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UNIVERSALS AND PREDICATION*

Theories of universals, the supposed referents of general terms,[1] fall into three basic classes, which I shall call P-theories, A-theories, and T-theories. The theory featured in Plato's *Republic* is an example of a P-theory; the theory commonly ascribed to Aristotle is an A-theory; and the "trope" theories expounded by Donald Williams and Keith Campbell are T-theories. (If the reader associates "P" with Plato, "A" with Aristotle, and "T" with trope, my exposition will be easier to follow.) T-theories and A-theories are more commonly held today than P-theories, but they involve a serious error about predication, which P-theories easily avoid. In this paper I shall support the claim that T- and A-theories involve this error, and I shall develop and defend a P-theory that avoids it.

A-theories, T-theories, and P-theories

Although I introduced the expression "A-theory" by reference to Aristotle, I could just as well have referred to D. M. Armstrong, for his theory is a striking contemporary instance of the sort of theory I have in mind. According to him, a universal is an absolutely determinate feature (a quality or relation) that may exist at many different places at the same time; it is a "repeatable" entity. The basic reason he gives for thinking that such repeatables exist is that different particulars have what appears to be the same nature and that this sameness of nature cannot be explained away.[2] There is such a thing as identity of nature, he says, and this nature, which can be present in two things, is a universal.[3] The sameness of nature Armstrong speaks of here may be partial rather than complete, for a red ball and a red book may have something in common too. Normally, a general predicate is applicable to a thing because of some universal the thing possesses; but if two things are truly described by the same predicate, say "colored," the color-universal possessed by one may be very different from the color-universal possessed by the other: one may be green while the other is red.

A T-theory differs from an A-theory in denying that any attribute possessed by one particular is (or could be) identical to an attribute possessed by another particular; for a T-theorist, universals are nonre-peatable entities: each one of them is uniquely instantiated, a unique attribute-instance. Such instances may be more or less similar, however. If two objects, x and y, are both $scarlet_{29}$, the $scarlet_{29}$ of x is an exact

duplicate of the $scarlet_{29}$ of y; if x is $scarlet_{29}$ and y is $scarlet_{16}$, the scarlet of x is very similar to the scarlet of y, but not a duplicate of it.

A P-theory differs from A- and T-theories in denying that universals are literally present in the spatio-temporal world. According to a P-theory, an elementary statement, judgment, or belief "a is F" is true just when the referent of "a" (the subject) *falls under* (or bears some comparable "relation" to) a P-universal that is associated with the predicate "is F." The predicate "is F" need not be held to denote the associated P-universal, and the P-universal need not be a Platonic Form, which particulars imitate or partake of. On the contrary, the P-universal might be describable as some kind of intensional object, something we can mentally take account of in deciding whether a predicate is or is not applicable to a particular object. The universals of the P-theory I shall recommend might, in fact, be best described by the word "concept," though "concept" will have to be used in a specially clarified sense.

Problems with A-theories and T-theories

In expounding his trope theory, Keith Cambpell began by identifying a key difficulty of Armstrong's A-theory, that of comprehending how anything could enjoy the "unrestricted" reality that an A-theorist assigns to a universal, a reality neither diminished nor augmented by diminishing or augmenting the reality of its instances.[4] I am not sure that this is a genuine difficulty in an A-theory; the basic difficulty I see in such a theory is that it is either inconsistent in what it requires to be explained or obfuscating in the explanation it offers. These unsatisfactory alternatives ultimately arise from an erroneous view of predication, but they can be grasped most easily by reference to two problems the theory creates, one about particulars and one about universals.

