pairs (themselves) resemble each other? All the resemblances resemble each other. But if the nominalist holds that all attributes are particular then the two resemblances relations of the two pairs of objects would have to be particulars also. The nominalist would be forced to postulate a higher-order form of resemblance: resemblance\textsubscript{2}. But of course there are other pairs of objects entering into resemblance relations and therefore the nominalist would be forced to postulate an infinite hierarchy of resemblances. And Russell tells us this is "an endless regress of the vicious kind."\textsuperscript{13}
Russell is right about it being necessary for a nominalist to postulate an infinite hierarchy, but is he right about the regress being vicious? Is the nominalist precluded from giving an account of any particular case of attribute-agreement without going back through the infinite hierarchy? The answer to both questions is no. As we have already noted, Loux says the nominalist can concede that the pair of individual attributes introduced by his account agrees with some other pair of individual attributes exhibiting some specific form of resemblance relation; but insisting that this fact has no relevance at all for the original case of attribute-agreement, he will deny that his account of the original case of attribute-agreement presupposes any account of this new case of attribute-agreement.\textsuperscript{14}

Even if an infinite hierarchy is necessary it is not necessary to appeal to each member of the regress in order to give an account of some phenomenon at any specific level of the hierarchy. Strictly speaking, one level previous on the hierarchy is irrelevant to giving an account of some phenomenon at a higher level.

Russell's celebrated argument does not seem to have much force against the nominalist. Viciousness consists for Russell in the purported fact that it is necessary to appeal
to each level back in the hierarchy in order to account for
the initial phenomenon. If Loux is correct, and I am
maintaining he is, then the regress is not vicious.

VII. Problems with Reductive Analysis

Russell felt that the philosophies of Spinoza and
Leibniz were the result of an undue attention to one sort of
universal: qualities. One of his great contributions was
making us aware of the importance of another sort of
universal: relations. In fact he believed, as we have
seen, the existence of relations was easier to prove than
that of qualities. Armstrong shares Russell's enthusiasm
for relations but wants more to advance the philosophy of
relations rather than the logic. Armstrong adopts, with a
slight variation, the same kind of argument as Russell used
for his proof of the existence of relations. Russell argued
that nominalism is spurious because in its formulation it
appeals, in spite of its stated objective, to a true
universal: the relation of resemblance. Armstrong also
believes that nominalism is spurious, but because his
broader general argument is inductive, he does not argue
directly that unanalyzed predicates imply universals.
Universals exist, so goes the induction concerning the
negative component of his argument, because all of the other
accounts of attribute-agreement are incoherent, and thereby
we are forced, as a sort of consolation prize, to embrace
realism. Russell uses the purported incoherence of
nominalism to attempt to prove directly that realism must be true, while Armstrong uses the purported incoherence of nominalism to attempt to prove indirectly that realism must be true. Armstrong's argument is basically the same as Russell's, but Armstrong's argument involves a slight extension of it.

Since Armstrong's argument is so similar to Russell's, can we apply the same criticisms to Armstrong as Loux does to Russell. Or does the slight change in Armstrong's argument preclude Loux's attempt to save nominalism?

The slight variance in Armstrong's argument is not enough to alter Loux's conclusion. For what is important to both arguments is not whether they are used to prove the existence of universals directly or indirectly. What is important in both cases is whether or not the infinity of resemblance relations (or falling under, is an element of, participation, etc.) is vicious. Armstrong argues that it is:

The Relation regress arises from the fact that the analysis involves once again the relation-type of falling under, a relation which links the pairs (of an object and a predicate which applies to the object) with the two-place predicate. . . These new instances of falling under are either a different type of relation from the relation which holds between the original particulars and the original
predicates, or they are the same type. If they are a different type then, in consistency, the analysis in terms of pairs of objects falling under a predicate must involve yet another still higher-order type of falling under, which, however, again cannot be left unanalysed. This regress is certainly vicious.17

Viciousness, then, consists of being left unanalyzed. A further unanalyzed type notion must always be postulated in nominalism.

But surely we have nothing to fear from a viciousness so benign. "It would be vicious if the nominalist were precluded from providing an account of any particular case of attribute-agreement without regressing back through the infinite hierarchies."18 But the nominalist's success in handling particular cases does not presuppose any such regress. If we have two pairs of white objects, for instance, we will say that the objects in question exemplify resembling individual attributes. And we can concede even further that the two pairs of individual attributes exhibit some specific form of resemblance relation. But how is that relevant to handling the particular original cases of attribute-agreement? It is true that at this point the newly postulated type notion is left unanalyzed, but we can still give an account of the original case of attribute-agreement without appealing to the existence of these newly
postulated type notions at all. Just because there are notions left unanalysed does not mean that the regress is vicious.

VIII. "I gotta use words when I talk to you" -- T.S. Eliot

This claim needs defending. Armstrong and Russell are arguing that, sooner or later the nominalist has to accept the existence of universals, so he might as well do it now. Sooner or later one has to accept universals because the nominalist position, whether realized by its proponents or not, presupposes the existence of a universal (Russell) or at least leaves unanalysed at each new level, a further type notion (Armstrong) the very kind of notion the nominalist position was supposed to give an account of. One must give an account of this new type notion because how can one claim to understand some phenomenon if the understanding of that phenomenon is based on a further phenomenon that is also not understood? Before understanding of the original phenomenon is possible, it seems only rational to demand understanding of the phenomenon the original one is based upon.

But I want to argue that the demand for a clear understanding of all components of an explanation in order to say that one has given a coherent account of some phenomenon is a demand that cannot be met. It is a demand that cannot be met for logical as well as practical reasons. A contemporary philosopher who has aimed his critical remarks in this direction is David Lewis. Lewis notes
that Armstrong formulates the problem of giving an account of the Moorean facts of apparent sameness of type in nature and then argues that the problem has undergone an illegitimate transformation:

When the demand for an account for a place in one's system turned into a demand for an analysis, then I say that the question ceased to be compulsory. And when the analysandum switched, from Moorean facts of apparent sameness of type to predication generally, then I say that the question ceased to be answerable at all. The transformed problem of One Over Many deserves our neglect. The ostrich that will not look at it is a wise bird indeed. 21

The question has ceased to be answerable at all because no theory can ever do without primitive predication at some level. If one asks for an analysis of a predicate used at some point in a theory, one must use other predicates in giving that analysis. But obviously within that analysis there are further predicates that need further analysis. And if one asks for a further analyses of these new predicates, the problem will concatenate ad infinitum. Armstrong picks up on the problem at this point and says that since all nominalisms and transcendent realism are attempting to give a reductive analysis of types, and that within the special case of predicate nominalism, new type
notions are always being introduced simply because of the necessity of using words when one gives an account, that therefore a vicious infinite regress results because one can never give an account of all predication.

But Lewis is arguing that the problem is not that predicate nominalists are saddled with a vicious infinite regress. He is claiming that the problem is that Armstrong formulates the problem of the One Over the Many as a reductive analysis of predication in general. If the One Over Many problem were not formulated in these terms, then the regress could never be generated. Logically as well as practically primitive predication must be accepted at some point. If one demands an analysis of all predication, then there is the problem of the infinite regress, and it will be logically impossible for the demand to be met. It will be logically impossible for the demand to be met because each new account uses predicates that will need to be given account of. Because of this logical impossibility we have the further practical problem of it never being possible for any account ever to be given of any phenomenon of attribute-agreement by a human. If, as Armstrong maintains, what properties there are is a scientific question, and the question is to be answered by human scientists, then the question will never be able to be solved because humans are finite. No conversation would ever get started if we were constantly honing our tools, i.e., defining our terms.
Doing away with all unanalysed predication is an unattainable aim, and so an unreasonable aim. No theory is to be faulted for failing to achieve it. For how could there be a theory that names entities, or quantifies over them, in the course of its sentences, and yet altogether avoids primitive predication?²²

Armstrong's theory is itself, of course, also one of those theories that cannot do without primitive predication. When Armstrong accounts in his own theory for Moorean facts he uses the predicate 'instantiates' as in 'particular a instantiates universal F.' And he claims that "such identity in nature is literally inexplicable, in the sense that it cannot be further explained."²³ But in this formulation 'instantiates' is an unanalysed type notion. And on pain of inconsistency Armstrong must give a reductive analysis of this predicate. "And if he did it would only postpone the need for primitive predication. So let all who have felt the bite of Armstrong's relation regress rise up and cry 'tu quoque'."²⁴

IX. Short Recapitulation

Before we go on to criticize the object regress and to see whether Loux's and Lewis' criticisms apply to all the other forms of nominalism and transcendent realism, a short recapitulation is in order. Armstrong claims that the
position of predicate nominalism affords no solution at all to the problem of attribute-agreement, because at its core, it is incoherent. It is incoherent because it generates an infinite regress that is vicious. The regress is vicious because each new level re-introduces and leaves unanalysed a new type notion, the very sort of phenomenon that the solution was supposed to give an account of. Contra Armstrong, I have argued, following Lewis, that in the case of predicate nominalism, no infinite regress is generated. No infinite regress is generated because at some level primitive predication must be accepted. Or, as Eliot says, "I gotta use words when I talk to you."

There may be a regress, but it cannot be infinite.

And even if this point is mistaken, that somehow an infinite regress is generated, the most Armstrong could claim is that the ontological economy of predicate nominalism is compromised. That is the most he could claim because the infinite regress is not vicious. I have argued, following Loux, that the regress is not vicious, because viciousness does not result merely from leaving a term unanalysed, as Armstrong has supposed. An infinite regress is vicious if we necessarily must go back and appeal to each previous level in the hierarchy if we are to give an account of any one level. But a predicate nominalist can simply deny that it is necessary for him to go back and appeal to all of the previous levels in the hierarchy. He can claim that all of the previous levels are simply irrelevant to
giving an account of some phenomenon at a certain level. I have tried, in an earlier section, to explicate and reinforce this claim by appealing to the analogy of a logical proof. Admittedly most proofs are not infinite, but that is irrelevant. We can justify or give an account of each move in the proof without necessarily appealing to all of the previous moves and their justifications in the proof. Each line or level is justified separately.

So, the proto-conclusion is then, that no infinite regress is generated (because of what Lewis says). And even if one was, it would not be vicious (because of what Loux says).

X. **Loux's and Lewis' Remarks Applied to the Object Regress and to Nominalism and Transcendent Realism**

First let us look at the Object Regress. Are the criticisms that have been leveled against Armstrong's attack on predicate nominalism applicable to the Object Regress? The Object Regress is very similar to the regress Russell used in attempting to eliminate nominalism as a solution. According to Armstrong the predicate nominalist must be understood to mean that the whiteness of white objects is constituted by their special relationship to tokens of the predicate type "white". So this supposed regress does not arise because of the relation between the object and the predicate. It arises, supposedly, just because of the
predicate itself. The actual markings on this page that constitute a token of the word "white" can be reproduced again and again. And therefore it is a type that must be given an account of. Now, does this regress fare any better against the same criticisms brought against the relation regress?

It does not. For the differences between the regresses are inconsequential. We can still maintain, following Lewis, that to ask for an account of predication in general is to ask for too much, and that primitive predication must be accepted at some point. And we can still maintain, following Loux, that even if there were a regress and it was infinite, it would not be vicious because it would not be necessary to appeal to every previous level of the hierarchy in giving an account of any one specific level. The account given of each token of the inscription "white" is distinct from the others.

Now, what about all of the other forms of nominalism and transcendent realism? Is there anything in Armstrong's attack on those positions that would make them immune from the criticisms mentioned above? There does not appear to be. Substituting "is a member of" in class nominalism, "resemblance" in resemblance nominalism, or "participation" in transcendent realism does not really avoid either Loux's or Lewis' criticisms.
XI. Conclusion: Regresses

In a reply to a criticism of Aune's, Armstrong summarizes his reasoning in what I have called the negative component of his indirect proof:

All nominalist accounts fail. The difficulties turn out to be manifold. In particular nominalist analyses are everywhere found having to employ the notion of a non-numerical identity which they suppose themselves to be giving a reductive account of. But if the notion of a non-numerical identity turns out to be unanalysable, then presumably we ought to accept it with natural piety as an irreducible feature of the world. And to accept irreducible non-numerical identity is to accept universals.26

Here is a clear statement of the two claims (numbers 1 and 3, page 34-36) I said earlier comprised half of the general structure of Armstrong's argument. All forms of nominalism and transcendent realism are incoherent. And because of the way they are incoherent, i.e., they all reintroduce at a deeper level the very concept they are attempting to give an account of, immanent realism must be embraced. If Loux and Lewis are right, and I maintain they are, then giving an account of a Moorean fact is not necessarily giving a reductive analysis. Not every account
is an analysis. These claims correspond to Bradley's idea stated at the beginning of this chapter. One can give an account while maintaining some phenomenon is primitive. We can not conclude, from Armstrong's arguments at least, that nominalists and transcendent realists are employing non-numerical identities. It is only because Armstrong forces nominalism and transcendent realism into the Procrustean bed of reductive analysis that the regresses seem to be convincing in any way at all. Armstrong's indirect proof fails because no theory can do without primitive predication at some level, and because viciousness does not consist of leaving terms unanalysed.

I think the foregoing argument is correct but it is important to realize exactly what it shows. It is not an argument for nominalism per se. One cannot conclude from it that there are only particulars in the world and/or that all things in the same category share only an appellation. What it does show is that Armstrong's argument against nominalism is spurious because it is motivated by a demand that cannot be met. Ironically, if his criticisms were genuine, they would cut against his own theory just as deeply. Fortunately, they are not.

XII. The Thought Experiment

Even if Armstrong defers to the foregoing argument, his attack has not yet been fully quelled. Believing his arguments against nominalism and transcendent realism to
have been successful, Armstrong attempts to point out a further implausibility of the theories by indicating a supposed consequence that would seem to be unacceptable. He points out the supposed unacceptable consequence by asking us to perform a certain thought experiment. In the section entitled "Can predicates determine properties?" Armstrong suggests the following:

According to Predicate Nominalism, an object's possession of (say) the property, being white, is completely determined by the fact that the predicate 'white' applies to this object. But now let us make a thought experiment. Let us imagine that the predicate 'white' does not exist. Is it not obvious that the object might still be white? If so, its whiteness is not constituted, by the object's relation to the predicate 'white'.

Remember, Armstrong characterized predicate nominalism as:

\[ a \text{ is an } F \text{ iff } a \text{ falls under the predicate '}F' \text{.} \]

And he interprets this as, what properties there are in the world depends upon our language or what predicate resources we have at hand. And since, for Armstrong, properties are universals, and also physical (because he is a materialist) the existence of a property cannot be dependent upon
language, because words cannot effect physical reality in a
direct causal way. Therefore this is further reason to
believe that nothing external to an object is relevant to
what properties an object has, and nominalism, despite the
argument against the regresses, should still be eschewed.

It is obvious that an object would still be white even
if the predicate "white" did not exist. How could an
arbitrary, conventionally designed string of phonemes have
any effect whatsoever on the existence of the physical
properties of some object? "0, be some other name! What's
in a name? That which we call a rose, by any other name
would smell as sweet." But is this a good reason to
eschew nominalism? More specifically, is Armstrong's
characterization and interpretation of predicate nominalism
fair?

There has been in the tradition an extreme
interpretation of nominalism that I like to call the
performative utterance interpretation. This position is
best characterized by Humpty Dumpty. ("When I use a word it
means just what I choose it to mean--neither more nor
less") The claim that there is nothing common to a class
of particulars called by the same name other than that they
are called by the same name is like Humpty Dumpty's
statement. Words can mean what we want them to mean, and
our calling a group of particulars by a certain name in a
sense makes them what we call them. This seems to be what
Armstrong means by predicate nominalism.
Indeed this position does have its place in the history of philosophy, but I fear Armstrong is setting up a straw man. If one argues that nominalism is best characterized by the performative utterance interpretation, then it seems doomed to failure. This characterization is doomed from the start for at least four reasons. First, if all the individuals called by the same name had nothing in common except for the fact that they are called by the same name, then no reason could be given why they and no others had that name. In virtue of what would you exclude any object from the category if you can call anything by any name you want? Second, a closely related argument is that this characterization cannot account for the difference between something being called "F" and its being properly called "F". That is, a sufficient condition for something being an F cannot be its being called "F" because "this does not do justice to any of the normative notions associated with language use, (for example) the contrast between truth and falsity, (and) the possibility of misdescribing and so on."30 The third argument is that it would be miraculous for different people to agree in their independent application of a general term if objects had nothing in common. "That is, if we imagine the not unusual circumstances in which two competent English speakers are each separately confronted by an object they have never before seen and both agree that it is a dog, how is the nominalist to explain this fact if not by appeal to the
similarity between this dog and others." And the final argument is the one already given by Armstrong.

The best conclusion to derive from these arguments is not, as Armstrong would want, that nothing external to an object is relevant to what properties the object has, but rather that, if we regard the position characterized above as the best way to think of nominalism, then it is hard to believe that anyone ever actually tried to hold it. For surely attribute-agreement does not depend upon language. Objects can agree in their attributes even where language lacks the predicate resources for expressing their agreement. It seems we are justified in looking for a more tenable characterization.

Fortunately not all nominalists have stated their position in this unsatisfactory way. Most characterize their view by saying that two objects agree in property because they are, for instance, both red and that this fact is fundamental and does not presuppose the existence of any additional entities. A famous passage of Quine's is salient here.

One may admit that there are red houses, roses, and sunsets, but deny except as a popular and misleading manner of speaking, that they have anything in common. The words 'house', 'rose', and 'sunset' are true of sundry individual entities which are houses, roses, and sunsets, and the word
'red', or 'red object' is true of each of sundry individual entities which are red houses, red roses, and red sunsets; but there is not, in addition, any entity whatever, individual or otherwise, which named by the word 'redness' nor, for that matter, by the words 'househood', 'rosehood', 'sunsethood'. That houses, roses, and sunsets are all of them red may be taken as ultimate and irreducible.\textsuperscript{32}

What Quine is saying is simply that objects agree in attribute because of how they are and what they are, not because they exhibit abstract entities, and (most importantly) not because of language. Words do not determine reality and within nominalism there is no necessary connection between the claim that all two objects in the same group share is a name and the claim that words somehow completely determine reality. Nominalists like Quine claim there is no objective generality in reality, and that generality is located in our words (or minds). Not, however, as Armstrong thinks, that objects have properties in virtue of falling under certain verbal categories. That idea is the performative utterance interpretation, that somehow words (or concepts) are generative of what exists. But nominalism does not necessarily have this generative aspect. The properties an object has are determined by what the object is, and that is just a brute fact of nature.
All that nominalism has to claim is that, what we really mean when we say that many different objects are white is that there is no entity that all of those objects share except that we are willing to subsume, because of our interests and beliefs, all of those entities under one category. So in a sense there is something they all share: we call all of them by the same word. But that is not constituting or completely determining an object's possession of a property.

Words (concepts) have an importance for nominalists that they lack for realists, but the importance does not lie in their power to determine properties (in the sense of causally effect). Armstrong's extreme materialism has skewed his interpretation of nominalism. Predicates do not make objects have the properties they do, natural objects have the properties they do because of nature.

I understand that the position emerging from these comments is at this point nothing more that a few hints. This position will be developed further later. But for now it seems fair to say Armstrong has set up a straw man, and therefore his conclusion that nothing causally external to an object is relevant to what properties it has, has not been proven.

XIII. Causality

The concept of causality does double duty in Armstrong's theory. It is first appealed to in order to
show that an object has its properties in virtue of nothing causally external to it. Second, it is put forth as one of the fundamental theorems of his theory, purporting to show a necessary condition for the existence of any entity. The two ideas are connected in indirect ways that should become clear later on. But first let us examine the concept of causality as it functions as the fourth argument to show that the properties of an object are inherent and independent of anything external to it.

In the section entitled "Predicate Nominalism and Causality" Armstrong puts forth the following argument:

The next argument depends upon there premises. First, there are causes in nature. Second the causal order is independent of the classifications which we make. Third, what causes what depends solely upon the properties (including relational properties) of the cause and effect. From this it follows that properties are independent of the classifications which we make, and thus that the Predicate Nominalist's account of properties is false.33

Two qualifications are in order. First, a reminder: as noted before, M.C. Bradley criticizes Armstrong's choice of formulating the problem of attribute-agreement as an attempt to give a reductive analysis of types, and suggests
alternative formulations. Bradley criticizes Armstrong's notion of causality for the same reason. He asks why we should believe the third premise above and cites Armstrong as claiming that we should, because we naturally think of the action of causes as determined by their properties.\textsuperscript{34} But Bradley goes on to say:

if one aimed to solve, not the supposed problem of properties, but rather the problem of general terms, and to do so by a theory which did not undertake to analyse by its own resources each accepted truth of property-discourse, one might regard it as adequate to observe that $x$ causes $y$ where there is a law connecting $x$ and $y$ (under some description of them); and laws are linguistic entities.\textsuperscript{35}

And he concludes that "the argument from causation is not obviously a separate argument against Nominalism unless we make Armstrong's analytic assumptions about formulation and method."\textsuperscript{36} I argued earlier that Armstrong's formulation of the problem was legitimate, and that he has good reasons for not seeing the problem in linguistic terms. Therefore I will not rehearse them here. But even if Bradley were right about someone regarding it as adequate to observe that under some description, the law $x$ causes $y$, is a linguistic entity, it would not mean that Armstrong's program should
not be attempted. For some of us do naturally think that the causes of actions are determined by their properties, and those people might regard it as adequate to observe that the law \( x \) causes \( y \) is not a linguistic entity.