The problem about particulars can be brought out as follows. There are two alternatives concerning particulars available to A-theorists. According to one, particulars are simply complexes of A-universals; according to the other, particulars are something in addition to the A-universals they possess. The first alternative is not plausible by contemporary standards.[5] It is rejected by leading A-theorists--Armstrong rejects it, for example[6]--and it is vulnerable to an objection that I shall develop later in connection with T-theories.[7] I shall therefore pass over it now and consider the second alternative--that particulars are something in addition to the A-universals that they possess. The difficulty with this alternative is that it renders

[*] Forthcoming in Richard M. Gale, ed., *Blackwell Guide to Metaphysics*

particulars unnecessarily mysterious. Particulars become mysterious on this alternative because the nature of a thing, according to A-theories, is constituted by the universals it possesses, but the particular is distinct from those universals. As a result of this, a particular is distinct from its nature--distinct not just in the sense of being not identical with it but in the sense of being something in addition to it. John Locke famously described such distinct particulars as "things I know not what," mere *substrata* that support qualities or provide a subject in which qualities can inhere.[8] He acknowldged that he has no clear and distinct idea of such things, and A-theorists who regard particulars as ultimately "bare" subjects ("bare particulars")[9] describe them in an equally mysterious way.

Armstrong, an A-theorist who accepts the second alternative, thinks that these problematic descriptions can be avoided by distinguishing two conceptions of a particular, one thick and one thin. According to the thick conception, a particular is a "thin" thing along with its qualities: If the thin thing is **a** and **S** is the conjunction of **a**'s qualities, the thick particular is the state of affairs, **a-**having-**S**.[10] According to the thin conception, a particular--in this case, **a**--can be thought of in abstraction from the state of affairs in which it figures; so conceived, it can be thought of as distinct from the properties **S**. Armstrong concedes that, thought of this way, the thing **a** is "perhaps...in a way" a bare particular: "it is the mere thisness of a thing as a Scotist would put it"; it "can have no properties. It is a bare principle of numerical difference."[11] Although Armstrong allows that non-spatio-temporal particulars are imaginable, he nevertheless suggests that the particularity "or thisness" of a particular might in fact be identifiable (owing to the nonexistence of immaterial things) with a "total-position" in space-time. The attributes of such positions, their shape and size, are of course universals, he says; but two different total positions may yet be two, he thinks, even though they have the same attributes.[12]

It seems to me that Armstrong's thinly conceived particulars, and therefore the thickly conceived ones of which they are constituents, are every bit as mysterious, ultimately, as Locke's "things I know not what." It is, of course, possible (epistemically speaking) that Armstrong's thin conception of a particular is not really required for a defensible A-theory denying that particulars are complexes of universals. Roderick Chisholm, who spoke of a thing's properties in a way that suggested he held an A-theory himself, said that the following assertions are "simply a muddle":

1. If we distinguish between a thing and its properties, then we must say that the thing is a "bare particular" that doesn't have any properties.
2. One is tempted to regard "This is red" as a subject-predicate proposition, but if one does so, one finds that "this" becomes a substance, an unknown subject in which predicates can inhere....[13]

Chisholm did little to explain why these assertions are muddles other than observing that the idea of a self (a self being a particular) is "the idea of an x such that x loves or hates and such that x feels cold or x feels warm, and so forth."[14] Evidently he was confident that the x he speaks of here is not a bare particular because it is patently not characterless but warm, cold, a lover or hater, and so on.

The claim that something that is warm or cold or wet or dry cannot be a bare particular is perfectly acceptable to me, but then I do not hold an A-theory. Those who do conceive of properties in a particular way, and they also assume a analysis of predication that makes a mystery of something otherwise not mysterious at all. They take properties to be entities that are "possessed" by particulars but distinguishable from them. When a particular, **a**, is said to be **F**--blue, say--the A-theorist adopting the first alternative construes the claim as affirming that a universal, **u**, is present to **a** but distinguishable not only from it but from the entire "bundle" (or sum) of universals **a** possesses. Although **a** can be known as the possessor of **u** and whatever other universals it may possess, its nature as something distinct from those universals cannot be known because any predicate or concept that one might use to characterize (or cognize) its nature is said (by the A-theorist) to refer some other universal that is distinct from it or any part of it. So the intrinsic character of **a** remains mysterious according to the theory.