The second qualification has to do with a possible vagueness in the second premise of Armstrong's argument above. There is a certain sense in which the classifications we make are not independent of the causal order. It all depends upon how one interprets "classifications we make". And Armstrong, I believe, does not have the following in mind. If one emphasized the "make" part, and interprets that as the actual utterances of strings of phonemes that we pronounce, or the actual marks on a piece of paper that we write, then one could claim that the classifications we make are not only not independent of the causal order, but are examples of events well within the causal order. After all, the actual utterances of strings of phonemes that we pronounce do cause the air around us to undulate at certain frequencies, and, if in close enough proximity to some listener, do cause the membranes of his ear drums to reverberate. Once could also sketch out the causal process of seeing the written marks on a piece of paper.

But this cannot be what Armstrong has in mind. He would, of course, accept these as paradigm cases of causal efficacy in the natural realm. His intention is, however, to claim that what causes what, is irrelevant to what we
call it. A rose by any other name would smell as sweet. Therefore, with these two qualifications, let us continue the examination of the fourth reason as to why Armstrong believes that nothing external to a particular is relevant to what properties it has.

If there is a causal order independent of us and properties are what is important in the causal order, then obviously properties are independent of us. Nevertheless I want to argue that Armstrong's victory remains a limited one for the following reason. Armstrong's fourth reason for claiming that nothing external to a particular is relevant to what properties it has suffers from the same problem as his third reason: his interpretation of predicate nominalism is a straw man. If one interprets predicate nominalism as the position which claims that our predicates somehow have causal efficacy on particulars, that somehow our words actually determine in a physical way which properties an object has, then, one is misinterpreting predicate nominalism. At least predicate nominalism does not have to be seen in that way. As was said before nominalism denies the existence of multiply exemplifiable entities by claiming that objects are put into categories because of our interests and desires and also that, why a natural object is what it is, is a brute fact of nature. It seems that Armstrong is conflating two distinct questions: 1) "By virtue of what is an object put into a specific category?" and, 2) "By virtue of what does an object have a
property?" One could read these questions as asking the same thing, but that interpretation is by no means necessary. A nominalist would claim that a natural object has its properties in virtue of its various parts being arranged in the requisite way, and that is a natural, fundamental fact. A nominalist could also maintain that why an object is put into a certain category depends upon our interests and beliefs. But he need not answer the second question with this latter reply.

This suggestion has a bit more to it than the few hints mentioned in the previous section, nevertheless I realize it needs a more sustained defense. But as was also promised in the previous section, that defense must come later. For now the claim is that Armstrong's argument is valid only if one interprets predicate nominalism in his highly materialistic way. I hope these few intimations have made it seem at least tentatively plausible that his interpretation is not necessarily the only one that can be made.

Before we can give a solution to the question of whether or not objects have properties inherently, or whether or not properties are mind dependent, we should first examine what properties there can be. We need to know what can exist before we can say where these things are located. Therefore the second role that causality plays (as a proposed necessary condition for the existence of any entity) will be examined.
XIV. Causality and Existence

An interesting aspect of Armstrong's theory is that so many problems can be solved and so much can be accounted for within a relatively sparsely populated ontology. His ontology is not quite as sparse as a nominalist's would be, but it is still a very limited one which consists of "nothing but particulars having properties and (being) related to each other" (Hereafter referred to as AO). Conspicuously absent from his ontology are the various entities that might be gathered under the label "abstract". Armstrong bemoans the fact that

A bewildering variety of additional entities have been deemed necessary by some philosophers. There have been postulations of transcendent universals, a realm of numbers, transcendent standards of value, timeless propositions, non-existent objects such as the golden mountain; possibilia and/or possible worlds, 'abstract' classes which are something more than the aggregate of their members, including unit-classes and the null-class.

It is the ability to reject abstract entities that Armstrong considers to be one of the major advances and contributions of his work. What allows him to eschew these entities is his proposed necessary condition for the existence of any entity: causal efficacy. He claims that
if an entity cannot act upon or be acted upon by anything in the natural realm, then we have no good reason to say it exists. The attempt to eliminate abstract entities, by using this notion of causal efficacy in the natural realm, comes in the form of a dilemma:

It seems an upholder of our moderate but minimal Realism can advance an single very powerful line of argument which is a difficulty for them all. (All those who postulate the existence of abstract entities). The argument takes the form of a dilemma. Are these entities capable of acting upon particulars or are they not?\(^{39}\) (My parenthetical remark)

In other words, if abstract entities are capable of acting upon particulars, then a convincing and satisfactory account of how they do must be given. And if they do not, they can play no role in explanatory science. ("In what way, then, can the latter [abstract entities] help to explain the properties and behavior of spatio-temporal particulars?"\(^{40}\) And if they cannot do that, then we have no compelling reason to postulate them.

I do not want to argue that abstract objects effect physical particulars in the highly materialistic way Armstrong presumes. But I do want to argue that for a certain class of phenomena (phenomena in need of explaining
just as much as any other scientific datum) explanation involves more than just causal efficacy. More specifically I want to argue that our interests and desires, things external to physical particulars (a nominalistic component), not only can be relevant and needed in a scientific explanation, but for a certain class of phenomena, must be appealed to. In other words, Armstrong's dilemma is not exhaustive. A third category, not only can, but must be appealed to in certain cases. But first let us examine:

XV. The First Horn of the Dilemma

Again, the dilemma posed by Armstrong is: are abstract entities capable of acting upon particulars or are they not? The problem of the first horn is that, if abstract entities are capable of acting upon particulars, then how exactly do they do it? Armstrong argues that it is just implausible to believe that abstract entities can act upon a central nervous system. For example, in Descartes' dualist interactionism no plausible suggestion has been made as to where to locate where spiritual happenings have their immediate effects. And in general there has been no plausible suggestion made as to how something non-physical can effect something physical. Armstrong concludes that since no satisfactory account has yet been given there does not seem to be much reason for believing one will.

Obviously one can counter this by claiming that just because a plausible suggestion has not yet been given does
not mean that one never will. But Armstrong could counter by asking how long we are expected to suspend judgement because of a possibility. The mere possibility does not argue for its truth.

I believe that nothing very fruitful lies along this path. We are left with two possibilities: either 1) give an answer to Armstrong's question (and nothing seems to be forthcoming), or 2) show that the problem of how something non-physical can effect something physical does not need to be taken seriously. For this possibility also no obvious argument arises. We can conclude therefore that the first horn of Armstrong's dilemma is successful. The place to drive the wedge is found in the second horn.

XVI. The Second Horn of the Dilemma

The argument for the second horn is characterized as follows:

A spatio-temporal realm of particulars certainly exists. . . .

If any entities outside this realm are postulated, but it is stipulated further that they have no manner of causal action upon the particulars in this realm, then there is no compelling reason to postulate them. Occam's razor then enjoins us not to postulate them.41
From this characterization the argument can be schematized as follows:

1) Abstract entities have no causal efficacy on particulars in the natural realm.

ergo: 2) There is no compelling reason to postulate the existence of abstract entities.

From this schematization it is easily seen that the argument is fallacious. The tacit assumption that must be supplied is:

1') Causal efficacy on particulars in the natural realm is a necessary condition for the postulation of any entity.

If we insert this new premise the argument is valid. And if we assume along with Armstrong that nothing non-physical can effect something physical (the conclusion of the first horn of the dilemma) then 1) may be regarded as true. The question is then, is 1') true?

Before we go on to examine 1') I want first to recapitulate our intended program. Ultimately I want to argue, even if Armstrong is right about causal efficacy being a necessary condition for the existence of any entity, that does not mean that nothing external to an object is relevant to what properties it has. That is, Armstrong
argues that, because there are causes in nature, and that the causal order is independent of the classifications we make, and because what causes what depends upon the properties in the cause and the effect, that therefore what properties there are, are independent of the classifications we make. The first premise seems unassailable, and we have already agreed to accept the third (page 85), but why should we believe the second, i.e., that the causal order is independent of the classifications we make? Well, one way to look at causal efficacy, Armstrong's proposed necessary condition for the existence of any entity, is to see it as a way to support indirectly, this second premise. If causal efficacy is truly a necessary condition for the existence of any entity, and if the classifications we make are not causes in the natural realm, then the causal order is independent of the classifications we make. So, before we can decide whether or not Armstrong's fourth reason for claiming that nothing external to an object is relevant to what properties it has, we must first examine his proposed necessary condition for the existence of any entity: causal efficacy. I want to argue that, ultimately, he does not have a coherent position on causal efficacy, but also that even if he did, that would not rule out the possibility of something external being relevant to what properties an object has. As was claimed earlier, there is a certain set of phenomena that necessitates appealing to our interests
and desires, if we are to give a complete explanation of them.

XVII. Causal Efficacy

Now let us examine l'. l' has been dubbed the Eleatic Principle,\textsuperscript{42} and may be tentatively characterized as follows:

EP: Only those things which are causally active are real.

Simply put, the Eleatic Principle states that all things are causally active. (If something is not causally active it is not a "thing".) And because explanation involves causation, any purportedly real entity, if it is not causally active, can play no role in explanatory science. ("In what way . . . can [non-causally active entities] help to explain the properties and behavior of spatio-temporal particulars?"\textsuperscript{43}) And if they cannot help us to explain the behavior and properties of physical particulars then there is no reason to postulate them.

A criticism of l' has appeared in the recent literature. Graham Oddie\textsuperscript{44} argues that there are no unobjectionable versions of the Eleatic Principle, and then claims that Armstrong himself actually endorses a sort of Quinean ineliminability thesis. In order to facilitate our examination of l', I will follow the structure of Oddie's
article and use it as a vehicle for my own comments and criticisms. First, I want to argue that Oddie is correct about there being no unobjectionable version of the Eleatic Principle, but not for the reasons Oddie gives. I will show that the reasons Oddie appeals to are untenable because he fails to assess adequately Armstrong's motivations. Next, I want to defend Armstrong against Oddie's second criticism. Perhaps Armstrong should defend a sort of Quinean ineliminability as a criterion for existence, but as a matter of fact his criterion is decidedly different than Quine's.

Before we evaluate the Eleatic Principle we first need to examine what Armstrong means by causation. For if, in EP, the concept of causation is left understood at an intuitive level, problems arise immediately for Armstrong's theory. They arise in the following way. Since Armstrong is a realist about the laws of nature it is possible to derive, using EP, a rather unfortunate consequence. Consider the following argument:

1) Laws of nature exist.
2) Only those things which are causally active exist (EP).

\[\text{ergo:} \quad 3) \text{Laws of nature are causally active.}\]

One might agree that laws of nature describe the behavior of certain phenomena, and even that they somehow
have independent existence. But it is difficult to see how they might cause something to happen. Perhaps, after examining what Armstrong means by causation, he can be freed from this unfortunate result.

XVIII. The Relation of Causation

Causation is a special case of what Armstrong calls "neces-sitation".46 "The first point which an Empiricist must insist upon is that the relation between universals involved is not logical necessitation".47 So necessitation is physical, and it is a relation between universals, not particulars. F-ness necessitates G-ness, just in case possessing the property F brings about possession of the property G in a particular. But necessitation does not amount merely to Humean regularity. F necessitating G makes a regularity but regularity and necessitation are not identical. Because of the possibility of cosmic coincidence it is possible to have regularity without necessitation. Necessitation is stronger in that it explains the regularity. And finally, necessitation supports counterfactuals, whereas the Humean account cannot. That is what Armstrong says about the relation. Now let us consider what he takes to be the relata of the relation.

XIX. The Relata of Causal Relations

At one point in his theory Armstrong proposes that:
we try to give an account of causal and nomic connection in terms of second-order relations: irreducible relations between first-order universals.48

He fleshes out his proposal like this:

Al: Let us suppose that a certain object, a, is acted upon and, as a result, during the succeeding interval, t, it undergoes a series of changes, E . . . since E is a perfectly definite sequence of properties and t is, let us suppose, a perfectly determinate lapse of time, . . . undergoes E during lapse of time t will be a true property. It is this first order property which is the second term in the non-symmetrical higher-order relation of nomic necessitation.49

And what about the first term of the relation?

These relevant non-relational and relational properties of a may be taken conjunctively. As such they form a single, very complex current property of a. Let us call this property "C". It is being C which necessitates undergoing sequence E during lapse of time t.50
Since properties are universals, it is obvious from the characterization that Armstrong regards causation as a relation between universals.

Let us apply Armstrong's proposal to an example of a singular causal statement. And in order to facilitate criticism, let's look at the logical form of the example.

1): The rock broke the window.

The ontology of Al seems to consist of objects, which are particulars, and universals. With this ontology, the logical form of 1) is made more perspicuous by:

1'): There exists objects o and o' and there exist properties p and p' such that o has p and o' has p' and p caused p'.

Unfortunately for Armstrong, however, if this interpretation is accepted, then he has excluded from his ontology some of the very entities the existence of which he wishes to defend. The result of combining EP, AO, and Al would make it necessary for Armstrong to exclude the existence of particulars, one of the basic components of his ontology. This can be seen as follows:

1) Particulars are not the relata of causal
relations.

2) If an entity does not enter in a causal relation, then it cannot have causal efficacy.

ergo: 3) Particulars have no causal efficacy.

4) Only those things which are causally active exist. (EP)

ergo: 5) Particulars do not exist.\textsuperscript{51}

Therefore, on pain of inconsistency, Armstrong must reject this interpretation.

Strangely enough, there seems to be another interpretation in with the first. He also seems to be saying that causation is a relation between states of affairs. To repeat partially: "\textit{a's undergoing E during a lapse of time t is the thing necessitated (a certain state of affairs).}"\textsuperscript{52} And later, after a complete account of the causal relation is given, he says: "A certain sort of state of affairs brings about a certain sort of state of affairs."\textsuperscript{53} This statement is meant to characterize completely the causal relation and is meant to be a restatement of what was said before about universals. But it seems that is is not merely a restatement, it is a new thesis. States of affairs are not first-order universals. First-order universals are constituents of, but not identical with, states of affairs.

According to this interpretation 1' becomes:
There exists states of affairs S and S' such that S is the rock's having hardness and S' is the window's having of the property of undergoing breaking and S caused S'.

But Armstrong cannot maintain this interpretation. In order to see why, we must look at what he says about states of affairs. He defines a state of affairs as:

\[ \text{DSA: a particular's having a certain property or two or more particulars standing in a certain relation;}^{54} \]

and he gives this qualification:

\[ \text{QSA: states of affairs seem not too dissimilar from Wittgenstein's facts. In the Tractatus (1) he said that the world was a world of facts not things.}^{55} \]

Armstrong likens his notion of states of affairs to Wittgensteinian facts. But remember, it is true that for Wittgenstein, facts are states of affairs.\(^{56}\) But states of affairs are a combination of objects or things.\(^{57}\) Armstrong cannot maintain that the relata of causal relations are states of affairs for reasons similar to why he cannot maintain the relata are universals: the proposed entities
are not contained in his stated ontology. AO says there are things with certain properties that stand in certain relations to one another. And these things are part of the natural realm, and they have causal efficacy in the natural realm. The question then becomes: do facts have causal efficacy in the natural realm? The answer to this question is no. The things that comprise a state of affairs, for Wittgenstein, are objects found in the natural realm, but the state of affairs itself is not. It is much more abstract. A state of affairs, therefore, cannot have causal efficacy, and therefore, cannot exist. So, if Armstrong maintains that states of affairs are not too dissimilar form Wittgensteinian facts, and that states of affairs are the relata of causal relations, then he has added something new to his previously stated ontology.

But, Armstrong might say that 1") is only a superficial rendering of 1), and that something more is involved in the notion of a state of affairs. There are, at least, two interpretations that might be given. The first is that a state of affairs might be a relation between ordered pairs made up of particulars and properties. The second is that a state of affairs is, itself, a relation between particulars and properties. 1") revised according to the first suggestion, would be as follows:

1"R): There exist ordered pairs o and o' such that

  o is the ordered pair consisting of the rock
and hardness \(<r, h>\) and \(o'\) is the ordered pair consisting of the window and undergoing a sequence including \(<w, b>\) and \(o\) causes \(o'\).

This does add some complexity to the interpretation of \(1''\), but unfortunately it is no more tenable than the unrevised version. It is no more tenable because a type of entity involved in its ontology is explicitly forbidden by AO. An ordered \(n\)-tuple is usually considered to be a set, and sets do not exist because they cannot act or be acted upon entities in the natural realm. So, this interpretation is plagued by the same problem as the other interpretations.

Another way of bolstering the notion of a state of affairs is to claim that it is a relation between particulars and properties so that the logical form of \(1''\) would become:

\[
1''R': \text{ There exist objects } o \text{ and } o' \text{ and there exist properties } p \text{ and } p' \text{ such that } o \text{ has } p \\
(H(o, p)) \text{ and } o' \text{ has } p' \text{ } (H(o', p')) \text{ and } H(o, p) \text{ caused } H(o', p').
\]

This suggestion is much more difficult to dismiss, but something can be mentioned that would make it implausible for Armstrong to maintain. If \(o\) and \(p\) and \(o'\) and \(p'\) are each related by the relation of "having", then a (vicious)
infinite regress ensues. If o has H to p, then would it not be necessary for o to have some further relation that would relate it to H? The same would be true of H and p. And, of course, this new relation between o and H would require another relation to relate it to o and itself, and H and itself. Because of this regress it seems as if we would never be able to point to any one thing and say that it is a relatum of a causal relation. Pointing to any one relation between an object and its property would require also pointing to an infinity of other relations.

If the foregoing arguments are plausible, neither universals alone nor states of affairs alone can be the relata of causal relations. Neither suggestion can work singly so perhaps they might work together. Two possibilities arise: 1) universals could be related to states of affairs like properties are related to (Lockean) substratum; 2) universals are to be used in the general explanation of causality, while states of affairs are to be used in the explanation of any specific causal relation. Let us look at 1) first.

1) Think of a state of affairs in the same way substratum is thought of. A state of affairs might be considered as a metaphysical substratum that supports and is distinguished from any universals that the objects (the window and the rock, from the example) instantiate. We can think of states of affairs as supporting universals, or on the other hand, universals inhering in a state of affairs.
Within a specific state of affairs, what really does the action, what we attribute causal efficacy to, is the universal that is supported by some specific state of affairs. States of affairs and universals could never be found separately. So, it is not just universals, nor is it just states of affairs, but it is universals supported by states of affairs that are the relata of causal relations.

However plausible this suggestion might sound, Armstrong is committed to rejecting it for at least two reasons. First, words like "support" and "inherence" are only metaphors. And if they are taken literally, they do not capture the nature of the relation between universals and states of affairs. A state of affairs is not underneath a universal as "pillars are underneath a roof, not do they inhere in the substratum as burrs inhere in wool. But if the words are not to be taken literally, how are they to be taken?" Because these metaphors are not clear, the suggestion loses some of its intelligibility, as Armstrong himself sees.

And even if the vagueness of the metaphor is not enough to compel us completely to reject this suggestion, the second problem is much more convincing. The suggestion that a relatum of a causal relation is composed of a state of affairs related in a certain fashion to a first-order universal is (like 1"R" above) involved in a vicious regress. A state of affairs is related to a universal by the relation of support. But it seems also that a further
relation is required in order to relate the state of affairs with the relation of support. And, of course, a further relation is required in order to relate the state of affairs with the new relation. A regress clearly ensues. And the regress is vicious because each new postulation must be appealed to in order to explain the entire phenomenon.

2) Now let us look at the suggestion that universals are related to states of affairs as general is related to particular. That is, when we explicate general causal connections we might attribute what causes what, to universals. And when we explicate particular causal sequences, we might attribute causal efficacy to a state of affairs. A window, a certain propertied particular, is broken because a rock, another propertied particular, hits it. So, when this specific rock breaks that specific window, we have a certain state of affairs. But, whenever we have rocks breaking windows, the causal efficacy is attributed to the universals that all the windows share and all the rocks share.

Now this interpretation does seem to have some intuitive plausibility. Wherever we have any specific causal sequence, propertied particulars are what are involved. But what makes each causal sequence of that type, be the type that it is, is the universal involved. And with universals being the relata of general causal sequences, this suggestion seems to be compatible with EP. It avoids the first criticism (page 100) because there is no one
specific particular involved in any general causal sequence. Therefore, EP is not applicable in this situation and Armstrong's ontology remains intact.

Even though this suggestion avoids the first criticism, it will not save Armstrong from the second. States of affairs, if they are not unlike Wittgensteinian facts, still do not exist according to Armstrong's own criterion. EP is applicable to specific causal connections and according to it we have no compelling reason to postulate the existence of states of affairs.

It might be argued that my criticism of states of affairs being like Wittgensteinian facts (and therefore non-existent) misses the point. Armstrong might claim that too much is being made of his perhaps off-hand remark that states of affairs are "not too dissimilar form Wittgenstein's facts." For, after all, he does compare states of affairs to what he calls "thick" particulars. Here is what he says:

A conjunction of properties in a particular is itself a property of that particular. The properties of a particular therefore form a single property--the "nature" of that particular. Hence a particular in the "thick" sense is a particular in the "thin" sense possessing a property. Hence it is a state of affairs. So we can say both that the world is a world of particulars in the "thick"
sense and that it is a world of states of affairs. We are saying the same thing in different words.\textsuperscript{59}

And, according to Armstrong, a "thick" particular is:

\textbf{TKP:} a thing taken along with all of its properties.\textsuperscript{60}

And a "thin" particular is:

\textbf{TNP:} a thing taken in abstraction from all its properties.\textsuperscript{61}

Any material object is a thick particular; a chair, for instance, including all of its properties of color, mass, etc. A thin particular is that in virtue of which it (the chair) was a particular--its particularity.

First of all, strictly speaking, saying that the world is a world of thick particulars, and that it is a world of states of affairs, is not saying the same thing in different words. In order to make this apparent, let us paraphrase TKP as follows:

\textbf{TKP':} a particular having a certain property (and this property can consist of a conjunction of properties).
Contrast TKP' with Armstrong's definition of a state of affairs:

**DSA:** a particular's having a certain property.

When TKP' and DSA are compared, the difference is obvious. TKP' picks out a proprieted particular in the natural realm. But DSA seems to be emphasizing the having of a property. TKP' picks out a physical particular. DSA picks out an action or event.

The conclusion that can be gleaned from all this is that even if Armstrong did not intend his states of affairs to be thought of as Wittgensteinian ones, states of affairs in any case cannot be the relata of causal relations. Actions or events are not part of A0.

This brings us to one last attempt to make Armstrong's proposal plausible. Talk of thick particulars suggests another interpretation. Perhaps we should think of thick particulars as the relata of causal relations. Under this interpretation, the logical form of 1) would be:

1''): There exist thick particulars T and T' such that T is some rock possessed of hardness and T' is some window possessed of some property of undergoing a certain sequence of events including breaking and T causes T'.
This suggestion is indeed a good one. It is compatible with AO and EP. And if we deny (as Armstrong does\textsuperscript{62}) that particulars and properties are related, then it also does not fall to the infinite regress. But can this more sophisticated interpretation save Armstrong from the initial criticism (page 100)? This suggestion does suffer from another problem. And this problem has to do with Armstrong's account of relations in general. Therefore, the criticism of 1") will be taken up in the next section.

XX. The Causal Relation Itself

At this point we can make a preliminary conclusion. Most of the suggestions as to what the relata of the causal relation might be just do not seem plausible. There are regresses galore that more than compromise his materialism and scientific empiricism. We have not specifically examined the most plausible suggestion so far: that the relata are thick particulars. But it is not necessary to do this in order to show that Armstrong's position is incoherent. There may be problems with this suggestion, but let us, for the sake of argument, suppose there are none. Even if we allow this, Armstrong's position is incoherent because the causal relation of necessitation is itself objectionable. It is objectionable for two reasons: 1) necessitation itself falls subject to an infinite regress, and 2) it is susceptible to the same unhappy result of our initial criticism (page 100). Let us look at 1) first.
Oddie shows how the regress ensues in the following way: the relation of necessitation itself must not, on pain of inconsistency, be excluded from the realm of application of the Eleatic Principle. So, if necessitation is to exist it must be causally efficacious. And if it is to be causally efficacious, it must enter into the necessitation relation with thick particulars. But since necessitation is a second-order relation, it can not enter into second order relations with other universals. It cannot enter into a relation on the same level that it is:

Hence if necessitation is to exist there must be a third-order relation of necessitation, necessitation*, into which necessitation can enter with other universals. Now necessitation* exists ex hypothesi and so, by the Eleatic Principle it must enter into some 'necessitation' or necessitation*, and so there must exist an fourth-order relation of necessitation, necessitation**.63

Because Armstrong maintains that the relation of necessitation is not on the same level as the relata of the causal relation, and that the relation of necessitation itself must enter into a necessitation relation if it is to exist, it seems that Oddie's regress is inescapable. This result more than compromises Armstrong's radical empiricism. This result is incompatible with his previously stated claim
that the question of what properties there are in the world should be decided by empirical means, by total science, and not by a priori means. This regress was generated a priori.

2) The relation of necessitation itself suffers from the same kind of problem as does the argument at the beginning of this section (page 100). If we substitute "necessitation" for "laws of nature", we get:

1) Necessitation exists.
2) Only things which are causally active exist.

ergo:
3) Necessitation is causally active.

It is difficult to see how a relation itself can cause something. In any case one need not account for any situation of cause and effect in that way. When two chemicals are brought into contact, for instance, a certain reaction occurs. But in giving an account of this should we say, as Armstrong must, that the relation somehow exerts some force or has some efficacy upon the relata of the causal relation, that somehow helps or makes possible the chemical reaction? We can say (following Hume) that two chemicals can be spatially contiguous with each other and the reaction occurs, yet deny there is an extant relation of necessitation exerting its force on the two chemicals. We need not accept the existence of a causally efficacious relation necessitation, in order to claim that this relation
exists. We can just jay that what it is for this relation to exist is that there exist, in a concrete spatio-temporal sense, spatially contiguous, constantly conjoined things.

XXI. Conclusion: The Relation of Causation

So, for many reasons we have seen that Armstrong's version of the relata of the causal relation and the causal relation itself are untenable. First it is very difficult to find a plausible suggestion as to what the relata might be. Second, even if we accept uncritically thick particulars as the relata, the causal relation of necessitation itself is unacceptable. It is unacceptable because one can generate a priori an infinite regress that is incompatible with Armstrong's avowed empiricism. And because it is difficult to see how the relation of necessitation itself can cause anything, or why we must account for cause and effect that way.

XXII. The Eleatic Principle

After this rather lengthy digression we are now in a position to return to an examination of our original problem. That being, is there a plausible version of the Eleatic Principle? As I said earlier, I want to argue that Oddie is right about there being no acceptable version to it, but for reasons other than he gives. I want to argue that Oddie fails to assess adequately Armstrong's motivations for the Eleatic Principle. After that I want to
defend Armstrong against Oddie's criticism, that Armstrong's principle is ultimately identifiable with Quine's ineliminability criterion.

As was noted earlier, the Eleatic Principle simply states that all things are causally active. After arguing, I think successfully, that this principle cannot be a logical truth Oddie examines the alternative that it might be interpreted as a factual claim. But if interpreted in this way, asks Oddie, what reasons do we have for thinking this claim to be true? If we could discern causal connections between abstract objects and the natural realm then we would know the principle is true. But since we cannot do this there are two possibilities: Either abstract entities exist and Armstrong is wrong, or abstract entities do not exist and they do not give us any counter-examples to the principle. "How could we possibly decide between these two hypotheses?" 64

This situation is very much like to Kantian stance on the distinction between noumena and phenomena. We can only deal with phenomena, says Kant, we can never get to noumena. Abstract entities, in Oddie's version of Armstrong, are like noumena: unattainable through empirical means. We could never know if our claim about the existence of abstract entities were true or false, if we say that something exists without that thing being empirically attainable, because we start from the premise that all our knowledge is empirical. If something is beyond our means of knowing about it, then
we could not affirm or deny its existence. We could not say anything about it. We can only deal with phenomena, not noumena.

Armstrong's position is not exactly like Kant's because Armstrong does give us a way to decide between the two hypotheses Oddie elucidates. If the entity helps us to explain the behavior of some spatio-temporal particular, then we can say it has causal efficacy and that it exists, even if it were sub-visible. How could it help us to explain if it did not exist, Armstrong would ask. Explanation involves causation and if a phenomenon is to be explained then the entities postulated for that explanation must be causally involved. And if abstract entities cannot be causally involved then we should not affirm their existence. (More will be said about this shortly.)

Believing his argument about the necessitation regress to be successful, Oddie concludes the first version of the Eleatic Principle is unacceptable. He then suggests a mitigated version of the principle in order to try to save what he considers to be Armstrong's basic intuition. Oddie's revised Eleatic Principle states that thing exists if it is conceivable that it play some role in the causal structure of the world. He then attacks this new version on the vagueness of the word "some". His argument is as follows. Someone weighs 100 kilos. Whenever this person climbs his stairs they creak. His weighing 100 kilos plays a role in the creaking of the stairs "and so it would seem
that derivatively the number 100 also plays a role, however slender. Does this make it a candidate for existence? If not then it becomes obscure what principles operate in deciding whether an entity does play a causal role in a situation. 65

In other words, Oddie is arguing that if Armstrong allows numbers to play a causal role in a situation, however slender, the result is a bad one 66 for then every positive real number plays a role in this same situation because it is possible to change the unit of measurement. And if numbers are not allowed to play a causal role the result is also a bad one, for how are we deciding whether (what principles are we appealing to), an entity does play a causal role?

Because this notion of causal efficacy is obscure, Oddie suggests that the principle that we are really appealing to when we make the decision about what entities have causal efficacy and which do not is really a sort of Quinean ineliminability principle. He says:

In the above examples the notion of playing a role in the causal structure of the world has been cashed out very simply. The principle that has been tacitly appealed to is this: if all descriptions of an aspect of the causal structure of the world make reference to an entity or a type of entity, (so that reference to that entity or
entities of that type is not eliminable) then that entity or that type of entity plays a role in the causal structure of the world. Suppose that it is possible to give truth-conditions for all statements in a set S without making reference to some entity X. We will describe this by saying that it is possible to give a reductive analysis of X for the set S.\[^{67}\]

At first blush it seems odd for Oddie to compare and ultimately identify Armstrong's criterion for existence with Quine's. It seems odd because the two criterion obviously allow for the existence of different entities. Quine is notoriously a reluctant Platonist, accepting abstract entities only grudgingly because physicists need mathematics and mathematics is "up to its neck" in abstract entities. While Armstrong explicitly denies the existence of abstract entities and proposes causal efficacy as the criterion we can use to reject them.

As a working hypothesis Quine's criterion can be characterized as follows: what exists is what is presupposed by the apparatus of the best theory about the world. This implies that the apparatus of the best theory about the world (at some time t) could presuppose entities that lack causal efficacy. If it is not possible to eliminate the entity from the theory through some reduction, then that entity is necessary for explanation and we can
conclude that it exists. But it does not follow from that, that every entity that is ineliminable from a theory is causally efficacious. Quine's position on numbers is a perfect example. Nowhere does he attribute causal efficacy to numbers, (sets), he only says, reluctantly, they are not eliminable.

If this situation is plausible it seems that Oddie's suggestion is incorrect. Oddie's attempt to identify Armstrong's criterion with Quine's is unsuccessful because testing for causal efficacy is not the same thing as giving a reductive analysis. In testing for causal efficacy one devises and performs empirical experiments designed to isolate the effects of a certain particle, for instance. But one could hardly call giving a reductive analysis an empirical "test" at all. There is no "test". Science and its experimental method are not involved. But Oddie might ask, "Does not being a necessary part of the explanation give the entity its required causal efficacy?" It seems Armstrong could answer this question with a resounding "no". Oddie's strongest argument is that Armstrong's criterion leaves obscure what principles are at work in deciding whether an entity plays a causal role in a situation. In his example about the heavy man and his creaking stairs Oddie claims the number 100 (and for that matter any number) plays some role in the situation, albeit slender. But does it?
To see why it does not, let's look at his example once more. Oddie claims that if the number 100 plays a role, then every positive real number can play a role because we can change our basic unit of measurement. But how can completely different objects have the same effect on an object? That is, we expect different entities, because they are different, to have different effects on any specific particular. And because the number 1 and the number 490,287,653 are, presumably, different entities, we would expect them to have different effects in the same situation, even if numbers themselves only had a slender part in the total effect to begin with. But in Oddie's example, changing the basic unit of measurement would not effect the creaking of the stairs. And obviously that is a good thing. One would not expect the stairs to collapse or to stop making noise because the unit of measurement on the scales or the measuring stick were changed. It seems the best thing to conclude from this is, not that every positive real number plays a slender role in causal explanation, but that none of them do.

This intuition might be extended a bit to make Oddie's suggestion seem even less plausible. We have seen that Oddie's example implies that the effect of different abstract entities within a certain category does not change, no matter how much the entities differ within the category. From this we might be able to imply that even intra-categorical differences do not change the effect, no matter
how seemingly diverse the entities in the different categories are. For if entities as diverse as the numbers given above cannot make a difference, then it seems as if no difference in abstract entity could make a difference. If Oddie allows this then any abstract entity could have the same effect on any situation as any other abstract entity.

What these last few points are intended to show is that it seems strange to claim that abstract entities can play some causal role in a situation. Armstrong is not forced to accept this claim at all. He can claim that the numbers in the example are merely man-made conventional labels adopted by us for pragmatic reasons. The fat man has a certain amount of mass, but the units we use to measure or the numbers we use to label the man's mass are not something real, i.e., are not things that have causal efficacy. They are fictions even though they are very useful ones.

Armstrong's proposed necessary condition for the existence of any entity is that the entity must have causal efficacy in the natural realm, not ineliminability. We believe that sub-atomic particles, even though sub-visible, can bring something about the world. They help to give us a causal explanation, and that is what abstract entities cannot do. Just because an entity is ineliminable from a theory does not mean we suppose it to be capable of bringing something about in the world. The Eleatic Principle has something more to it than ineliminability. Every causally
efficacious entity is ineliminable but not every ineliminable entity is causally efficacious.

XXIII. Conclusion

The conclusion to be gleaned from all this is that the notion of causality, at least the way Armstrong interprets it, cannot be used to support the claim that nothing external to an object is relevant to what properties an object has. It cannot be used to support this claim because Armstrong's interpretation of nominalism is a straw man. No nominalist has to, or even has, interpreted predicates as somehow causally determining in a physical way which properties a particular might have. Armstrong is imposing a magical view on nominalism. That somehow simply saying the word makes something happen. "Abracadabra!" and all red things are red. There are, of course, valid examples of performative utterances. For example, "With this ring, I thee wed." The mere fact of uttering the words makes something real. But as I have argued, this interpretation does not capture the main tenets of nominalism.

Another conclusion that can be drawn from the foregoing discussion is that we should not completely dismiss the notion of causal efficacy. The problems Armstrong gets into with it are 1) that the notion of necessitation falls prey to a vicious infinite regress, and 2) it is obscure what principles operate in deciding whether an entity plays a
causal role in a situation. First let us look at 2). I have argued that Armstrong can, and does, appeal to the notion of explanation. The notion of an explanation makes less obscure what principles are at work in deciding whether an entity plays a causal role in a situation. If the entity has causal efficacy in the natural realm, then it can help us to explain the behavior of physical particulars. How could it help us to explain if it did not have causal efficacy, Armstrong would ask.

I said earlier that the suggestion that the relata of causal relations are thick particulars was a good one (page 112-113). It is a good suggestion because it avoids all of the other criticism leveled against the other interpretations. The only thing stopping that suggestion from being plausible is the relation of necessitation itself. If somehow this relation could be gotten rid of and a suitable substitute could be given then perhaps we could retain the remaining good part of the suggestion. And in the last chapter I hope to do at least part of what is necessary.
CHAPTER FOUR:

PARTICULARISM AND THE INCOHERENCE

OF ARMSTRONG'S CENTRAL DOCTRINE

I. Introduction

As was noted at the beginning of this thesis, the general structure of Armstrong's argument has negative and a positive component. So far we have been discussing the part of the negative component dealing with the claim that nothing external to an object is relevant to what properties the object has. If my foregoing arguments are plausible, the Armstrong has failed to show us this. The remaining part of the negative component deals with Armstrong's attempt to show the incoherences of particularism, i.e., the thesis which holds that a property characterizing a concrete object is as particular as the object which the property characterizes.

Armstrong takes G.F. Stout\(^1\) as the major proponent of particularism in twentieth century Anglo-American philosophy. Even though Stout claims his theory differs from nominalism, he argues for a position that is very much within the nominalism tradition:

What then do we mean when we say, for instance, that roundness is a character common to all billiard balls? I answer that the phrase 'common character' is elliptical. It really signifies a
certain general kind or class of characters. To say that particular things share in the common character is to say that each of them has a character which is a particular instance of this kind or class of characters. The particular instances are distributed amongst the particular things and so shared by them.\(^2\)

Like traditional nominalists, Stout maintains the properties of concrete individuals are particular. When there is a case of apparent attribute-agreement, say two pairs of blue jeans of the same color, there exists not only the two numerically distinct pairs of pants, but there are also two numerically distinct blues, even if they are of exactly the same shade. Properties, like concrete individuals, differ numerically from other properties. Not only is it possible to form a class of all the particular pairs of jeans whether they be blue, black, or grey, etc., but it is also possible to form a class of all the specific shades of blue, for instance, whether they are baby blue, azure, or royal.

Unlike traditional nominalists, however, when Stout claims that the properties of concrete individuals are particular, he is not thereby claiming there are no universals. The specific shade of blue of my jeans is a particular, but that does not exhaust the ontological status of the property. The property is also an instance of a
universal. The universal, or in virtue of what the class of specific blues is unified, is described by Stout as a "distributive unity". When we say, "the jeans are blue", the general term "blue" refers not to a specific property but to a general class of properties. Two pairs of blue jeans are both an exact specific shade of blue because each pair of jeans has a property which is a particular instance of that class of blues. The unity is called distributive because all individuals that have this absolutely specific shade of blue have distributed amongst them a particular instance of the class.

But this position leads one naturally to the question of "in virtue of what is a class a unity?" Stout's answer is as follows:

I differ from them (nominalists) essentially in maintaining that the distributive unity of a class or kind is an ultimate and unanalysable type of unity.3

But for Armstrong, Stout's position is unsatisfactory. Exactly why he believes this will be examined in the next section.

II. Arguments for Particularism

Armstrong begins his attack on particularism by examining three arguments that have been given in its
defense. The general conclusion that he derives from his examination is that none of the arguments force us to accept the particularist analysis. Perhaps ultimately this is the conclusion we also should accept, but as it stands, his examination of at least one of the arguments is far too cursory.

A time-honored argument that goes back at least as far as Plato is the problem about the multiple location of a property. Armstrong puts the problem this way:

If the redness of (a) curtain and (a) carpet is identical, as the orthodox (realist) view maintains, then the one entity must be conceived of as being wholly present in a multitude of different places and times. How can this be?4

And (as might be expected) he claims that this argument for particularism begs the question:

It treats identity of property as if it were identity of a particular. A particular cannot be wholly present in a multitude of different places and times. But a property can. This is to say no more than: a number of different particulars can all have the very same property.5

And his conclusion is that:
This reply to the Particularist argument does nothing to refute the Particularist view. But the reply seems to show that the Particularist has done nothing to refute the Identity view (the doctrine that properties and relations are universals) either.6

The problem with this situation is: upon whom does the onus lie? Armstrong believes it is the particularist's burden. Even if this were so (which is debatable), from the account given it seems Armstrong would still owe us something by the way of explication. That is, he still owes us an answer to the question of how a property can be present in a multitude of different places and times. The answer he gives is interesting and unique, and if plausible, it eliminates one of the major motivations for particularism.

III. Armstrong and Abstraction

The problem of the location of properties has plagued philosophers since Plato, but Armstrong believes he has recently made progress by suggesting that we restrict our postulations only to instantiated universals. Following this advice will bring universals into our realm as the repeatable features of the world. He is attempting to show it is possible to be a realist and a naturalist
(materialist), while still maintaining universals are abstract. The combination is possible, he argues, if the concept of "abstract" is changed. Although I agree with Armstrong that the concept of abstraction is diverse, I shall show that his attempt to make naturalism and realism compatible depends upon an inadequate assessment of the underlying assumptions of the two positions.

Armstrong wants to defend naturalism defined "as the view that nothing else exists except the single, spatio-temporal, world, the world studied by physics, chemistry, cosiology, and so on.7 This is not quite physicalism because he is not claiming that the world can be, in principle, completely described by the concepts of an ideal physics, but his view is definitely a one-world view, where everything that exists is physical. (An axiom of this view is the Eleatic Principle.)

Armstrong also believes objects share identical properties. Consider his citation of Weinberg from the Scientific American:

as far as we know, any two elementary particles of the same species are, except for their position and state of motion, absolutely identical, whether they occupy the same atom or lie at opposite ends of the universe.8
And Armstrong asks, "Might there not be two electrons with the very same non-relational properties?"  

The problem with holding these two beliefs simultaneously is that they appear to be incompatible. They seem incompatible because most take it as axiomatic that something physical can only be at one place at one time. So, if universals are physical, and anything physical can only be at one place at one time, then universals cannot be multiply exemplifiable.

In spite of this Armstrong believes naturalism (materialism) and realism are compatible. They are compatible if we do not permit uninstantiated universals. He says,

Those philosophers drawn to Naturalism are also regularly drawn to Nominalism. It seems natural to many to think of the spatio-temporal world as a world of mere particulars. And certainly if we admit uninstantiated universals we are abandoning the doctrine of Naturalism. But Naturalism combined with Nominalism has proved a very narrow ontological base. . . . It is very worthy of remark, therefore, that provided we restrict ourselves to instantiated universals, Naturalism can be combined with the rejection of Nominalism. Given the Principle of Instantiation, universals can be brought into the spatio-temporal world,
becoming simply the repeatable features of that world.10

The Principle of Instantiation states that every property must be a property of some real material particular. If we permit uninstantiated universals (that is, universals that exist only in the non-spatio-temporal realm), for example, a property that the predicate "faster than light" refers to, then the Eleatic Principle is violated. Compatibility with this principle can be insured by permitting only instantiated universals. But the question arises as to why we should restrict ourselves to instantiated universals. That is, what is the rationale, what is it about restricting ourselves in this way, that makes naturalism and realism compatible?