I said earlier that A-theories also create a problem about universals. The problem is this. According to A-theories, if we are to explain why a general term is truly applicable to a thing, we must ultimately acknowledge the presence in it of some A-universal.[15] But A-universals can perform this explanatory role only if they differ from one another: the A-universal whose presence in **x** explains why "blue" is applicable to **x** must differ from the A-universal whose presence in **y** explains why "red" is applicable to **y.** Similarly, the A-universal whose presence in **z** explains why the absolutely determinate predicate "scarlet_{29}" (assuming it to be such) applies to it must be the same as the universal that explains why this predicate is applicable to some $\mathbf{w} \neq \mathbf{z}$. But if universals can differ or be identical in this way, they must have natures that differ or are identical; and differing natures must have features that distinguish them. Since A-theorists

assume that things possess features (are thus and so) only if they have appropriate A-universals, such A-universals must be their constituents in just the way that the A-universals of particulars are their constituents. As in the case of particulars, a distinction will have to be drawn between the A-universals and their constituents, and the A-universals will end up with the characterless "thisness" that Armstrong attributes to particulars. Since the constituents comprising the nature of a universal must be distinguishable from one another, they too must have different natures, and this means that they will possess constituents in turn. There can be no end to this on A-theorist assumptions: every universal will be like an infinitely complex system of Chinese boxes, one within another and each containing its own peculiar "thisness." This consequence strikes me as incredible.

Armstrong does not accept this criticism of his theory. When I brought it to his attention in the mid-eighties, he replied that although a fully determinate shade of white, W_{57}, will be different from every other universal, the relevant differences may only be "numerical."[16] I find this suggestion unintelligible and certainly at odds with the assumptions about predication implicit in his A-theory. If particulars **x** and **y** could not have distinct natures without having attributes (that is, A-universals) that distinguish them, how could two universals be distinct things without having attributes (that is, A-universals) that distinguish them? A-theorists attribute universals to particulars on general grounds--they want to explain the similarities and differences that are recorded by the application of predicates. We may not have an infinity of predicates that we customarily apply to universals, but that fact is irrelevant to the metaphysical explanation of the similarities and differences that must exist between them if they are to do the explanatory work that A-theorists attribute to them. If $\mathbf{u_1}$ and $\mathbf{u_2}$ are distinct objects with explanatory potential, there must be some **F** that $\mathbf{u_1}$ has but that $\mathbf{u_2}$ does not have--and so on without end.

On the face of it, T-theories (trope theories) do not face the problems I have attributed to A-theories. According to them, particulars are not ultimately mysterious subjects of predication but "bundles" of tropes. But tropes differ from one another in spite of the similarities that may exist among them. They cannot differ or be similar, however, without having definite natures--and this means (given the assumptions of the theory) having distinguishing attributes. If a trope theory is consistent in all its presuppositions, a thing's ostensible attributes are actually is constituents: "a is F" implies that a particular **F-ness** is part of **a**. Consequently, if a T-theory is consistent in this way, it must allow that every trope consists of further

tropes--and so on without end. Since unanalyzable particularity can be no more allowable for tropes than for ordinary particulars, every identifiable thing will decompose into a bundle of other things, and no bundle will have an irreducible core. (An analogous consequence will hold for A-theories that regard particulars as complexes of A-universals; this is the objection that applies to "the first alternative" that I did not discuss when I considered A-theories.)[17]

Adopting a defensive strategy similar to one naturally adopted A-theorists, T-theorists might argue that tropes can resemble and differ without having similar or contrasting components--that their resemblances and differences can be ultimate facts about them. But an exactly parallel argument could be used to argue that particulars can resemble and differ without having tropal constituents: their resemblances and differences can be ultimate facts about them. The latter claim is no less credible than the former. In fact, it is far more credible, all things considered: it does not have the bizarre consequences of a consistently developed trope theory.