IV. Two Definitions of "Abstract"

In order to answer this question the concept of abstraction must be examined. Armstrong has a specific idea in mind that differs from the usual conception. In a slightly different context (about the ontological status of laws) he says this about abstraction:

If laws are relations between universals, then the fact that laws are abstractions is explained, at any rate if it is granted that universals are abstractions, as, contra Plato, I take them to be.
(I do not, of course, take them to be abstract in the Quinean/North American misuse of the term 'abstract'. In that misuse it is Platonic universals which are abstract.\textsuperscript{11}

Armstrong is saying that the way "abstract" is usually used, (that is, in the Quinean/North American way) is a misuse, and that "abstract" should not refer to Platonic entities. A paradigm case of the misuse of "abstract" can be found in the writings of Bertrand Russell. According to Russell's view, entities are labeled "abstract" if they do not exist in the natural spatio-temporal world. They subsist, he says\textsuperscript{12}, in a realm that only mathematicians and logicians know and love. According to this usage abstract universals are Platonic. But for Armstrong, Russell's abstractions are vicious. They are vicious because the entities can subsist without being instantiated in any natural particular. Armstrong suggests a new definition that is contra Plato et al. Abstract entities are those that "cannot exist in independence of other things".\textsuperscript{13} They can only be found in particulars in the natural realm. One could never perceive only a property, and there can be no uninstantiated property. They only exist in the spatio-temporal realm as the shared nature of all the objects that exemplify the property. The property of my shirt being red is an abstraction from the material shirt. But the property itself, taken by itself, is still physical. This
abstraction is real, but at no time is a Platonic realm invoked. For Armstrong the opposite of "abstract" is "unrefined", not "concrete". Also, one could never perceive only what some have called a "bare" particular; that is, as Locke would say, a thing I know not what, in which properties inhere. Only propertied particulars are possible.

It is in this way that Armstrong tries to bring abstract and physical together, and tries to bring universals back into this world. By redefining "abstract", (actually this is not a new notion, many philosophers of the middle ages thought of abstract in this way) Armstrong has given a way to make naturalism and realism compatible. Abstract properties are repeatable features of particulars, but they can exist because they do not violate the Eleatic Principle. Armstrong's solution is very interesting because he combines the concepts of physicality and universality in a plausible way which results in a unique middle position.

I want to argue, however, that in spite of the seeming plausibility of Armstrong's middle position, he does not succeed in making realism and naturalism compatible. All he really succeeds in doing is merely pushing the problem back one step. The problem is only pushed back one step because the proposed change in the definition of "abstract" fails to assess adequately an underlying assumption of realism and naturalism.
V. The Stuff Universals Are Made Of

The motivation for trying to make these two compatible, of course, is the problem of how to account for apparent attribute-agreement in diverse physical particulars. In Armstrong's words:

But, as Plato was the first to point out, this situation (apparent attribute-agreement in diverse particulars) is a profoundly puzzling one, at least for philosophers. The same property can belong to different things. The same relation can relate different things. Apparently there can be something identical in things which are not identical. Things are one at the same time as they are many. How is this possible?14

According to realists it is possible because there is an objective identity in things which are not numerically identical. According to nominalists there is no such objective identity. For realists the apparent situation is the real one. For nominalists the apparent situation is just that, only apparent. One of the major motivations for both positions is the seemingly incontrovertible fact that no physical thing can be in two different places at the same time. This fact suggests to realists that the objective identity cannot be physical. To nominalists this fact
suggests that all properties are particular. But in both nominalism and realism spatial uniqueness drastically affects the kind of answer these positions can offer.

Armstrong wants to bring universals back into this world. The distinction between vicious and non-vicious abstractions, he claims, opens up this possibility. Platonic Forms would be vicious because they would exist independently of physical particulars. Armstrong's universals are not vicious because they are incapable of independent existence. But at this point the important question becomes: since Armstrong wants to be a realist, what is the ontological status of his real universals? It seems true that if we countenance only instantiated universals that they become the repeatable features of our world. But what is the ontological status of a repeatable feature? Armstrong tells us it is a physical yet abstract universal. But a question still remains: in virtue of what are all of these repeatable features put into the same category? That is, what is it that all repeatable features of a certain type, share? This seems to be a legitimate question in spite of the change in the definition of "abstract". Repeatable features can never be found apart from physical particulars, but in a certain sense even Plato would agree with that. Even for Plato properties are always found instantiated in physical particulars. But what makes all the physical particulars of a certain type members of the same category is the fact that they all reflect or share
in a single non-spatio-temporal Form. But every physical object, or course, has a physical instantiation of a property. Just because properties are incapable of independent existence does not mean that it is illegitimate to ask what all repeatable features of a certain type share.

Therefore, one might easily accept the claim that universals can be found instantiated only in the particulars of this world and still remain unmoved by Armstrong's answer to the problem of the location of a property. One need only ask, "in virtue of what are these repeatable features brought into the same category?" This question, if one is a realist, must be answered by invoking abstractions in the "vicious" sense. The non-concrete Platonic notion of "abstract" must be invoked because the identical natures shared by two protons, for instance, cannot be physical. Each proton is physical. And each instantiation of the nature of the proton is physical because it can only be found in physical particulars. But the thing that the natures share, which must be given an account of if we are not to be ostriches about the problem of universals, simply cannot be physical if no complete physical thing can be at two different places at the same time.

All Armstrong has really done is push the problem back one step. Because he fails to take into account the spatio-temporal uniqueness of physical objects, Armstrong's suggestion about changing the definition of "abstract" bears
no fruit. And, therefore, he gets us no closer to making naturalism and realism compatible.

The issue of the location of properties is taken up in a famous passage in Plato (Parmenides (131A-E)), where Parmenides tries to show that the notion of multiple exemplification is incoherent. He argues that multiple exemplification can be understood in either of two ways: 1) different objects can partake of a distinct part of one property (Form), or 2) each object can partake of a property wholly and completely. Parmenides objects to the first view on the grounds that properties are not the kinds of things that have parts. And he objects to the second by claiming that a property will be divided form itself if it is wholly and completely present in numerically distinct particular objects.

It is the second point we are interested in. For a transcendental realist like Plato, it seems Parmenides' objection is ill-founded. For, to be a transcendental realist is just to deny the principle that it is impossible for a single object to be in many different places at the same time. What is wrong with Parmenides' criticism is that he is thinking of Forms using a physical metaphor. Because of this, his criticism misses the mark, because that is exactly what Plato would deny.

But Armstrong, on the other hand, does not have this means of escape. For him, properties are physical, and in that case Parmenides' criticism is entirely appropriate. A
single physical object would be divided from itself if it were at two different places at the same time.

VI. Naturalism and Realism

If, in order to remain a realist, Armstrong must accept Platonic abstractions, then there is an interesting consequence for his theory. If shared natures are non-spatio-temporal, then they cannot be found by empirical means. If they are abstract in the Platonic sense, they cannot be found in the material spatio-temporal realm demanded by naturalism. Therefore, naturalism and realism, as they are defined, are incompatible.

One thing Armstrong might do in his defense is to agree to a certain extent and say that indeed one of the major motivations of traditional nominalism and realism, is spatial uniqueness. But, he might continue, that is exactly what he is denying in the case of properties. He could defend, perhaps, a semi-Platonic position. Physical objects can retain their spatial uniqueness: my desk can still only be at one place and at one time. But spatial uniqueness can be denied in the case of physical properties. And this, Armstrong might claim, is the beauty of his thesis. By denying that physical properties can only be at one place at one time he can give an account of attribute-agreement and still retain realism about universals. We can also retain our common intuitions about the possibility of physical objects being only in one place at one time. And therefore
the intuition on which the criticisms of Armstrong were based, is not applicable to the phenomenon in question.

Armstrong nowhere explicitly says his view is semi-Platonic, but one can glean from his comments that for all intents and purposes, he could claim that. His own words are:

One must drop the argument that if two different things each have the same property, then a property will be at two different places at the same time and so will be divided from itself.¹⁵

The main problem with this suggestion is that it is extremely ad hoc. Why should we retain the spatial uniqueness of physical objects and not physical properties? We should hold this truth to be self-evident; that all physical entities are created equal. But Armstrong is definitely aware of the problem I have pointed out. For he says:

Instead we must just stick with this proposition: different particulars may have the same property. (And different pairs, triples, etc., of particulars may have the same relation.) Different particulars may be (wholly or partially) identical in nature. Such identity in nature is literally inexplicable, in the sense that it cannot be further explained.
But that does not make it incoherent. Identity in nature entails that the universe is unified in a way that the Nominalist finds unintuitive. But I take that to be simply the fault of the Nominalist's intuitions. We simply have to accept that different particulars may have the same property or be related by the same relation.\(^{16}\) (My emphasis)

And Armstrong might go on to say that the key difference between properties and physical objects is the fact that the same property can be found in distinct physical objects, and that this difference must be there in order for properties to do the theoretical work they were posited to do.

There seems to me to be two things wrong with this possible response. First, Armstrong's suggestions are not really a solution to the problem of attribute-agreement, they seem to be merely a restatement of the problem, and thereby, and admission of defeat. Remember, we are dealing with the problem of attribute-agreement. Diverse physical particulars seem to share identical properties. The problem is, how do we account for this phenomenon? If one adopts the realist stance, as Armstrong does, then one must claim there are multiply exemplifiable entities. The question then becomes, how can one physical thing be at two different places at the same time? Armstrong's answer is "Well they
just can, and there is no way to explain it". It is just a brute fact of nature that must be accepted. As a response to this question Armstrong's answer seems less than satisfactory.

If we are not to be ostriches about this problem then an attempt must be made at explanation. Is there an explanation possible that is compatible with Armstrong's naturalism? Remember the question we are working with is: in virtue of what are repeatable features brought into the same category? There are only two possible ways to answer this question, and neither of them are compatible with Armstrong's theory. Either 1) there is something that, for instance, two atomic structures share or, 2) there is not. If there is not, then Armstrong's position would reduce to particularism. And if he would accept this theory at this deeper level, why not accept it in the first place? (As we will see in the next section, he does not accept it.) If there is something the two atomic structures share, then there are further problems. The question about the location of properties arises again at this level. That is, could this new postulation that both of the atomic structures share be physical? The answer seems to be "no" for the same reasons mentioned earlier. If this newly postulated entity is capable of multiple exemplification, as it seems it must, then it could not be physical because no complete physical thing can be at two different places at the same time.
Suppose, for the sake of argument, that this newly postulated multiply exemplifiable entity could be physical. Would this new entity itself exemplify the same structure the first two atomic structures share? If it does not, then it is hard to see what connection it has to the original exemplars. Besides, one would not expect it to exemplify the structure of something completely different.

And if this new entity does itself exemplify the same structure that the two original exemplars exemplify, then Armstrong's position would fall to a third man regress. If the new entity exemplifies the same structure as the two exemplars, then there is a new many which demands a new or second-order structure to be their one. But this new structure gives rise to yet a further many, demanding yet another one and so on ad infinitum.

The second thing wrong with Armstrong's response (the quote immediately above, page 141-142) is that it leaves us with an epistemological problem. Part of the motivation for Armstrong's attempt to bring universals back down into this world was the epistemological problems that Plato's theory of Forms suffers from. That is, if we assume empiricism and claim that our knowledge is attained by causal impact on our sensory apparatus, and if universals are non-spatio-temporal as Plato would claim, then we have an epistemological problem in that Forms cannot have a causal impact upon our senses. So, since part of the motivation for Armstrong's attempt to bring universals back down into this world was to
obviate this problem, we should have a clear solution. But, do Armstrong's physical and yet multiply exemplifiable repeatable features get around Plato's epistemological problems? The answer to this question is no. Even though repeatable features may be physical, there is still no way for us to get to them empirically. What has causal impact upon our senses is not the physical yet multiply exemplifiable feature, it is the instance of the property in the object.

In other words, suppose we ask Armstrong why a certain piece of gold is put into the category of gold things. It would do no good for him to point to the atomic structure inherent in that piece, for that is merely the physical exemplification of the universal. For realists, what makes things what they are is something "under" the appearance, and it is epistemologically irrelevant as to whether that something is abstract in the Armstrongian sense or in the Platonic sense. In neither case is their causal impact upon our sensory apparatus. And therefore Armstrong is left with the same problem as Plato.

VII. Conclusion: Armstrong's Realism

At the beginning of this chapter it was stated that this would be an examination of Armstrong's arguments against the position of particularism. We started off by looking at Armstrong's first argument against particularism, and that was that the problem of the location of properties
begs the question. That is, the argument for particularism says that there can be no such thing as a multiply exemplifiable entity because if it were wholly present in numerically diverse particulars it would be divided from itself, and that is impossible. But Armstrong claims that this argument begs the question. And in order to see if this argument was correct, we were taken far afield and deep into the heart of his positive theory, i.e., his solution to the problem of attribute-agreement. His solution was to argue that properties were physical yet capable of multiple exemplification. I have tried to argue that, at its core, his attribute-agreement thesis is incoherent. By claiming that identity in nature is literally inexplicable, Armstrong does not solve the problem of attribute-agreement, he merely restates it. Also I have tried to argue that his attempted solution is unsuccessful because he fails to assess adequately two of the underlying principles of nominalism and realism. If your intuitions lie with the nominalist, and you hold that no one physical thing can be at two different places at the same time, then his suggestion of changing the definition of "abstract" bears no fruit because it is still legitimate to ask what the ontological status of a repeatable feature is. And since, as Armstrong maintains, the status of a repeatable feature is physical, then it cannot help us solve the problem of attribute-agreement if physical entities are spatially unique. On the other hand, if your intuitions lie with the realist, and you hold that
multiply exemplifiable entities are possible, then Armstrong's suggestion also bears no fruit because it is epistemologically irrelevant as to whether the universal is physical or abstract (in the Platonic sense). In neither case do they impinge upon our sensory apparatus.

So, even though we are only midway through the examination of Armstrong's arguments against particularism, we can state a major conclusion of this thesis. At its heart, Armstrong's solution to the problem of attribute-agreement is incoherent. It is incoherent because it is no real solution at all, it is merely a restatement of the problem. So, even if Armstrong were right about all the other negative arguments that attempted to show the implausibility of nominalism, that is, the relation regress, the object regress, the thought experiment, and causality (and I have argued at length that he is not) we still would not be forced to accept his peculiar brand of immanent realism.

VIII. Armstrong's Other Positive Arguments for Realism

I have, in effect, in the last section, argued for the existence of universals. I too believe that the phenomenon of the One Over the Many can only be accounted for realistically. (In the next section I argue that the thesis which states that all things are particular is incoherent. On this point also, I agree with Armstrong.) Where Armstrong and I differ is the ontological status of
repeatable features. If I am right about Armstrong's position being, at its core, incoherent, then we must accept abstract entities in the Platonic sense. And as long as we are discussing Armstrong's positive arguments for the existence of universals, it seems appropriate, at this point, to digress briefly from our evaluation of particularism, and examine Armstrong's other positive arguments for the existence of universals. This will be an examination of Armstrong's general claims 2) and 4) (pages 36-37) concerning the notion of abstract reference.

Armstrong's other positive reasons for the existence of universals are put forth in a short chapter entitled "Arguments for Realism". Given the importance he attaches to the One Over Many argument, this chapter's title is misleading. But these arguments are not attempts to show the incoherence of opposing positions, so there is a definite positive tenor to them. Armstrong's arguments are taken almost entirely from earlier articles by Arthur Pap and Frank Jackson. As a means of supporting their belief in universals Armstrong et al., have focused their attention on the common use of certain nouns and noun phrases usually called abstract singular terms. Consider the following statements:
1) Red resembles orange more than it resembles blue.
2) Red is a color.
3) He has the same virtues as his father.

Since these statements are acknowledged to be true (suppose 3 is true for the sake of argument), and since they seem to refer to something abstract, that is, appear to involve reference to universals, Armstrong's argument is that, if we cannot find paraphrases in non-abstract terms for the true sentences in which these terms occur, we must admit the existence of universals. In his own words: "It seems that the Nominalist owes the Realist an analysis of the statements from which this ostensible reference to universals has been removed."^{19}

Because it is a simpler sentence, both grammatically and ontologically, let us look at 2) first. Armstrong claims that a nominalistic account of

2) Red is a color.

cannot be given merely by rewriting 2) as:

2') For all particulars, x, if x is red, then x is colored.\(^2^0\)

because 2) entails 2'), but the reverse entailment does not
hold. To see that the entailment does not hold, consider Jackson's argument:

4') For all particulars, x, if x is red then it is extended. 4') is true. Indeed, like 2') it appears to be a necessary truth. Hence, by parity, if 2') entails 2), then 4) should entail:

4) Red(ness) is an extension. So far from this being the case, however, 4) is actually false. It follows that 2) says more than 2'). The Nominalist has given no account of this.²¹

One thing that should give us pause about this claim is: what is it that 2) says more than 2')? That is, what is this "more" that the nominalist has failed to give an account of? Having said nothing about its status, Armstrong et al., just assume that it is something ontological. But let us examine the possibility that what the nominalist leaves out of his analysis can be given an account of without committing ourselves to mysterious abstract objects.

Bruce Aune²² gives us a clue as to how that might be done. Consider a sentence similar to 2):

5) Tardiness is reprehensible.

This sentence has an abstract singular term as its subject,
but it seems obvious that it does not refer to an abstract object. As Aune says:

the sorts of things that are truly reprehensible are people and actions—not platonic objects, which cannot be criticized or reprehended. Thus, in spite of its abstract subject term, "Tardiness is reprehensible" is really a sentence about tardy people or tardy actions: it means that tardy people are, in a way, reprehensible or, alternatively, that tardy actions are reprehensible actions. Parity of reasoning requires a similar interpretation of assertion 1).\(^{23}\) (For Aune's 1 substitute our 2.)

What is it that actually makes 4) false? In the sentence

4) Red is an extension

the copula, is the "is" of identity as it is in 2) and obviously red is not an extension so 4) is false. But perhaps we should not interpret the copula so strictly. To see another way of interpreting it let us look at a few more examples. It is possible to come up with many more examples of Armstrong's (and Jackson's) critique.
6') For all particulars, \( x \), if \( x \) is red, then \( x \) has a shape.

and 7') For all particulars, \( x \), if \( x \) is red, then \( x \) has a size.

Armstrong would consider these examples as further evidence for his claim that nominalism can give only an insufficient analysis. And he would claim that 6') and 7') should entail:

6) Red(ness) is a shape.

and, 7) Red(ness) is a size.

And he would conclude that 6) and 7) are actually false and that nominalism gives an even worse translation than he had previously thought.

It is possible to generate more examples of this type. And should we conclude, with Armstrong, that with every new example even more of the insufficiency of the nominalist account is being exposed? But, again, what exactly is the nominalist leaving out? Of course 6) and 7) are false if we interpret the copula as the "is" of identity. But is that interpretation necessary? We can, following Aune, claim that 6) and 7) are merely claiming that red things have a shape and a size. Not that we are falsely attributing shapehood to a mysterious abstract entity.
Armstrong is claiming that the nominalist analysis is insufficient because it fails to give an account of what is left out of the entailment from 2' to 2). The difficult question to be raised at this point is: what exactly is it that the nominalist analysis is leaving out? What more is there that the nominalist is missing? Does what is left out change, the more examples one gives? Until these questions are answered we have no good reason to believe that anything is being left out. It only appears so because the surface grammar of the sentence misleads us. 6) is false if one interprets it as an identity statement, but all it really seems to be saying is that red things have a shape.

Now let us examine 3):

3) He has the same virtues as his father.

Armstrong suggests that a predicate nominalist would give the following analysis:

8) For all particulars, x, if x is a virtue-predicate, then x applies to a iff x applies to a's father.24

But, says Armstrong, this analysis will not do for the following reason:
However, the most serious difficulty concerns the predicate 'virtue-predicate'. It is clear that the predicate cannot be a primitive one: conditions for its application must be given. What can those conditions be except that it applies to any predicate which in turn applies to any particular which possesses one of the virtues? But to speak of 'one of the virtues' is to make ostensible reference to universals.\(^{25}\)

The problem here is very similar to the first problem we looked at, and both of those are in general very similar to the problem Armstrong relied so heavily upon in his criticism of nominalism, that is, that somehow an analysis of the phenomenon is just not forthcoming. As was shown in Chapter Two, this criticism is unfounded, and it can be shown to share that quality with the present criticism. What exactly is the problem? The problem is that the analysis itself contains a type-notion and that therefore it utilizes the very notion that was to be analysed. And further, because the sentence is true, the phrase "one of the virtues" seems to presuppose the existence of multiply exemplifiable entities. Also this problem will arise for all the different types of nominalism: in class nominalism appeal to a virtue-class will be made, in mereological nominalism appeal to a virtue-lump will be made, etc. Armstrong concludes that
the argument does show that we can give an account of 'the virtues' only in terms of universals: that range of properties and relations which make it true that a particular possesses a certain virtue.26

But does the argument show that "virtue" can be given an account of only in terms of universals? We may speak of virtues in everyday life, but we do not have to think of them as existent. We could say that they are fictions that simplify our discourse. We need an interpretation of 3) that contains no explicit reference to abstract objects. Again I will turn to Aune for support.

Aune claims that a nominalistic interpretation of 3) is possible if we appeal to the substitutional interpretation of the quantifier.27 The substitution interpretation of the quantifier may be characterized as follows: an existentially quantified statement is true just when there is at least one true substitution instance of the relevant propositional function: if we take "x is mortal" to be the propositional function, then a true substitution instance of "x is mortal" would result if we substituted "Socrates" for "x". What is important about the substitution interpretation is that it does not make existence claims. It does not claim that there is some member of some domain that has mortality. All it says is that there is a term
that can be substituted for the variable that will make the propositional function true.

Applying this interpretation to 3) we get:

9) For all particulars, x, and for all virtues V, the father has (is) V iff the son has (is) V.

This interpretation avoids Armstrong's criticisms.

The last statement we will examine is Armstrong's 1):

1) Red resembles orange more than it resembles blue.

As an attempted interpretation Armstrong claims the nominalist must try:

10) For all particulars, x, y, and z, if x is red and y is orange and z is blue, than x color-resembles y more than x color-resembles z.28

And further, says Armstrong, the nominalist must claim that "color-resemblance" is a primitive predicate.29 He then goes on to attack the plausibility of the claim that all of the many resemblance predicates are primitive. And he concludes that:
It is clear that we understand the pattern which is common to all these predicates and that it is this understanding which permits us to form new resemblance predicates as required. What is common can only be resemblance and what is peculiar to each case can only be the respect of the resemblance.\(^{30}\)

But is this the only nominalistic analysis possible? The validity of his criticism can be granted while still maintaining the possibility of an alternative nominalistic analysis. It seems that, rather than talk about colors and their resemblances, if we talk about the electro-magnetic spectrum and relative positions of the various wavelengths then we can give an interpretation to \(1\) that contains no explicit reference to abstract objects.

\(11\) For all particulars, \(x, y,\) and \(z,\) if \(x\) is red and \(y\) is orange and \(z\) is blue, then the position of \(x\) on the spectrum is closer to the position of \(y\) than \(x\) is closer to \(z.\)

No one simple strategy has been suggested for interpreting all of these statements, but that is not necessarily a drawback. It would be nice to have one method that could be used to interpret all statements, but it is not necessary for nominalism.
IX. Conclusion: Positive Arguments

Perhaps the analyses offered here are inadequate (especially 11). But in a certain sense that is not important. It is not important for three reasons. First, both Armstrong and I have already argued for the existence of universals because of the problem of the One Over the Many. We came to different conclusions, but realism, at least, has already been established.

Second, there is an internal inconsistency in Armstrong's theory concerning these points. As was mentioned (and will be dealt with fully in Chapter Five) Armstrong wants to separate semantics and ontology. What properties there are is separate from the meanings of our terms. Contrary to our earlier conclusion, let us suppose that he had indeed shown that nothing external to an object, including meanings, is relevant to which properties an object has. Let us also suppose that terms purportedly referring to universals do play essential roles in true sentences. But if he is right about these two points, then how does the latter fact effect the dispute about whether universals exist or not? That is, if there are predicates without properties and properties without predicates and meanings are irrelevant to the properties an object has, then the mere fact that we cannot give an account of certain statements without maintaining realism does not mean universals really exist. Just because the truth of certain
sentences presupposes certain terms referring to multiply exemplifiable entities does not mean that there really are such entities. The terms that purportedly refer to universals, even though they appear in true sentences, may be predicates that apply in virtue of no real property. Armstrong tries to establish a category of predicates that are applicable to a particular even though there is no real underlying property that the predicate applies in virtue of. (This point also will be examined in Chapter Five.) The idea is basically just an extension of Wittgenstein's notion of a family resemblance and his example of "games". There may be no single property in virtue of which the term 'game' applies to all of the things in that category. If Armstrong thinks he has been successful in showing that there are predicates that are correctly applicable to a particular, but in virtue of no property, then he should not appeal to the argument that there are universals because the truth of certain sentences presupposes them. The very terms he claims presupposes the existence of universals may also be terms that apply in virtue of no real underlying property. At least he cannot assume from the beginning that they are not.

Finally, there is a pertinent comment from Wolterstorff:

... what we wish to do is find out whether there are predicable universals; whether for this or that
purpose it is necessary to say that there are, or to refer to them, or commit ourselves to them, is really quite a different matter. Or put it this way. We want to know whether, for the purpose of stating what there is, it is necessary to say that there are predicable universals.31

In this passage, I take Wolterstorff to be saying that even if the existence of universals were necessary in order for us to make sense of true statements with abstract singular terms in them, it would not follow that they exist. That is, if universals exist, they exist whether we need them to make sense of certain statements or not. And if anything, this seems to be a more realistic position even than Armstrong's. That is, Armstrong spends most of his first volume attempting to prove that predicates, our man-made language, has nothing to do with what properties an object has, nothing to do with the existence of universals. If some particular has some specific property then we find it with science, not language. But now he seems to be turning around and saying that universals are necessary for us to make sense of true statements with abstract singular terms in them. But even if it were, it would not follow that they exist.

X.  **Armstrong's Criticisms of Stout**

If the foregoing criticisms are plausible there seems
to be at least some reason to take particularism seriously. Therefore unless Armstrong can prove his point and show that particularism is ultimately incoherent there is at least prima facie reason to pursue the doctrine (contrary to Armstrong's wishes). Before that issue can be settled Armstrong's account of Stout's position must be examined.

As has already been mentioned Armstrong believes nominalism has a strong mark against it because it seems intuitively true that objects do not have properties because they are, for instance, members of a class (fall under a predicate, fall under a concept, etc.). They are members of a class because they have certain properties. Armstrong, in effect, is claiming that Stout has not taken this point seriously. In spite of the fact that Stout mentions repeatedly that the concept of a distributive unity is unanalysable and that he differs from traditional nominalism in that he is not going to try to analyse it, Armstrong believes Stout appeals to class nominalism when he tries to answer the question of, in virtue of what are particulars grouped together into classes. Armstrong puts it this way:

The Class-Membership Analysis is represented by Stout himself. The universal, he said, is 'a class or kind'. the particular redness of this carpet is a member of a certain class of particulars: the class of all redness.32
Armstrong continues by saying Stout's version of class nominalism avoids some problems brought up earlier but,

Nevertheless, all the other difficulties which we advance against the orthodox class-membership analysis still remain. It seems clear, for instance, that it is the nature of the members of the class that determines which class they belong to, rather than the class which they belong to determining their nature.\textsuperscript{33}

Even if Armstrong is ultimately right about the incoherence of particularism, at this level, at least, I want to argue that Armstrong has misconstrued Stout's position in that he (Stout) does not appeal to class nominalism as a solution to the problem of attribute-agreement.

What evidence does Armstrong give that Stout is a class nominalist? Armstrong says that Stout says that the universal is a class and the particular blueness of my jeans is a member of a class made up of particular bluenesses. Unfortunately this is the extent of Armstrong's evidence for his claim. And it does not follow from that sentence that Stout is a class nominalist. Stout can consistently maintain a class can be formed, for instance, from all of the different particular specific shades of blue, and this class can be called a universal, without claiming that the
particular blues are blue in virtue of being a member of the class of all blues.

In a symposium with G.E. Moore, Stout addressed this point directly. He said:

This view (particularism) necessarily presupposes that a class of characters is not ultimately constituted in the same way as a class of things. A thing belongs to a certain class only because a character of a certain kind is predicable of it. But we cannot, without moving in a vicious circle, go on to say that characters themselves can belong to classes of kinds only because other kinds of characters are predicable of them. What I maintain therefore, is that qualities and relations belong to classes or kinds just because they are qualities and relations. Characters as such are instances of universals. . . 34 (my emphasis)

According to Armstrong's own definition, for someone to be a class-nominalist he must hold the following maxim:

\[
a \text{ has the property } F, \text{ iff } a \text{ is a member of the class of } F's. \text{ } 35
\]

The first thing to say about this characterization of class nominalism is that Armstrong cannot, logically speaking, be
taking the biconditional seriously. The two conditionals that Stout's theory must satisfy, if Armstrong is right are:

1) if a has the property F then 
a is an element of the class of F's. 
and 2) if a is an element of the class of F's then 
a has the property F.

Armstrong cannot be taking the logical biconditional seriously because 1) and 2) state truths that almost no one would deny, let alone a class nominalist. Something has the property if it is an element of the class and something is an element of the class if it has the property. But who would deny either of those?

It is obvious from the context what Armstrong is trying to say. What he means to say is that objects have properties "in virtue of" or "because of" their membership in a certain class. But "because of" and "in virtue of" do not equal the logical connective "\( \equiv \)". So let us just translate Armstrong's characterization using "because of" or "in virtue of", forget about the logical connectives, and see if Armstrong's characterization fits what Stout says. The relevant lines from Stout are those italicized from the quote above (page 163, note 34). If we extract the unnecessary terms and use terminology more consistent with what Armstrong seems to be intending, the result is the following:
3) Properties belong to classes because they are properties.

Let us look at an example of this maxim:

4) the blueness of my blue jeans belongs to the class of all blues because of/in virtue of its blueness (or its being blue).

Or in other words:

5) Because of their blueness my blue jeans belong to the class of all blues.

But is this class nominalism as Armstrong would say? 5) seems to be saying something wholly uncontroversial. If something has a property then that thing is an element of the class of all things that have that property. Even realists would agree with 5). If this is true then Stout's position cannot be class nominalism as Armstrong sees it.

If we do a conversion of 5), that seems to be more like what Armstrong is getting at. That is, things have their properties (solely) in virtue of their being members of a certain class. Now this does seem to be a bit more controversial, and also it does seem to characterize class
nominalism, as Armstrong sees it, but as we have seen, it does not characterize Stout's position.

What may be concluded form all this is that Armstrong has misconstrued Stout's position. Armstrong represents Stout's position as satisfying Armstrong's criterion for class nominalism, but in fact it does not. But perhaps this is not important, for there still is a position called particularism, and the question remains, (whether Stout is a representative of it or not) as to whether it is a plausible position or not.

The next criticism Armstrong puts forth is the one cited a few pages back concerning the intuitively strong belief that objects are, for instance, members of a class because of the properties they have and not that they have the properties they do because they are members of a certain class. This is really just a restatement of the thought experiment criticism leveled earlier against all kinds of nominalisms. And if the arguments of the previous chapter are sound (that is, that Armstrong assumes a highly materialistic and causal way of viewing nominalism, and that one need not accept those criteria in order to be a nominalist), then reintroducing the thought experiment at this point is no salvation for Armstrong.

There is an attempt by Armstrong to defend particularism by appealing to the resemblance of classes of particulars. In spite of some advantages he believes there are sufficient reasons to reject even resemblance
particularism. The first two reasons we have met before. The first is another restatement of the thought experiment criticism, and the second is a version of the vicious regress argument. We have already accounted for the first argument above and the second is characterized by Armstrong as follows:

An account of the unity of a class of things which all 'have the same property' appeals to the resemblance which each of these things has to suitable paradigms. Relations of resemblance have been substituted for the original property, simply recreating the old problem of universals in a new guise. . . In our original discussion of Resemblance Nominalism it was maintained that the regress was vicious. The situation seems unchanged when it is Particularism which is being considered.36

But this criticism has been countered in the chapter before the last. Even if there is an infinite regress one need not appeal to each and every previous resemblance relation in order to give an account of a resemblance relation at a certain level.

The third criticism is that "a particular may be the only one of its kind, and so have nothing to resemble or be 'equal' to."37 And if we give an account of many things
having the same property in terms of the resemblance which
the particulars bear to each other then we cannot account
for many things having the same property because there is no
resemblance relation between things to take as primitive.
But is this a real problem? For instance, suppose there
arose a new species of animal as a result of mutation. *Ex
hypothesi* it is the only member of this new species. But
does that mean there is nothing similar to it in any way?
It would have similarities to other previously existing
species. It seems that the only time Armstrong's argument
has any real force is just in case there exists some
particular that is wholly disparate from anything in its
surroundings, say, for instance, if it were the only
existing entity in the entire universe. In that case the
resemblance account would be impossible to apply.

Fortunately this is not our world, but this criticism
points up what may be considered Armstrong's most
devastating criticism against particularism. His general
strategy in his chapter on particularism was to argue the
inadequacy of Stout's position by showing that particularism
does not solve but merely postpones the problem of
universals. Remember Stout argued properties are one and
all particular but that there are distributive unities
amongst objects having properties "in common". The unity is
called distributive because all individual objects that have
some specific property have distributed amongst them a
particular instance of the class. Armstrong's position on distributive unities is as follows:

But the notion of a distributive unity seems to be a restatement of Stout's problem rather than a solution of it. It is a way of saying that the members of certain classes of particulars are many, but at the same time one, while failing to explain what that oneness is.\(^\text{38}\) (My emphasis)

If Armstrong is right this criticism seems to be the strongest anyone could give of any theory that purports to solve the problem of universals, namely that it is no solution at all. And Armstrong's claim does seem plausible. With the notion of a distributive unity, Stout leads us up to the problem, spells it out, and then claims that the very aspect that makes the problem so difficult and interesting is unanalyzable. Stout's "solution" is no real solution because he does not explain the apparent identity in things which are not identical. He does not tell us how two things can"share the same property".

XI. Conclusion

At this point we are in the unusual situation of not being able to accept particularism or multiple exemplifiability. Armstrong is correct in claiming that Stout's "solution" to the problem of attribute-agreement is
really merely a restatement of the problem. And even though it was necessary to go through a more circuitous route to decide this about Armstrong, it is ironic that his position falls to the same criticism as Stout's. By claiming that identity in nature is literally inexplicable Armstrong's position is also merely a restatement of the problem. What precludes a realistic solution for both positions (although of course for particularism this is not a problem) is the penchant both positions share for materialism. If Armstrong wants to retain his realism, then it is necessary for him to give up something. A plausible suggestion of what might be done will be taken up in the next chapter.
CHAPTER FIVE:

MIND-DEPENDENCE AND ONTOLOGY

I. Results Up to This Point

Before examining the issues of this last chapter, let us take stock of the conclusions reached so far. As I said in Chapter Two, the overall structure of Armstrong's argument has both a positive and a negative component. The major claim that Armstrong is trying to defend with these two components is that nothing external, in a causally efficacious way, is relevant to what properties an object has. That is, Forms, words, concepts, classes, etc., can all fail to exist yet at the same time an object can retain its properties. None of the traditional theories of nominalism (resemblance, class, mereological), nor conceptualism, nor transcendent realism postulate entities that are necessary for a satisfactory solution to the problem of attribute-agreement. So far only part of the negative component has been examined (although that is most of his argument). If I am right about the meaning of a "vicious" infinite regress, then the relation regress and the object regress fail to support the major claim. I have also argued that the thought experiment and the notion of causality fail to support the major claim because one need not interpret nominalism in the highly materialistic way that Armstrong does. In the latter two cases I issued a promissory note
about the separation of semantics and ontology that I intend to pay off in this chapter.

I have also argued that Armstrong is right about particularism, at least Stout's version of it. Perhaps there are other versions that may be more plausible, but Stout's is usually considered to be a good, if not the best representative example of the position. And that position was found to be incoherent, because the notion of a distributive unity is not a solution to the problem of attribute-agreement, it is merely a restatement of it. So, unless someone can point to a more plausible suggestion, it seems we are justified in concluding that the properties of concrete particulars can not be one and all particular. There must be something that they share in common.

I argued for that conclusion, in effect, and for what that "something" could be, when I showed the incoherence at the core of Armstrong's position concerning the existence of universals. His major argument for the existence of universals is the argument from the One Over the Many. His argument was an indirect one, attempting to show the incoherence of all views opposed to his, and attempting to show how his own view avoids all of the problems of the opposing views, and how his view solves the problem of attribute-agreement.

In opposition to Armstrong I have argued three points: 1) Armstrong has failed to show the incoherence of all views opposing his. Following Loux and Lewis we have seen that
Armstrong's regresses are neither vicious nor infinite. And his thought experiment and his notion of causality basically set up a straw man. 2) Armstrong's own view does not avoid all of the problems of the opposing views. His own theory falls prey to the same criticism leveled against particularism. And following Lewis I argued that if the relation and object regresses were vicious they would sting Armstrong just as badly. 3) Armstrong's view does not solve the problem of attribute-agreement for two reasons: i) it is merely a restatement of the problem, and ii) his suggestion of redefining the notion of abstract in order to bring universals back down into this world bears no fruit if one is either a nominalist or a realist.

His suggestion bears no fruit if one tends toward nominalism because it is still legitimate to ask what the ontological status of a repeatable feature is. And that cannot be physical if no one thing can be at two different places at the same time. His suggestion also bears no fruit if one tends toward realism because, among other problems, his theory has the same epistemological problems that Plato's suffers from because all one comes into contact with is the instance of the universal and not the universal itself.

My position so far then can be characterized in the following way. My argument too is an indirect one that has both positive and negative components: a) Because I agree with Armstrong about particularism, I too believe there must
be multiply exemplifiable entities. b) And for the reasons mentioned above in 3) I believe these entities cannot be physical. c) Because I do not believe Armstrong has been successful in showing that nothing causally external to an object is relevant to what properties it has, at this stage I would like to leave it as an open question. In the next section I will kill two birds with one stone: i) I will make good on the promissory note concerning the separation of semantics and ontology, and ii) in the process I will close the question stated in my third point a few lines above. I will in fact be arguing that something causally external to objects is indeed relevant to what properties they have, to our interests and desires.

II. The Separation of Semantics and Ontology

One of Armstrong's most controversial claims, one that he appeals to again and again throughout his work, is his claim that ontology must be separated from semantics. Ultimately he wants to argue that universals exist, not because of the fact that words have meanings, but because of the identity of nature exhibited by various particulars. Properties can not (and should not) be found by a priori means, he argues, but instead they can only be found by a posteriori means, by total science. In order to show that properties cannot be found by a priori means, Armstrong's task, as he sees it, is first to discredit what he calls the "Argument from Meaning." For he says:
It will be argued in Part Four that the Argument form Meaning is unsound, and that, once it is seen to be unsound, there is no need to assume that in each case in which a predicate applies it applies in virtue of characteristics. Once this assumption is given up, we are free to consider in individual cases, and on the merit of the case, whether the predicate does apply in virtue of characteristics.¹

We must keep in mind that what he is trying to do is to show that properties cannot be discovered a priori. And they cannot be discovered a priori because the Argument from Meaning is unsound. Let us look at this argument.

An example of the kind of argument Armstrong wants to defeat can be found in Russell.² Russell identified properties with the meanings (references) of the predicates which apply to various particulars. For example, "white" applies to my cup because the predicate means the property. What we mean when we say "white" is the object in the world the word refers to. Each predicate is associated with a property because for each meaningful predicate that we can think of, the meaning of that predicate is a property. But as Armstrong laments: "no philosopher with any Empiricist sympathies can feel happy with a conclusion so easily reached. There seems to be no honest toil in it!"³
But remember why Russell believes this. He identifies knowing what a sentence means with knowing which objects one would have to be acquainted with in order to find out if the sentence was true. So, if a predicate, a man-made thing, is applicable to an indefinite number of particulars, there is an objective property that the predicate refers to because that is the thing that must be there for us to be acquainted with if we want to see if the sentence is true or false.

What Armstrong does not like is that from any meaningful predicate we can infer the existence of an objective property. He would agree with Russell that there must be something out there that the predicate refers to in order for the sentence to be true, but he would deny that we should identify the meaning of a predicate with what must be out there in order for the sentence to be true. Armstrong suggests that

we reject the notion that just because the predicate 'red' applies to an open class of particulars, therefore there must be a property redness. There must be an explanation why the predicate is applicable to an indefinite class of particulars which played no part in our learning the meaning of the word 'red'. Furthermore, this explanation must in the end appeal to the properties (or relations) of these particulars.
A somewhat parallel situation that might aid in understanding is the following. Just as Russell's program can be seen as a purging of senses from Frege's realism by devising a method through which descriptions can be analysed away, Armstrong's can be seen as an extension of Russell's in that he (Armstrong) wants to purge metaphysics even further of any nominalistic component. (This analogy requires a qualification. Armstrong does not mean to purge every predicate of its sense. There are senses that cannot be gotten rid of. But more will be said about this shortly.) If it can be shown that the Argument from Meaning is unsound then, according to Armstrong we will have thereby purged metaphysics of its closet nominalism, and we will be free to decide on the merits of each case as to whether a predicate applies to a particular in virtue of an objective property.

Armstrong's idea about separating semantics and ontology is closely related to Wittgenstein's celebrated remark concerning our assumptions in the One Over Many argument. Wittgenstein said we should not assume that many distinct particulars actually possess a common feature just because they all fall under a common description. He implored us to look to see if they all have the feature. And when we do look, he suggests, we will probably find that there is, instead of a single feature, a complex network of similarities among the distinct particulars. He then gives evidence for this claim by asking us to consider his well-
known example of games. He is not claiming that every predicate is like the predicate "game". For certain predicates there may in fact be only one feature that all particulars that fall under that certain predicate share. He is merely suggesting that we should not assume that form the start.

Wittgenstein's remark is sometimes taken to undermine the theory of universals. But it does not. His example shows, if it shows anything, that distinct particulars may all be called by the same name without having a single determinate feature in common. Objects need not have only one determinate attribute by virtue of which they are all called by the same name.

Armstrong extends this idea by claiming that objects not only need not have only one determinate feature in common, they also need not have any. One can hear echoes of Wittgenstein in Armstrong's remarks:

The correct view I take to be this: Given a predicate, there may be none, one or many universals in virtue of which the predicate applies. Given a universal, there may be none, one or many predicates which apply in virtue of that universal.6

Armstrong proceeds to prove this claim by denying there is a one-to-one correspondence between predicates and
properties. This correspondence does not hold, he claims, because there can be predicates without properties and properties without predicates. Let us consider the latter possibility first.

It is an intelligible conception, says Armstrong, that there are properties which exist that do not have a corresponding predicate. Because, for instance, the property might not have been discovered yet. And although today we may know nothing about it, and cannot even say anything about it, we must admit that it exists and has existed. So today there is a property without a predicate, but next year, for instance, (when it is discovered) the property will be labeled and categorized. There have been such situations in the past, and we are most likely still in this same kind of situation, so there is good reason to think that such unknown properties do exist, and that therefore now they obviously have no predicate. It is difficult to disagree with this claim.