Predication

When David Lewis, in his important paper "New Work for a Theory of Universals," criticized Armstrong's main argument for universals, he insisted that predication should be acknowledged as "primitive," as not requiring any analysis, least of all the sort of analysis that Armstrong was tacitly requiring.[18] When you attempt to explain why a thing **a** is **G** by introducing some constituent **u** in a, whether A-type or T-type, you are always left with an unexplained datum of the same structure: **u** is **F**. This way of putting the point is closely related to mine; I have simply tried to show what happens when predication is consistently analyzed according to the pattern assumed by an A- or T-theory.[19]

Although I would not attempt to analyze predication, I don't want to say that I accept it as primitive and let it go at that. The fact that shrewd philosophers constantly provide (or assume) unacceptable analyses of it makes it important to offer some clarification of it--to say enough to help readers resist the tendency to offer an analysis. I also want to say enough to discourage a philosopher from saying, as Armstrong did, that if I say that a dog is barking but "deny the metaphysical reality of properties and relations" I am committed, against my will, to the view that the world consists of "truly bare particulars."[20]

To clarify the basic nature of predication as I understand it, it is helpful to consider what is fundamentally accomplished by elementary English sentences having a predicative function. The following ex-

amples illustrate the simplest forms that A-theorists make use of in developing their views; they are also employed by T-theorists, but I shall ignore the latter in this context.

(1) Socrates is wise.

(2) Alcibiades laughed.

(3) Plato admired Socrates.

In (1) the predicate contains a linking verb conjoined to an adjective, a construction that A- theorists interpret as relating a subject to a repeatable universal. In (2) the predicate is a mere verb, which is less plausibly interpreted by the subject-R-*Fness* paradigm; and in (3) the entire sentence must be transformed to accord smoothly with A-theorist preconceptions: it must assume the form of "The ordered pair <Plato, Socrates> R *admires.*."

In contrast to the A-theorist, I take the predicate of (1) to be a unit, one by means of which the person denoted by the subject is described as wise. The predicate does not denote (or pick out) a repeatable component that is attached to this subject; it applies directly to the subject itself, telling us what *the subject* is like. Since a wise person is not a characterless "this" but a wise thing, the predicate of (1) gives no support to the inferences Chisholm regarded as a muddles. The same is true of the predicate in (2). Here a simple verb is predicated of a subject: Alcibiades is described as having laughed at some time. If, using the sentence, I describe Alcibiades this way, I cannot reasonably allow that I have described a "bare" particular, for I have described Alcibiades as having laughed, and nothing ultimately characterless can do a thing like that. Sentence (3) is similar to (1) and (2) in describing something, but it describes two people rather than one: it describes Plato in relation to Socrates. It does not identify anything other than Plato and Socrates, and there is no justification for representing its logical structure in the contrived way suggested above.

What I have just said no doubt needs elaboration, for the reasoning supporting the postulation of A-universals is very deeply entrenched in the thought of many philosophers. The key consideration is that the predicates in sentences like (1) and (2) directly apply to the things picked out by their subjects; they do not apply to some further items that their subjects may possess. If I say that a fire plug is red, the only thing I am talking about is the fire plug; I am not talking about something that it "has." Anyone who is familiar with red things and understands English will know what I am in effect saying about the plug: *It* is a red thing. Red things resemble one another with respect to color, but one should not suppose that this resem-

blance consists in a common component, an A-universal. The A-theorist Armstrong actually denies that there are generic universals: he claims that repeatable determinate whites (for instance, yellowish $white_{25}$ and greenish $white_{14}$) color-resemble without exemplifying a higher-order whiteness, and a T-theorist would claim that corresponding tropes would color-resemble without containing a common white. I avoid the exotic but make a parallel claim: white things (bed-sheets, writing paper) and red things (fire engines, balloons) color-resemble one another without containing any common metaphysical element. If you are familiar with fire engines and can speak English, you will know what I mean in speaking of a red balloon. You will not have to be familiar with any metaphysical entities, particular or general, that supposedly inhere in certain balloons and fire engines.