Now let us look at the claim that there are predicates without properties. There are two cases: 1) when there is no particular and 2) when there is a particular and a predicate that is applicable to it, but the predicate does not apply in virtue of a property. An example of 1) may be "accelerates through the speed of light." As far as we know nothing in the past, present, or future has or ever will accelerate through the speed of light. So, if there is no particular, then, by the principle of instantiation (i.e.,
any property must be found in some particular), there can
be no property. This claim too seems difficult to disagree
with. (Of course Plato would disagree with this, for he
holds that there are forms that exist in his heaven
independently of any instantiation. But that is exactly the
point that Armstrong is at pains to refute.)

So far so good. Now let us look at 2). Armstrong
thinks there are predicates that are applicable to
particulars, but applicable in virtue of no property. For
example, every particular is identical with itself, so the
predicate "identical with itself" applies to every
particular. But Armstrong argues this predicate does not
apply in virtue of a property for two reasons.

The first reason is that we can know a priori that a
thing is identical with itself. As we have seen, Armstrong
claims that what properties there are in the world should be
decided by total science and not by any a priori means. But
this is not a good reason for believing there is no property
of self-identity. It is not a good reason because it begs
the question. To see how it begs the question we must
remember Armstrong's task. He is trying to show that there
are properties without predicates because he wants to show
the inadequacy of the Argument from Meaning. To discredit
this argument he needs to deny there is a one-to-one
correspondence between predicates and properties. But in
this denial he appeals to the exact notion he is arguing
for. That is, we can know that the predicate "identical
with itself" applies to every possible particular without appealing to anything empirical, without appealing to total science. We can know a priori that the object, whatever it is, is identical with itself, for how could anything not be? But Armstrong uses the claim that properties are not discoverable a priori in trying to argue for the same claim. He says that we can know a priori that an object is identical with itself. That in turn is supposed to discredit the Argument from Meaning. Having discredited that we can therefore conclude that properties cannot be found by a priori means.

We can conclude from all of this that Armstrong's first reason for denying that self-identity is a property has no force because it blatantly begs the question.

The second reason is an appeal, according to Armstrong, to a plausible necessary condition for what it is to be a property. And that is that the property must endow the particular that has it with certain causal powers. Here Armstrong is again appealing to his Eleatic Principle. Later in this chapter this principle will be examined in greater detail, but regardless of the ultimate verdict, something can be said now about whether it can be used to defeat the Argument from Meaning.

His argument against accepting the purported property of self-identity as a real property is that it has no causal efficacy. For he asks:
Now could a thing's identity with itself even be conceived to endow the object with causal power? It is difficult to see how it could. 7

His argument then is a "how possible" argument. That is, Armstrong is arguing that it is up to those who might think that self-identity could possibly endow a particular object with certain causal powers to give some sort of account of how this might actually happen. And for Armstrong no account could be forthcoming because it seems that for him it is just obviously impossible. I do not have a fully worked-out account of how this purported property could effect something in the natural realm, but one can still argue that his reason of causal efficacy is not decisive about the status of self-identity because the situation is much vaguer than he takes it to be.

For instance, it may turn out that self-identity is the only property we can point to that would let us be able to distinguish two otherwise qualitatively indistinguishable objects. This property could be the thing that makes the object what it is. This possibility, of course, does not prove that self-identity has causal efficacy, but it does show that self-identity might be necessary for an object to have causal efficacy. For how could an object that lacked self-identity have any causal efficacy at all? This argument may not be decisive either, but at least it shows
that the situation is not as clear-cut as Armstrong takes it to be, and that more argument is needed.

So neither argument decisively makes the case that there can be predicates without properties, i.e., predicates that can apply to an object in virtue of no real characteristic. Armstrong's victory then, is a limited one. From his attempt to discredit the Argument form Meaning we have gleaned the following results: first, there are properties without predicates. Second, there are predicates without properties when there is no particular that the predicate applies to. But, third, he has given us no strong reason to believe there are predicates without properties in the case where there are predicates that are applicable to particulars but applicable not in virtue of any property.

Before the final judgement on the separation of semantics and ontology is given, I first want to point out a fairly significant internal problem with Armstrong's theory that exists regardless of his claims about separation. As has been said repeatedly he wants to separate semantics and ontology for their mutual benefit. Immediately after he puts forth the arguments above, he defines different types of predicates. But in the definitions he fails to follow his own light. Look at the definitions of "open" and "closed" predicates:

The essential mark of an open predicate is that there is nothing in its semantics which restricts
its application to a finite number of particulars. . . If a predicate is not 'open' it is 'closed'. 'Identical with the planet Venus' and 'the wisest of men' are closed predicates.8

This quote is interesting because Armstrong implicitly admits, regardless of the problem of whether or not a predicate applies to a finite or infinite number of particulars in virtue of its meaning, that in fact there are predicates that apply solely in virtue of their meanings. And this is exactly what he says should not be allowed:

What we must do, I submit, is to distinguish with all possible sharpness between the meaning, intension, or connotation of a predicate on the one hand, and the property or relation, if there is one, in virtue of which the predicate applies to particulars, if it does apply to any, on the other. The study of semantics of predicates must be distinguished from the theory of universals. Ontology and semantics must be separated to their mutual benefit.9

When Armstrong says in the quote above that ontology and semantics must be separated, I take him to mean that they must be separated completely. And I do not think that interpretation is forced in any way. For he does not claim
they must be separated only to a certain extent, nor does he attempt to set up any restrictions or limitations as to what degree they must be separated. It seems fair to say that he intends the two fields to be independent of each other.

And further, the example "the wisest of men" seems to point to the same problem. Whether or not there is something in the semantics of the phrase that restricts its application to a finite or infinite number of particulars is not important. What is important, and decidedly contrary to Armstrong's wish, is that semantics is relevant to the application of the predicate at all! Armstrong admits this predicate applies to a finite number of particulars in virtue of its semantics. And if "wisest" applies in virtue of its semantics there seems to be no reason why we could not extend that result to all evaluative predicates. It seems that every evaluative predicate, whether it be superlative, comparative, or whatever, applies to particulars in virtue of its meaning. And since evaluative terms are omnipresent in our language it seems Armstrong must admit that a large part of our thought and culture uses predicates that apply in virtue of their meanings. This is obviously contrary to the thesis he wants to defend.

Armstrong could respond by saying that evaluative predicates are like the predicate "is identical with itself" in that they apply in virtue of no real objective property. If my arguments earlier were plausible, then this is probably not the best route to take. But at least we can
conclude here again that Armstrong needs to do more work. More will be said about this later.

So far then, our conclusion is that Armstrong has not given decisive arguments for the claim that we should separate semantics and ontology. There may be other reasons why we might want to separate these two, but the reasons he suggests are not completely decisive. And we have also seen that he himself allows for predicates that apply in virtue of their meanings alone. So, semantics and ontology in fact have not been separated, and there is no conclusive evidence which shows that they could, at least in the way Armstrong suggests. The only remaining question then is, should they be separated? Should we try to find a way to separate them?

I personally am not aware of any other attempts to do this. But I also think that an examination of the catalogue of all the various attempts (if there is such a catalogue) would bear little fruit. For, even if Armstrong (following Wittgenstein) is right about there not being a one-to-one correspondence between predicates and properties, it does not mean that semantics and ontology should ultimately be separated. Armstrong is alerting us to a problem when he argues that just because there is some word with a meaning it does not necessarily mean there is some property. Properties are not necessarily found that easily, granted. But it does not follow that every property is independent from any meaning. It does not imply that the meanings of our words, the content of our concepts, which depend upon
our interests and desires (entities which are causally efficaciously external to objects), are irrelevant to what properties an object has. Our interests and desires do have an effect on which properties an object has (at least some of the properties).

In other words, Armstrong concludes his argument for the separation of semantics and ontology with the invocation of the Eleatic Principle. At this point metaphysics is supposedly purged of all of its nominalistic components. Our interests and desires have nothing to do with what properties an object has. Nothing causally efficaciously external to the object does, according to Armstrong. Semantics is separated from ontology and we are now free to decide whether a predicate applies to a particular in virtue of a property on the merits of each case. The explanation of why a predicate is applicable to an indefinite number of particulars for Armstrong makes no appeal to the meanings of predicates.

Let us suppose for the sake of argument that Armstrong has indeed shown us that there is no one-to-one correspondence between predicates and properties. The question now is: would that fact purge ontology of all its nominalistic components? Even if there is no one-to-one correspondence between properties and predicates, would it be true that no appeal to the meanings of predicates, in any situation, is necessary to explain why a predicate is applicable to an indefinite number of particulars? Would it
be true that our interests and beliefs, which determine the meanings or our predicates, are totally irrelevant (to what categories there are and to what objects are in which categories)?

In the next section I will argue that our interests and desires are not irrelevant to what properties an object has. But first I would like to point out the sort of error that I think Armstrong is making. If we examine some probable motivations of his claim we can see how and where he has gone wrong. The separation of semantics and ontology is a thesis that is subordinate to Armstrong's more general thesis that there is nothing external to an object that is relevant to what properties it has. He wants to prove the former claim in order to bolster the latter. But even if there is no one-to-one correspondence between predicates and properties it does not follow that semantics and ontology can be separated and that therefore nothing external to an object is relevant to what properties it has.

One way to see the Armstrong's mistake is to go back to Chapter One and utilize the notions of Inherence and Mind-Dependence. Utilizing these notions we can explain Armstrong's error by saying that he conflates Inherence with Mind-Dependence. He conflates the two notions in the following way. Remember, he says that:

It is very worthy of remark, therefore, that provided we restrict ourselves to instantiated
universals, Naturalism can be combined with the rejection of Nominalism.\textsuperscript{10}

But just because we claim (and even if it were true) that there are no uninstantiated properties does not mean that there are no properties that are mind-dependent. Just because every property must be instantiated (inherent) in some physical particular does not mean that our interests and desires (things non-inherent, external, or outside the physical particular) are irrelevant to what properties an object has.

It is this dichotomy of "inside/outside" that he is confused about. In order to avoid the confusion a further distinction needs to be taken into consideration. There are two different kinds of "outsides" that Armstrong lumps together because of his claim that nothing causally efficaciously external to an object is relevant to what properties the object has. There is the "inside/outside" distinction of Plato. That is, the Forms in the Platonic heaven are "outside" our natural universe. This "outside" applies to both of the notions of inherence and mind-dependence. Forms, for Plato, are neither inherent in physical particulars nor are they dependent upon our minds for their existence. But then there is also the "inside/outside" distinction of, say, Aristotle. Aristotle's properties are inherent in the sense that they are "in" physical particulars in the natural realm as
opposed to Plato's, whose are non-spatio-temporal. But this "inside/outside" distinction does not necessarily preclude the possibility of properties being mind-dependent. That is, we can consistently maintain that properties are inherent in the Aristotelian sense, but still claim that the mind-dependent aspect of nominalism need not, cannot be rejected. For Plato, if there really are Forms then they exist outside of space and time, and their existence has nothing to do with what we think. But if Aristotle is right and properties are somehow "in" the physical particulars that manifest them, then the possibility of certain properties being mind-dependent is not necessarily precluded. Just because a property must be instantiated in a physical particular does not mean that the property cannot originate with us.

Armstrong's rebuttal would be the infinite regress arguments, the thought experiment, and his purported necessary condition for the existence of any property: causal efficacy. If what I have said in earlier chapters about the regresses and the thought experiment is plausible, then Armstrong cannot respond with these. But causal efficacy seems to have more force, so that will be examined in detail in the next section.

Before moving on the next section something more needs to be said about predicates and properties. I am not claiming that no distinction should be made at all between them. That would be reverting to the error Russell made,
(at least the error Armstrong thinks Russell made). A word, or a concept (a mental entity), is not a property of an objective physical particular. Also there are different types of predicates that must be distinguished. Both Armstrong and Russell reject disjunctive and negative predicates, for instance. Also they both accept that atomic predicates correspond to properties. But these distinctions and whether they should be accepted or not really are a separate issue. What categories there are, of predicates that correspond to properties, is a different question than the one about whether or not words or concepts are relevant to what properties an object has. This work deals primarily with ontology. It is an attempt to show the significance of nominalism and conceptualism to questions of ontology. This significance Armstrong denies. What is needed then, is not a full-blown theory about how (and which) predicates correspond to properties and which do not. What is needed is an argument as to why certain aspects of the rival theories of nominalism and conceptualism are necessary for solutions to ontological questions. That attempt follows in the next few sections.

III. The Role of Agreement

It seems what is needed is an example of a particular that has changed properties solely on the basis of changes in our concepts. And we do not have to look very far to get one. Twenty-four hundred years ago a certain vase in
ancient Greece had various properties of shape, size, etc. It had, among others, the properties of being cylindrical, having a certain mass, and being made of ceramic. Because of the properties inherent in it, it was put to a certain use. The category it was put into and how it was used was a function of its inherent properties and its form. But now this same vase, while retaining the same material properties of shape, size, mass, etc., has had its function changed. Now it is a work of art in the British Museum. It has become older, and that property is not dependent upon us, but it also has become a member of a new category because of changes in our concepts. If the category that a particular is put into is a function of its use, and its use is a function of our interests and desires, then particulars can change properties on the basis of our intentions as to which use the object is most appropriately suited.

To this Armstrong would reply that the property of "being a work of art" fails to satisfy the Eleatic Principle. This purported property is not real because it cannot act or be acted upon in the natural realm. Like the predicate "self-identical", "being a work of art" is one that applies to the vase but not in virtue of any property. The most our suggestion points to, he would say, is the urgent need for a theory of semantics, but it does not effect his theory of objective universals. He says:
Ontology and semantics must be separated—to their mutual benefit. Of course this lays on us an obligation to give an account of the semantics of predicates. What is it for a predicate like 'accelerates through the speed of light' to be a meaningful expression. In this work however, that problem can receive only incidental attention. Our concern here is with first philosophy.\textsuperscript{11}

To see whether this rejoinder is sufficient and to see whether the example of the vase does or does not effect his theory of objective universals we must look further at his explanation of why predicates are applicable to an indefinite number of particulars. Armstrong's explanation appeals to the existence of a multiply exemplifiable property that each member of a group has. But, beside answering the question of whether or not there are multiply exemplifiable entities, any theory purporting to solve the problem of the One Over the Many must also give an account of how the connection between predicates and properties is established. For this seems to be a necessary part of the explanation of why a predicate is applicable to an indefinite number of particulars.

Another way to see the importance of establishing the connection between a predicate and a property is to think of the phenomenon of communication, or of learning or identification. For instance, when I see a particular
object and identify it as having a certain property, that whole event is a phenomenon that needs to be explained or given an account of just as much as any other physical phenomenon. The act of identification is a datum just as much as any other phenomenon. And obviously it is a phenomenon that is repeatable. It happens every day to everyone of us. So one could also think of this phenomenon as falling under the problem of the One Over the Many. What is it about distinct acts of identification (whether by the same person or by many different people) that is the same? This phenomenon needs to be given an account of. And it will be argued that in establishing the connection between a predicate and a property that reference must be made to people and their behavior, and that therefore a mind-dependent element must be accepted in ontology.

Armstrong's account of how the connection between a predicate and a property is established has two components:

We have access to the properties and relations of things only insofar as (a) the things act upon, in particular upon our sensory apparatus; and (b) as a result we are disposed to classify certain particulars as all being alike in a certain respect.\textsuperscript{12}

In other words, certain things act upon us because the properties inherent in these particulars have causal
efficacy in the natural realm. These properties impinge upon our sensory apparatus, and because of our dispositions to recognize things in certain ways we all agree to put certain particulars in the same category.

Certain things act upon us, and we classify them. By causing us to classify them, they manifest a similarity of power. So we judge that their properties (or relations) are at least similar.\textsuperscript{13}

At this point I would like to turn to a short but potent article by Richard E. Grandy entitled "Universals or Family Resemblances?" In that article Grandy shows that most discussions of the problem of universals suffer from superficiality because they do not take seriously enough the necessity of specifying what it is that connects an expression with its referent. Insofar as expressions do refer to something, this is clearly the heart of the problem, and it is clear that it is to be located somewhere in the activity of language users. To show how this effects the problem of universals two possible views of language are put forth:

One possibility is the following: According to one possible view of language, let us call it the Naive Linguistic Realist position, human language arises because human beings perceive that there are
various kinds of objects in the world and adopt (in some suitably loose sense of adopt) conventions that enable them to refer to these kinds of objects by various general terms. According to another possible view, which we shall call the Naive Linguistic Nominalist, there are certain sets of objects that people find it convenient to group together because of their interests and beliefs, and people adopt conventions that enable them to refer to the members of these sets by various general terms.  

Grandy then points out two problems with the nominalist view. First, it cannot be that two objects that have the same name have nothing in common except their name because it would be miraculous that different people agreed in their applications of the term. If the objects had nothing in common, what would make two independent observers call it by the same name? (Except chance, perhaps.)

if we imagine the not unusual circumstances in which two competent English speakers are each separately confronted by an object they have never before seen and both agree that it is a dog, how is the nominalist to explain this fact if not by appeal to the similarity between this dog and others?  

The second problem concerns something being called $G$ and its being properly called $G$. We can be mistaken about what we call things, so merely calling some object $G$ cannot be enough.

If $G$'s have nothing in common other than being called "$G"$, then it would appear that being called "$G" is sufficient for being $G$. But this does not do justice to any of the normative notions associated with language use, the contrast between truth and falsity, the possibility of misedescribing and so on.16

The realist, says Grandy, has a simple explanation of these two phenomenon: 1) the social character of language, i.e., that different speakers can agree on previously unencountered objects, and 2) that the structure imposed on the world by the nominalist is not wholly arbitrary. (But ultimately it too is unsatisfactory.) A realist could say:

that objects are called $G$ because they all and only share some property $G$; that an application of the term $G$ to an object is correct if and only if that object has the property $G$. The social character of language is derivative from the realist assumption, for the explanation of why speakers agree in the
application of some terms is that the property \( P \) is perceptible to speakers.\(^{17}\)

It is at this point that Grandy's discussion becomes pertinent to Armstrong's theory. It is pertinent because Armstrong shares the same view about the social character of language as Grandy attributes to the realist. Armstrong's view differs slightly from the view attributed to the realist by Grandy in that Armstrong's is less general. Armstrong's explanation of why speakers agree in the application of terms deals with a special notion of causality and manifesting similarities of power, etc., while Grandy's realist speaks only of properties being "perceptible", but at heart they are both the same.

The ground-breaking question that Grandy asks is:

The difficult question that must be raised about these explanations is how the connection between a general term in the language and a property is established.\(^{18}\)

And just because we all automatically agree, or are even disposed to agree (as Armstrong would say) that a certain particular belongs in a category, does not mean that the property we are appealing to is characteristic of the objects we put into the category. That speakers agree that an object has a property does not make it have that
property. Any given particular has many different properties, and even though we have dispositions to classify, it does not mean that we are all tapping in on the same property. Simply being disposed to classify certain particulars into the same category is not sufficient to establish that a specific property is characteristic of all and only those objects in the same class.\textsuperscript{19}

How can we be sure we are all referring to the same property? Grandy suggests two ways:

1) the property \( P \) is picked out from others by the intentions of the speakers, 2) the property \( P \) that is characteristic of \( G \)'s is the most salient property possessed by the exemplars and not possessed by negative exemplars.\textsuperscript{20}

So either the property is picked out by the speaker's intentions or the property is the most salient. But after some thought, says Grandy, one realizes that these two responses are really not distinct. One cannot intend to point out some property to a listener unless one believes that property is conspicuous enough for the listener to see. One cannot usually convey some information to a person unless one has some expectation that the listener will grasp what is intended. And one can only believe that a listener will grasp what is intended if that property is salient.\textsuperscript{21}
At this point rehearing Armstrong's argument and how Grandy's point is related would be helpful. Armstrong claims that there must be an explanation of why a predicate is applicable to an indefinite number of particulars that has nothing to do with the meaning of the predicate, and this explanation must in the end appeal to the properties of the particulars. The notion of causal efficacy enters in this way: the only properties we can say exist are the ones that have causal efficacy, because if they did not have causal efficacy how could they help us in the explanation?

All of Armstrong's major theses are at play in these few sentences. The idea that nothing causally external to a particular is relevant to what properties an object has: not our words or our concepts (meanings) or Forms, nothing. Of course, the idea of the separation of semantics and ontology is at play here. And the notion of causal efficacy is playing an important role. I know that, strictly speaking, Armstrong says that the Eleatic Principle is only a necessary condition for the existence of any property but, when he asks, "How could an entity help us to explain why a predicate is applicable to an indefinite number of particulars if it did not have causal efficacy?", it seems to me that he is surreptitiously slipping in a sufficient condition as well. And it is not even that surreptitious because he does ask that question. I do not think I am making too much of this. That is, Armstrong might come back and say that I am not following the letter of his law, so to
speak. And if I (following Grandy) point to some aspect of the explanation of why a predicate is applicable to an indefinite number of particulars that are not causally efficacious, then what I have said is not really relevant to Armstrong's point. But my point is first that it is highly debatable that the letter of his law does not include a sufficient condition, for as I said, he does ask that question. Second, even if I am not following the letter of his law, I am certainly following the spirit. After all, the entire tenor of his work is materialistic, physical, causal, etc., and that the properties of objects have nothing to do with anything causally external to them, let alone our interests or desires. But I am maintaining that, in the explanation of why a predicate is applicable to an indefinite number of particulars, one must make reference to the interests and desires of a linguistic community. Since Armstrong is a materialist he would no doubt want to argue that even our interests and desires are ultimately reducible to only physical phenomena. But no matter, my point is that something external is relevant when we want to say what properties an object has.

At this point a realist could ask this question: What is wrong with the following picture? We have two subjects, person (a) and person (b). They are both presented with an object that has causally efficacious properties in it and they both agree to label it with some predicate. So the picture looks like this:
And the claim is that we do not need anything else to give an account of this situation other than the two people and the object with some causally efficacious property, and of course the relationships between person (a) and the property and person (b) and the property.

Grandy could (and has, in conversation) respond by saying that, what is wrong with the picture is that the relationships between the two people and the property, depend on the people. If one argues, as Armstrong does, that certain properties in objects, because of their causal efficacy, manifest a similarity of power, and that manifestation impinges upon our sensory apparatus, and we are disposed to classify them as all similar, then one is slipping in the intentions of the observers through the back door, so to speak. That is, the realist says that we need not invoke the intentions or the behavior of the linguistic community when, for instance, we are explaining the applicability of the predicate "red", because if we display, say, twenty red squares and go down the row pointing to each one and saying "red", and even though there is some possibility of confusion (the person might think you mean
"angle" or "line" or "square), sooner or later the person will understand, and ontologically there would be nothing more there than the person and the squares and the properties they all share. And one could build from there.

But even in this situation Grandy could say that the conclusion to be gleaned from all this is that it is not possible to give a straightforwardly realistic answer. The social character of language is not directly derivative from the realist assumption that speakers agree in application of terms because some property is perceptible to speakers.

A philosophically insightful characterization of the extension of a general term must . . . make reference to a linguistic community and to its past, future, and possible behavior. That speakers agree that an object is an F does not make it an F. Their verdict can be overthrown by themselves if they discover that some of their assumptions, presuppositions, contextual influences, perceptions, and many other factors were in some way inaccurate or inappropriate.22

If one wants to establish a connection between the predicate "red" and a property, it is not enough to just pick out a bunch of red things and keep pointing and saying the word "red". Because even in a large diverse group of objects there will probably be many properties in common.
So, if it is not enough to just pick out a large group of objects and keep pointing, then how else can we do it? We can examine our intentions, i.e., I can say, "Well, I intend for you to understand by "red" this property and not some other. But that also is not enough because one cannot really intend for someone to grasp this property as opposed to some other, unless the property is salient somehow.

So, it is not sufficient that the property is just salient (causally efficacious) because many properties are salient, but it is also not sufficient that we just examine our intentions, because the property has to be salient in order for us to intend to pick it out for one grasp it. Therefore, even a realist must make reference to speakers and their intentions.

IV. A Skeptical Response

Suppose Armstrong is convinced that in establishing the link between a predicate and a property even a realist must make reference to speakers and their intentions, and that therefore when giving an explanation of why a predicate is applicable to an indefinite number of particulars that even a realist must appeal to something external to the object. Does that mean that we have shown that Armstrong's necessary (and sufficient) condition for the existence of any entity is irrelevant? That is, when we both see a new x what would make us both say it is an x? The realist answer has been shown to be too simple-minded because one must make
reference to speakers and their behavior. So, what makes us agree when we label the new x with the same predicate? Is there something out there that causally effects both of us in the same way, or is it, as one could imagine a skeptic saying, that we both have the same appearance, but that somehow we are causally alone, so to speak. That is, we could have a situation in which we both have the same appearances, and we both use the same predicate when talking about the object, and we even have causal efficacy involved because the skeptic need not deny there are properties out there that are efficacious in the natural realm. The problem is that is is still possible in this situation for each of our appearances to be caused by some different property found in the object. What insures that the appearances are being caused by the same property?

This possibility does not make the Eleatic Principle irrelevant, but it does seem to compromise it somewhat because the actual mechanism involved in each instance of causal efficacy would have to be different. That is, when we both see something as red, the mechanism involved in my case that causally produces the red appearance would have to be different from your case, because the actual property that is producing the red appearance in my case is different from the actual property that is producing the red appearance in your case.

Suppose the situation were even more pernicious, and that every case of appearances and our verbal responses to
them, for everybody, at any time, were exactly as they appear now, but that the actual property that was responsible for causing the appearance in each case was different. Causality would have to be an extremely complicated thing, but this is a logical possibility. An example might help clarify what I am thinking about here.

Suppose, for instance, there are two people looking through two different windows at a certain object, say, a red ball. Let us assume from the beginning that the perceptual apparatus of both observers is functioning normally. Person #1 has a clear unobstructed view of the object, but person #2 is having a perceptual trick played on him. Outside of person #2's window there is a cleverly disguised mirror that is reflecting the image of a completely different yet qualitatively indistinguishable red ball. So in this example not only are the properties that are causing the appearance in each of the observers different, because the objects are numerically distinct, but so also are the causal mechanisms in each case different, because along with all of the other normal physical causal reactions that are taking place that are involved in any normal case of seeing, as in person #1's case, there is also the added physical causal reaction of reflection in person #2's case. Is this skeptical response a problem for Armstrong's Eleatic Principle?

This possibility very much mirrors a fanciful example that has been widely discussed in the literature on
epistemology of the past twenty years or so. And that example is the celebrated brain in the vat. The example runs something like this: suppose that, rather than each of us being an individual person who interacts in many ways with the external world around us, we are instead just separate brains in a vat of some solution that keeps the tissue alive. A certain mad scientist stimulates our brains with chemicals and electrodes to make us think that we are experiencing things as if we were what we all already think we are, i.e., people interacting with the external world. So, we think that our experiences are veridical, somehow, usually, really connecting us with the real world external to us, but in fact they are being artificially stimulated, and we are being duped into believing that they are veridical. In this situation a veridical experience would be qualitatively indistinguishable from one that was artificially produced by the mad scientist. The problem is, how can we tell if we are brains in a vat or not? Our experiences do not come labeled as either veridical or artificial.

This situation mirrors the skeptical response to the Eleatic Principle because, just as our experiences do not come to us labeled as either veridical or artificial, so also do our appearances not come labeled as being caused by one property or another, nor are they labeled as to what causal mechanism is involved. If the appearances are qualitatively indistinguishable, and we are causally alone,
then there seems to be no way for us to be able to tell that
the cause of your red appearance is different or the same as
the cause of my appearance.

This does seem to be a real possibility, but it is
important to understand the implications. Claims that a
certain property causes an appearance of red, or that a
specific causal mechanism is involved, claims beyond all
chance of error must be laid aside in favor of a more
skeptical and flexible theory of what causes what. We are
not saying that there are no causes, instead we are claiming
that what properties there are is never beyond rational
criticism. Therefore we can always ask whether it is
reasonable to accept some property as a cause. The question
is not resolved by appeal to some infallible beliefs beyond
all chance of error. It is settled instead, tentatively and
subject to subsequent reconsideration, by appeal to total
science. And this fits in exactly with Armstrong's thesis
about the role of science in finding properties.

V. **A Realistic Response**

So far then, it seems that our acceptance of Grandy's
point is enough for us to be able to say that a non-
realistic element is necessary to solve the problem of
attribute-agreement. But is it? That is, could not the
realist say that speakers and their intentions are relevant
to the applicability of predicates, i.e., the meaning of a
predicate depends on what property the speakers intend to
pick out, but deny that intentions are at all relevant to what properties an object has?

This does seem to be the best response that the realist (in the non-mind-dependent sense) can give, especially a realist like Armstrong. It is a good response for someone like Armstrong because it exploits a distinction that was argued far back in Chapter Two (page 40 ff.). Remember, Bradley tried to argue that Armstrong's way of setting up the problem of attribute-agreement (giving an account of Moorean facts) was illegitimate (or at least not necessary). And then he suggested that Armstrong put the question of attribute-agreement in a linguistic guise, for surely everyone would agree that there are linguistic types that need to be given an account of. This very page is full of them. I then defended Armstrong by arguing in effect that there are two very close questions that are usually asked when talking about attribute-agreement, whose answers do not necessarily have to be the same. The questions are so similar and require such an abstract answer that it is easy to mistake the one question for the other.

The questions are: 1) Why is it that we can use one predicate to talk about two numerically diverse objects, and 2) How can we account for the fact that two numerically diverse objects manifest the same properties? These two questions do not necessarily invoke the same response. Question 1) could be answered by invoking entities completely different from those invoked by the other. The
realistic response above seems to be exploiting this difference. Grandy's comments are more relevant to question 1), while a realist like Armstrong would be more interested in question 2).

Even if this is the best way to look at the realist response, we have at least shown (following Grandy) that non-realistic components must be accepted in the solution to question 1). But this leaves question 2) untouched and Armstrong could claim that our comments so far leave his theory unscathed. But perhaps there is something more that can be said concerning how our concepts are relevant to what properties an object has.

VI. A Modest Proposal

Sextus Empiricus once immodestly proposed that there is no such thing as incest, because touching your mother's knee is not incestuous, and all the rest of it is just a matter of degree. What makes this argument immodest is not its subject matter. Nor does its immodesty lie in what the argument suggests about Sextus Empiricus' psycho-sexual development. The argument is immodest, or extreme, in its logic. The logic of the argument, roughly, is as follows: there is no difference in kind between touching your mother's knee innocently and incestuously because there is no one place that one can put one's finger to mark the spot where the innocent touching becomes incestuous touching. Is it two inches above the knee, or six? And since there is
such a broad (gray) area, one does not know exactly where to put the limit. And therefore there is no limit. Innocent touching is just innocent touching, no matter what degree it is taken to.

Ask anyone's mother, Sextus Empiricus was wrong. But again, it is not because of the immodesty associated with breaking sexual taboos. It is because of the crude analysis Sextus Empiricus gives of the situation. Just because there is a gray area does not mean there is no black or white. It may be difficult to put one's finger on the exact spot beyond which innocent touching becomes incestuous, but that does not mean that there are no places where one should not touch. The most he can claim is that "incest" or "incestuous" is a vague predicate. Just because in practice it may be difficult to apply a predicate appropriately because there is a gray area (in this case it does not seem very difficult) does not mean there are no appropriate applications of the predicate.

What does all of this have to do with the problem of attribute-agreement and the realist response that no mind-dependent element is relevant to what properties an object has? It is connected in the following way: Sextus Empiricus does not argue in the same fashion about the predicate "exists", but Armstrong tried to put his finger, so to speak, on the exact point on the line as to where we can say a thing exists or it does not exist. And that point on the existence/non-existence spectrum, for Armstrong, is
causal efficacy, a non-mind-dependent element. An object exists only if it has causal efficacy in the natural realm, and causal efficacy is not mind-dependent.

So, for Armstrong then, no causal chain (or what happens to what), is dependent upon any mind or belief system. ("... The causal order is independent of the classifications we make."\textsuperscript{23}) Since whatever exists must have causal efficacy, it follows that what exists is independent of any mind or belief system. But there do seem to be examples of things that most people would say exist, and yet they do seem to be dependent upon some mind or minds or some belief system.

That is, realists (like Armstrong, and in general) are almost smug in their denial of nominalistic or mind-dependent elements in ontology, for their claims, they say, are just common sense. Suppose we are dealing with some disease, for instance, that has some specific chemical and atomic structure that is composed of certain kinds of atoms with specific weights and masses, etc., and is fatal to humans if exposed to it. Now what, a realist would ask, could our interests and desires have to do with the deadly force of this disease? No amount of re-naming or re-thinking or wishing will prevent the disease from doing its lethal duty. Of course, the name we give the disease, the actual string of phonemes we use to label it, are conventional. We choose that. But our interests and desires simply cannot effect the disease and what properties
it has. Let me issue two caveats here: first, there is a certain sense in which our interests and desires could effect this disease. We could come up with a cure, a way to neutralize its deadly effects. But that would not effect the realist's position, for the disease would still have the properties it has regardless of what we think. Second, there is another sense in which our interests and desires can effect the disease. In the philosophy of science, if Hanson and Kuhn et al., are correct, then what we find in the world depends a lot upon what we are looking for. That is, all of our observations are theory-laden, and what we find depends a lot upon the theories we construct. But admitting this is compatible with the realist position also. Our theories can change, and consequently our ways of looking at the world can change, but the elements we find are not made by us. Realism and fallibilism are compatible.

But there are cases where the purely realist response does not seem to be sufficient. A paradigm case is artifacts, e.g., tables, chairs, cars, etc. Artifacts seem to be right in between what Armstrong says about existence and causal efficacy. For Armstrong only those things that have causal efficacy exist, and causal efficacy is not mind-dependent. And artifacts certainly have physical (causal) existence, because, for instance, we we can sit on chairs. But many properties they have are what we would usually consider to be mind-dependent. The style of a chair obviously depends upon us somehow. Whether the chair is a
Breuer chair, a dentist chair, or a throne, its size, shape, and other properties depend upon what the chairmaker puts unto it. And if the notion of style is a property that is too aesthetic and abstract, one can think merely of the configuration of the parts of the chair, or its structure. The actual size, shape, and the relationship of its parts to each other are physical and therefore have causal efficacy, and yet they are also properties that obviously depend to a large extent on us, and what we intend.

As I said in an earlier chapter, the causal theorists think that Russell went wrong, when he was talking about what exists and what does not, by invoking meanings. We do not, as Russell would say, have a certain description in mind and then find in the world whatever satisfies that description and then say that thing has a right to be called by a certain name. But rather, the causal theorists would say, we find something in the world, baptize it, and then science finds out about the properties the thing has. And, Armstrong would add, science can only find out about the properties that one causally efficacious in the world and therefore only those things exist.

But artifacts satisfy components of both positions (Russell's and the causal theorists). Consider a common table. Obviously a table exists in this world. It is physical, made up of molecules whose atoms have a certain atomic weight depending upon what it is made of. So it has causal efficacy in the natural realm, and we would look to
science to tell us what properties it has. But tables, and artifacts in general, seem to have other kinds of properties. For instance, when we ask the scientist what a table is, he tells us information about the atomic weight of the atoms of the material the table is made out of, its weight and size and shape, etc. But there is other information about the table that is important and is not conveyed by appealing to merely scientific realistic components. We would also say the table has, for instance, a flat top surface, supported by a certain number of legs (and the number may vary), it has a certain style and a certain function (which could also be variable). These properties are also part of what we mean when we talk about tables. Our conception of what a table is determines which category the entity is placed in. If we change what we mean by table and decide to allow what we now call chairs (as we have done in some of the less traditional styles of furniture), this decision would not and could not be based on the results of some new experiment in atomic physics. It would be based on our desire to change what we regard as a table.

So, there is a component in artifacts whose existence is difficult to deny, yet nevertheless seems to have nothing to do with causal efficacy. We do not look only to science to tell us what a table is, not only to causal efficacy. But our intentions and desires, or what we mean by "table", is a necessary component when answering existence questions.
And it seems that a table, strictly speaking, could not exist without this mind-dependent component. Part of what it is to be a table depends upon what we mean by "table". Let me issue one caveat here. The notion of dependence must be qualified. The properties of the table depend upon our interests and desires only when the table is first being made or altered by someone later. For obviously the table and its properties would not stop existing if we stopped thinking about it.

Beyond artifacts there seem to be cases of things that exist that are even less connected to Armstrong's realistic notion of causal efficacy. Take, for instance, the example of a company or a university or, more generally, a community of whatever sort one wishes. A company has a certain legally defined status in society. And it seems to be real even though one cannot touch a company. It is a legal entity that has specific properties of its own over and above the properties of the collection of all its individual members. One can sue a company, for instance, and win, without any of its individual members suffering in any way. So a company seems to be more than just a collection of all its members.

But is it? One way to avoid the unfortunate (for Armstrong) consequence of having to admit an entity like a company into one's ontology, thereby accepting a mind-dependent component, is to argue that a company is not anything over and above the sum total of its members and
parts. A famous historical example of someone who argues this way is Jeremy Bentham. When Bentham was trying to explicate the principle of utility he had to decide whose pleasures and pains had to be taken into consideration when trying to decide the correct moral course of action. Do we take the pleasures and pains of the state or community into consideration when we are trying to decide what course of action to take? Bentham argues no, for the following reason:

The community is a fictitious body, composed of the individual persons who are considered as constituting as it were its members. The interest of the community then is, what? The sum of the interests of the several members who compose it.²⁴

So Bentham gives a nominalistic (or as Armstrong would say, a particularist) account of community. There is nothing over and above the sum total of the members of the group, for that is all it is. The question is, can Armstrong use this account or something like it to avoid the unfortunate consequences above? The answer to this question is no. Armstrong cannot use this account because it is an example of the kind of position that he explicitly argued against in the first third of his book. Particularism is an incoherent thesis for Armstrong and nominalism in general has been the target of many attacks. So, even if the account
above is a plausible way of looking at the notion of a community, that path is not open to Armstrong.

An example of an entity that seems to be even further removed from the notion of causal efficacy but still nonetheless real, is a border of a state or a country or county. Some borders are real in the sense that they have causal efficacy. For example, half of the border between Texas and Oklahoma is the Red River. The Red River obviously has causal efficacy in the natural realm. But contrast that part of the border between Texas and Oklahoma with the part that makes up the panhandles of both states. There is no natural border in this area. Where the border is drawn depends entirely upon our interests and desires. It is purely a human artifice. It has no direct causal efficacy in the natural realm. One cannot grab hold of Oklahoma's panhandle. But states, nonetheless, do in some very real sense, exist. For they do at least seem to have an indirect effect in the natural realm. For instance, there may be no unhappy consequences of a certain action on one side of the border, but the same action on the other side of the border could have dire consequences. It might, for instance, be illegal to drink alcohol under the age to twenty-one in Texas, but not in Oklahoma. And if this were true, it would not be because we would get wet if we stepped into the Red River.

My argument here is a simple one. It is based upon the idea that Armstrong and realists in general have chosen
examples too selectively. There seem to be many phenomena that a non-mind-dependent realist cannot give an account of. Just as Armstrong tried to point out statements apparently involving reference to universals that the nominalist could not give an account of, I too am attempting to point out phenomena that Armstrong's theory cannot give an account of. I take my inspiration from a famous statement by Charcot (Freud's teacher): "Theory is nice but it doesn't stop things from existing." Armstrong's notions of causal efficacy and non-mind-dependence are used to form a neat and compact theory. But that does not mean the other phenomena I mentioned do not exist.

VII. *Armstrong's Response*

One might ask, at this point, why I have equated mind-dependence with being outside the causal realm. And the answer is: because Armstrong does. There is a great deal of evidence to support this interpretation. But first some preliminary remarks.

Throughout the thesis so far I have been using the terms "nominalism" and "mind-dependent" interchangeably. But this identification could be confusing. It is because of Armstrong's slightly unorthodox way of categorizing the traditional metaphysical positions that I identify the two phrases above. As has been mentioned many times before, for Armstrong the only things that exist are those that have causal efficacy in the natural realm, and causal chains are
independent of our categorizations. From this it follows that all things that exist are independent of our categorizations. Also we have seen that Armstrong gives extensive argumentation attempting to show the incoherence of all forms of nominalism and transcendent realism. From these two arguments we can glean two points: first (here is his unorthodox categorization) we can see that for Armstrong nominalism does not mean what it usually means. For under that category he places what are usually regarded as distinct views. For instance, what has traditionally been called conceptualism is now concept nominalism. What has traditionally been called nominalism is now predicate nominalism. So we see that for Armstrong nominalism just means anti-realism. And there are many different kinds of anti-realism. Second, since for Armstrong, all nominalisms are relational accounts, and all relational accounts are incoherent, and all mind-dependent accounts are relational accounts, we can see that all mind-dependent accounts are nominalistic, in the broad anti-realist sense, and for him, incoherent.

Whether we equate the notion of mind-dependence with conceptualism or nominalism is unimportant. But what is important is that all mind-dependent accounts are relational, and all relational accounts are anti-realist. This is exactly the position Armstrong is at pains to show is implausible.
One can see why Armstrong would hold this view, but now let us look at some textual evidence that supports the forgoing argument. In the chapter entitled "Concept Nominalism" he characterizes the position as follows:

The Concept Nominalist calls upon concepts, conceived as mental entities, to do the same job for which the Predicate Nominalist employs predicates. The Concept Nominalist gives as his analysis of a's being F the statement that a falls under the concept F. Since concepts are mental entities, tokens of the concept f are found in men's minds. But a's being F is a matter of the concept-type being applicable to a... The Concept Nominalist need do no more than take as primitive the notions of a concept as a mental entity and that of a thing falling under a concept.²⁵

Before I show how this characterization supports the view attributed to Armstrong above I need first to show how my notion of mind-dependence fits into it. I have consistently been claiming that our intentions or our interests and desires are necessary components of any adequate account of certain phenomena. Perhaps my language has been a bit loose, but I intend, by my notion of mind-dependence, to mean nothing more that what Armstrong does by conceptual. They are mental entities, tokens of which are
found inside men's minds. These concepts have content which is manifested in our intentions or interests or desires. So, a token of a concept is found in a particular man's mind, and that concept, which is a concept of something, i.e., the concept has content, can influence our interests or desires. And also interests and desires can influence concepts. Our interests can change what we mean by the concept of a chair, for instance. So, a concept is related to an intention or interest by the relationship of influence, but still they are both mental entities that are found in men's minds and are therefore mind-dependent, mind-dependent in the sense that our minds make the concepts.

Why the quote above supports the claim that Armstrong should be interpreted as claiming that mind-dependent elements are to be equated with being outside the causal realm can be seen if we examine Armstrong's fourth argument against Concept Nominalism. He gives the same arguments against Concept Nominalism as he does against all the other forms, namely: the thought-experiment, the relation and object regresses, and causality. The last one is what we are interested in here. About causality he says the following:

The causal order of the world depends upon the properties of things. Again, the causal order is, in general, independent of the minds which take account of it.
Here is a clear statement of mind-dependence being outside the causal realm. Concepts are mental entities found in men's minds. The causal order is independent of minds. Therefore, mind-dependent entities are outside the causal order.

This is by no means the only evidence that can be cited. This attitude is pervasive throughout his work, and to go through other examples would be redundant. But another blatant bit of evidence can be found in Volume I, pages 128-129.

So it seems that as a matter of fact Armstrong does indeed equate mind-dependence with being outside the causal realm. The question now becomes; is this identification justified? There are unhappy consequences for Armstrong's theory no matter if one answers "yes" or "no" to this question.

First let us look at the negative answer. Suppose Armstrong admits that this identification is unjustified. What exactly would that entail? Well, the identification precludes the existence of mind-dependent elements. If the identification were unjustified it would open the door for the existence of mind-dependent elements. Another way to think of this is that mind-dependent elements could be part of the causal realm. And if anything, this suggestion does seem to be at least intuitively plausible. It seems only natural to think that our intentions or our interests and
desires have truck with the material world. After all, I have certain interests, and through acts of the will I attempt to bring about in the physical world situations that would satisfy those interests. My intentions can affect the physical realm. And further suppose I am a reductionist of sorts and I claim that beliefs, etc., are reducible to the merely physical realm. All my beliefs, etc., are just chemical and electric surges. In this case our interests and desires seem to be even more closely related to the physical realm. And given Armstrong's propensities (after all, he is the author of A Materialist Theory of the Mind) one would expect him to take this path. But as we have already seen, he just denies this possibility. So, if he were to answer "no" to the question above his theory would be blatantly contradictory. And further it would change his stated ontology radically.

An answer of "yes" to the question above would also seem to bring along with it unhappy consequences. (This is the point I have been trying to establish.) If mind-dependent elements are excluded from the causal realm and thereby excluded from existence, then it seems there are many phenomena that most people would regard as existent but could not be accounted for with Armstrong's necessary condition. Reality is far too extensive, complicated, and multifaceted for this criterion to handle. Artifacts, communities, and borders all seem to have mind-dependent elements in them, and they seem to be real and yet ex
hypothesis (according to this answer to the question) they are not causally efficacious.

Armstrong's response no doubt would be that these things are just convenient fictions but fictions nonetheless. He would appeal to his necessary criterion for existence and his arguments for that criterion, i.e., how could something help us to explain if it did not have causal efficacy? He might admit that I have pointed out some phenomena that seem to be troublesome for his theory, but nevertheless *not* admit that I have pointed out something new in ontology. These phenomena could be reduced to only physical causal phenomena or he could claim that some of the things I pointed out could have meaning, but the meaning is not based on anything in reality as he claimed with the predicate "accelerates through the speed of light."

The important thing to notice about this response (and there does not seem to be anything else in his theory that is applicable to the points in question) is that it has a decidedly promissory sound to it. That is, let us assume that Armstrong's claims in the previous paragraph are all correct. Causal efficacy is a necessary condition for existence, reductions are possible, etc. But even if they were true, there is much work that needs to be done. My point is that his theory, as it now stands, is faced with a dilemma. I claim that Armstrong has chosen his examples too selectively. And there seem to be certain elements of reality that cannot be accounted for with his theory. So my
argument against Armstrong comes in the form of a challenge: Give an account of the phenomena I have pointed out (many more examples can be mentioned) using only realism and causal efficacy. Here is where the dilemma arises. Either Armstrong allows mind-dependent elements and he rejects causal efficacy as the only criterion for existence, or he does not allow mind-dependent elements and he must resort to the possibility of reductions. In either case the challenge is a real one, and much more form Armstrong must be forthcoming before we can accept his theory.

VIII. The Vagueness of Existence

I suggest that what the foregoing examples show, if they show anything, is that we should regard "exists" or "existence" as a vague predicate. The problem with Sextus Empiricus' argument is the crudity of his analysis of the situation. Just because there is a gray area does not mean there is no such thing as incest. What I am suggesting is that Armstrong is making the same mistake except in a reverse way. That is, Armstrong's analysis is crude not because he points to a gray area, but because the point at which he draws the line on the existence/non-existence continuum seems to leave out too much of reality. To continue with the incest metaphor, we can say that Armstrong has suggested some line beyond which it would be incestuous to touch one's mother, wherever that line may be. But what I am suggesting (in the case of existence) is that there may
be cases or situations where one can go far beyond that point and still the touching would not be incestuous, i.e., thing would still exist. In the case of touching, examples are easy to imagine, and for existence examples have already been given of phenomena that seem to go beyond causal efficacy.

Just as there are cases and situations in which touching would not be incestuous even though the touch might obviously go past the point that one would usually consider appropriate, there also are cases and situations in which things exist even though they obviously go past the point of causal efficacy.

We should think of the distinction between existence and non-existence more as a continuum or spectrum rather than as a dichotomy. At one end of the continuum is (non-mind-dependent) causal efficacy, and at the other is (mind-dependent) interests and desires (concepts). In between those two extremes is a large gray area. But unlike Sextus Empiricus we will not claim there are no extremes just because we cannot draw an absolute line amidst the gray. But also we do not want the excesses that attention to either one of the extremes more than the other would bring. If we countenanced only (non-mind-dependent) causal efficacy then we could not account for certain phenomena. And if we countenanced only our (mind-dependent) interests and desires, then we would lose claims to objectivity. That is, it would appear miraculous that different persons would
agree in their independent application of a term if the objects had nothing similar in common. But we also do not want to ignore the extremes completely either. Like the common sense realist, it seems we simply must admit at a certain level, namely the natural physical level, that our interests and desires have nothing (in the sense of making or creating whatever object we are talking about) to do with what exists. The example given before was of a disease. And unfortunately cures simply cannot be thought into existence no matter how desperate our hopes. On the other extreme, there is the example of the non-natural state borders. These seem to be a purely human artifice. We can put them wherever we want them. But to admit this is not to admit that just because we all agree that something exists, that it actually does.

One immediate result that we can glean from this way of looking at existence is that the status of causal efficacy changes from a necessary condition to a sufficient one (something I claimed Armstrong believes anyway). If an entity has causal efficacy then we can say it exists, causal efficacy is sufficient for existence. For certainly if an entity can have a physical and perhaps even observational effect, then that entity surely exists. But just because something exists, does not mean it has causal efficacy, at least not causal efficacy in the way Armstrong talks about it. His examples are rocks breaking windows and mixing two chemicals together to get a reaction. But our example of
the non-natural state border does not have causal efficacy in this way. One cannot grab Oklahoma's panhandle. So there may very well be many things that exist that do not directly cause anything to happen in the natural realm.

So, we have causal efficacy as a sufficient condition showing up at different points up and down the existence/non-existence continuum depending upon how much causal efficacy is involved in the entity. For instance, from our disease example, since no amount of mere conceptualizing can make a cure, the disease's efficacy in the natural realm is sufficient for us to say that it exists. But further along the continuum our example of artifacts has elements both of causal efficacy and the interest and desires of our linguistic community. Another condition, therefore, besides causal efficacy, should be introduced at this point. The condition is: the degree of involvement of our interests and desires (concepts). In the example of the table we saw that part of what it is to be a table depends upon what we mean by "table". So our interests and desires (concepts) are manifested in the table to a certain degree, but not because they are causally efficacious.

And finally at the far end of the non-causally efficacious end of the continuum we have entities that exist but have no causal efficacy in the natural realm at all. Without any causal efficacy at all we accept or reject the existence of specific entities based on other criteria
depending upon the situation. For instance, numbers. Notoriously, Quine is a reluctant Platonist accepting the existence of numbers only because physics is up to its neck in them. And on the other side Hartry Field has recently argued that we can have science without numbers. The details of these theories are not important at this point. But what is important is that in neither case do we accept or reject the existence of numbers based on causal efficacy.

Another example: we reject the existence of Zeus, not because he cannot hurl lightning bolts, but because in general our religious presumptions have changed from pagan to Christian, or at least from polytheism to monotheism. And our idea of God (usually, except in the eastern religions) no longer contains the vicissitudes of human behavior. One might object at this point by saying that if Zeus could hurl lightning bolts than we would not reject his existence. But my point is that even though he cannot hurl lightning bolts does not mean we should reject his existence. He could still exist even though he has no causal efficacy.

From all this we can conclude the following: the criterion we use to decide whether a thing exists or not, at the opposite end of the continuum from causal efficacy, is variable, depending upon the situation. It seems that different criteria apply in different situations. But causal efficacy is not necessarily a criterion. Nor is our mere acceptance of an entity a criterion for existence.
Just because we all agree does not mean the thing exists. As was said earlier, we can overthrow our own verdict if our presuppositions, contextual influences, etc., change.

There is one more element of this continuum that needs clarifying. So far throughout the explication of this theory I have used the notions of direct and indirect causal efficacy intuitively without spelling out exactly what they mean. Now is the time for a bit of clarification. One way to make sense of the direct/indirect causal efficacy distinction is to think of it in terms of how much mind-dependence is involved in the causal chain. A clear example of direct causal efficacy would be one where the events in the causal chain are completely independent of any mental entities, for instance, an electron colliding with an atom or a meteor crashing into some planet. These events take place regardless of any categorizations we make. Causal chains containing artifacts in a salient way are more indirect because they contain a greater mind-dependent element. (What I mean by salient is the following: there are cases of causation that involve artifacts but nevertheless are still independent of mental entities. For instance, a brick might accidentally fall through a window. Both the brick and the window have mind-dependent elements in them, but our categorizations have nothing to do with the actual causal chain of the window breaking.) The non-natural state borders are examples of causal chains containing mind-dependent elements in salient ways. Suppose
I am under twenty-one years old and I am in Texas drinking a beer. Suppose also there is a policeman next to me and it is illegal for anyone under the age of twenty-one in Texas to drink alcohol. The purely artificial non-natural state border is obviously important in this situation, but not because I can trip over it (as I am running away from the policeman). The purely artificial state border is not part of the causal chain like the electron in the example above was, because ex hypothesi one cannot bump into mental entities. But nevertheless it has an indirect effect on what will happen to me.

Now we have all of the elements before us:

1) Causal efficacy. (¬MD)

2) The interests and desires (concepts) of the linguistic community. (MD)

3) Direct and indirect causal efficacy.

These three elements interplay with each other to a greater or lesser extent up and down the existence/non-existence continuum. The interplay of these three elements is illustrated on the next page.

Another way to think of this whole program is to think of it as an adaptation of the Wittgensteinian notion of a family resemblance. Remember that Armstrong put this notion to use when he was arguing against there being a one-to-one correspondence between predicates and properties. Just as with Wittgenstein's example of "game", where there is no single property that the predicate applies in virtue of, but
EXISTENCE/NON-EXISTENCE CONTINUUM

Gray Area

From this point further to the right different criteria are used to help us evaluate existence depending upon the situation. We may discover that some of our "assumptions, presuppositions, contextual influences, perceptions, and many other factors (are) in some way inaccurate or inappropriate." 27

This is sufficient for existence. Our agreement does not insure existence.

rather a complex network of properties so that the relationship between predicate and property is much more complex than previously thought, Armstrong extends the notion to say that predicates may apply to objects in virtue of none, one, or many properties. My suggestion can also be seen as an adaptation of the notion of family resemblance. Just as "game" applies to various particulars in virtue of a complex network of properties, so does "exists". From my point of view Armstrong failed to follow his own light. He did not extend the notion of family resemblance far enough.

IX. Comparison with Armstrong and Quine

The position sketched above contrasts with both Armstrong's and Quine's position in many interesting ways.
First, it is obviously similar to Armstrong's position because it has incorporated within it the notion of causal efficacy as a condition for existence. But also it is obviously dissimilar to Armstrong's position in that it has incorporated within it the idea that we must make reference to the meaning of our predicates, i.e., our presuppositions and preconceived notions, because our verdict on what exists could be overthrown if those notions are changed. Here is what Armstrong has to say about picking out properties and the role of predicates:

But philosophers have tended to assume that there is no particular difficulty in identifying the universals themselves. For many Realists, predicates automatically pick out objective universals... What has to be realized, instead, is that determining what universals there are is as much a matter for laborious enquiry as determining how universals are linked in laws... Philosophy may have some part to play in the enquiry into what universals there are, but it would be presumptuous folly to think that it has a major role.28

It is presumptuous folly for philosophers to think that they might play a major role in determining what universals there are because, basically, of the Wittgensteinian notion that there is no one-to-one correspondence between
predicates and properties. I have argued above that Armstrong's claim is not as plausible as he would hope. But even if his arguments were completely successful (after all, Wittgenstein's example of games seems undeniable) he would not have shown that nothing external to an object is relevant to what properties it has. The meanings of our predicates, because of the assumptions and preconceived notions that they entail, are relevant to giving an explanation of why a predicate is applicable to an indefinite number of particulars. But Armstrong thinks that the role of predicates and their meanings is much less important than I have suggested. His view is that:

What properties and relations there are in the world is to be decided by total science, that is, the sum total of all enquiries into the nature of things. (Philosophy is part of total science, but a mere part and not the most important.) The question is not to be determined simply by consulting our predicates, although we must begin from, and must not despise, the clues to what properties and relations there are which our predicates offer up. 29

Far from just not despising predicates as Armstrong suggests, I am suggesting that we actually befriend them. I agree with Armstrong that we should reject the idea that
predicates automatically pick out objective universals. But rejecting that does not entail rejecting meanings completely. For not only should we befriend predicates (concepts), we must, for the reasons I have set out above.

Like Armstrong, I claim that we should not despise predicates. That is, we should not be realists to such an extent that we completely ignore the hints that our words or concepts might give us as to what exists. But my motivations for not despising predicates and concepts seems to be different than Armstrong's. Armstrong thinks we should not despise predicates because there may in fact be something physical that scientists can find underlying the use of the predicate. So predicates can be hints in that sense. But to my mind we should not despise predicates and concepts because there are some entities that must have mind-dependent elements. So our predicates and concepts do point to something out there.

The thesis I have suggested is also not identifiable with Quine's ineliminability criterion. For my thesis does not depend explicitly upon the possibility of reduction. Quine's criterion is: what exists is what is presupposed by the apparatus of the best theory about the world. The notion of presupposition here is important, for it also carries within it the notion of reduction. That is, when Quine says the existence of an entity is presupposed he means, in a sense, that it must be presupposed. If it is possible to reduce that entity away without losing, among
other things, the explanatory power of the theory, then that entity is not presupposed. My theory does not explicitly appeal to only the notion of reduction. Although I do not want to preclude the possibility of appealing to that notion. For, the reason why we might change some of our presuppositions and preconceived notions is that we realize that a reduction of some entity is possible, and that therefore we need not postulate the existence of that entity. I am thinking here, for instance, of Hartry Field's attempt to eliminate the necessity of postulating the existence of numbers in science. This is exactly the point on which Quine reluctantly admits to being a Platonist. For Quine, science is up to its neck in numbers. Whether or not Field's arguments are ultimately plausible, the point here is that if they were, then we would not need to postulate the existence of numbers. And because of those arguments our presuppositions would change, and we would overthrow our previous verdict of what exists, even though we all had previously agreed that something had a certain property, and we all agreed to label it with some predicate.

My theory also differs from Quine's in that Quine's does not have within it the notion of causal efficacy. In my theory causal efficacy is a sufficient condition for existence, but Quine does not even mention it. For him, what exists is what is presupposed by the best theory we have of the world. Causal efficacy could be (and is, no doubt) a major element of the best theory we have of the
world. But it seems as though Quine's criterion allows the possibility of causal efficacy playing no role in helping us to decide what exists, so our two theories, strictly speaking, cannot be identified.

X. Conclusion

Back in Chapter One I claimed that three distinct concerns have motivated the three traditional accounts of attribute-agreement: 1) the concern for objectivity, 2) the concern that the features of human beings and their minds limit what is discernible, and 3) the concern for the possibility of communication. I claimed further that each of the traditional rival theories serves one of these masters at the expense of the others. I also claimed that any adequate account must have elements from all three theories.

I also admitted later that a position which admits elements from all three accounts would require an (almost) Herculean task of synthesis. Therefore the goals of this dissertation are not quite so ambitious. Instead, I attempted to show how concerns 1) and 2) above (realism and conceptualism, respectively) might be made compatible.

My belief that these two theories are compatible in an interesting way was motivated by a precise analysis of the theories involved. That is, if we characterize realism as the thesis which holds that there are universals, and human beings perceive there are various kinds of objects in this
world; and if we characterize nominalism as the thesis which holds that all things are particular, and that because of our interests and beliefs human beings find it convenient to group together sets of objects into kinds; then it is possible to construct alternate non-traditional theories by combining the various conjuncts of the theories in unique ways that shows their (the conjuncts) compatibility. For instance, in any anti-realist (nominalism or conceptualism) position, generality must enter in our concepts or words, because it is not in the world. That is, if we admit for the sake of argument that generality is not objective, than it must be subjective, for what other choice is there? And if we admit for the sake of argument that generality is objective, then how could it be subjective?

But upon closer examination we have seen that these theories allow alternative combinations. That is, it is most likely true that if all things are particular (objectively) then generality must come in somewhere in our concepts or words (subjectively). But from the proposed fact that our concepts or words contain generality, it does not follow that all (objective) things are particular. And the same reversal holds with realism. Just because generality is not in our words or concepts, it does not follow that there are universals.

If these two reversals are true then it is also possible to combine one conjunct of one theory with another conjunct of the other. That is, obviously it is not
possible to maintain the truth of the conjunction "all things are particular and there are universals." But it is possible to maintain the truth of the following conjunctions: 1) generality could be in both our concepts and words and in the world, and 2) there are universals and they are dependent upon our minds.

The position I want to make sound plausible is 2). I did this by showing that Armstrong's arguments against mind-dependence all fail, and that therefore the mind-dependent element is not excluded. Then I argued, along with Armstrong, that particularism is untenable and that realism must be embraced. Then I argued that there are phenomena in the world that seem to have both subjective mind-dependent elements and objective (universal) elements in them. For various reasons Armstrong's theory cannot give accounts of these phenomena. Therefore we must accept a mind-dependent element in ontology.

In effect, my argument is simply that humans can create kinds. In artifacts there are elements that are dependent upon us, and yet they are just as real as the causally efficacious elements.

If all of this is plausible it seems then that we must expand our catalogue of solutions presented back in Chapter One. We must admit a solution that has mind-dependent and non-mind-dependent elements. And this position would have to be repeated throughout the catalogue in all of the appropriate positions. The number of positions would be
increased a great deal. But rather than go through the whole catalogue I will rehearse only the one we are left with.

In Chapter Four I argued, along with Armstrong, that particularism, the thesis which states that everything is a particular, is at its core, incoherent. Because it does not give a solution to the problem of attribute-agreement, it merely restates the problem at a different level, thereby only postponing the solution. Particularism corresponds to the thesis in Chapter One that I called nominalism. Therefore, in one fell swoop, positions ten through eighteen can be eliminated.

Also, positions one through six can be eliminated because the first three countenance only properties inherent in the particular and the second three countenance only properties external to the particular.

So far, we are left with positions seven, eight, and nine. Position nine can be eliminated because that denies a mind-dependent element altogether, and as we have seen, the attitudes of the members of the linguistic community are relevant.

The only choice we have left to make is between positions seven and eight. What makes eight unappealing is that it sets up a sort of linguistic solipsism. Position eight allows each individual to connect up any predicate to any indefinite set of particulars based on his own interests and desires. Communication could definitely be a problem.
What we have come down to then is position seven. There are multiply exemplifiable entities that are both inherent in the particular to some extent (the causal element) and external to the particular to some extent (the mind-dependent element). And the mind-dependent element is based upon the linguistic communities' attitudes, interests, desires, and behavior.

Armstrong has attempted to argue for a theory of universals that is completely purged of any non-realistic component. Many arguments have been used to try to establish this claim. The regress arguments, the thought experiment, causality, the separation of semantics and ontology (the argument from meaning), the arguments against particularism, and those for realism (The One Over the Many and true statements that seem to appeal to universals) are all parts of a major scheme to attempt to prove indirectly that immanent realism must be embraced.

I have tried to show that Armstrong's realism is too pure. The arguments above that attempt to preclude the possibility of an external mind-dependent element in ontology all fail. And further, I have shown how certain phenomena in our experience receive a very common sensical natural explanation if we broaden our ontological base. The purity of Armstrong's realism depends upon its narrowness. And any complete theory of metaphysics, I contend, must stand on a broader foundation.
NOTES

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2. Ibid., 1:xv.

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4. Ibid., p. 96.

Chapter Two
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5. Ibid.
6. Armstrong, Universals and Scientific Realism, 1:12.
9. Ibid., p. 42.
11. Ibid.
13. Ibid., p. 43.
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20. Ibid., p. 252.
21. Loux, Substance and Attribute, A Study in Ontology, p. 46.
22. Ibid.
Chapter Three


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8. Ibid., p. 20.


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27. Armstrong, Universals and Scientific Realism, 1:17.

28. Romeo and Juliet 2. 2. 42-44


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9. Ibid.

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20. Ibid., p. 60.

21. Ibid., pp. 60-61. 3) substitutes for 4) in Armstrong's words.


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26. Ibid., p. 63.


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16. Ibid.


18. Ibid.

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22. Ibid., p. 16.


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27. Grandy, "Universals or Family Resemblances", p. 16.


29. Ibid., p. 8.