Armstrong has argued that one cannot avoid postulating A-universals by speaking of color-resemblance or shape-resemblance, because these resemblances are merely "respects" in which objects resemble and differ, and such respects require explanation by reference to A-universals. Armstrong's argument is unconvincing, however. When we learn to apply a color vocabulary to the objects around us, we learn to classify *them,* the objects, as more or less similar in color; and we readily learn to classify things as more or less similar in respect to other possible descriptions: for instance, in respect to being round or square. ("Is this as round as that?" we may ask?) What is redder or more round or squarer than another thing are *particulars*; it is they that we are comparing, not some abstract component that they have; and it is *they* that resemble and differ in respect of their color or shape, and not their supposed abstract components. When we apply predicates, simple or compound, to particulars, we describe *those particulars* (we say what *they* are like). We do the same when we speak of how *they* resemble one another.

It is useless for an A-theorist or T-theorist to reply, "Why do you emphasize that we describe particulars? We don't deny this. We simply insist that particulars are truly described as thus and so because they possess qualities, though we disagree about whether those qualities are repeatable or particular." The reply is useless because it assumes that true predication is invariably explained or justified by reference to items *other than* the particulars that are described.[21] Yet these other items can do the intended work (of explaining or justifying) only if *they* have natures of their own. If *having a nature* is invariably assumed to involve some kind of relation to a higher-order object that must itself have a nature of its own, a single predication is never fully understandable: it must always be understood (or tacitly analyzed) in relation to

something further, which must be understood in the same way--and so on without end. If a predication is ever fully understandable--and it usually is--some predication must be understandable in its own terms, without reference to further objects. I contend that "x is round" and "x is scarlet" are acceptable examples of predications understandable in this way.

Thus far I have been speaking of *describing* objects. When we *classify* them, we commonly employ a form of predication importantly distinguishable from the forms involved in (1), (2), and (3). This additional form is illustrated by (4):

(4) Gorgias is a sophist.

From a logical point of view, this sentence is actually ambiguous. On one reading it recalls Aristotle's examples of "things said of a subject that are not present in a subject."[22] Read this way, the sentence serves to classify its subject in relation to other things. Today, we commonly represent such a classification by specifying a class to which the subject is related. If the subject is an individual, we say it *is a member* of the relevant class, as in "Gorgias is a member of the class of sophists"; if the subject is itself a class, we often say it is *included in* a class," as in "Humans are mortals." These set-theoretical readings of the copula are not the only relevant readings, because neither is appropriate for its occurrence in the formula "$g \in \{x: x \text{ is a sophist}\}$," which may be read "g is a member of the set of x's such that x is a sophist." The "x is a sophist" here calls for a reading that Frege would have represented by the now-familiar notation "Sx": the object x falls under the concept **S**.

Advantages of P-theories

This last example brings me to the subject of P-theories of universals, for Frege's concepts are special cases of such universals.[23] As I understand them, P-theories are significantly different from A-theories and T-theories. One merit of all of P-theories is that they do not attempt to analyze predication. They specify a condition that must be satisfied if certain predications are true, but they do not imply that every predication--least of all one to the effect that a thing falls under a concept--must satisfy a similar condition.[24] Thus, to be a human being, Socrates must fall under the concept *human being*, but to do this, *he* must satisfy the conditions for being human; he does have to be related to some further object, which falls under a further concept, as A- and T-theories stubbornly suppose.[25]

Although theories of classes (or sets) are not usually considered theories of universals, classes can also be considered P-universals in my sense of the term. The relation between classes and their members is naturally expressed in English by “is a”--as in “Gorgias is a sophist”--words that can also be used to express the relation between a thing and a concept or Form that it falls under. I have said that one merit of a P-theory is that it does not attempt to analyze predication, but whether a given P-theory is actually acceptable obviously depends on how it conceives its P-universals, how it conceives the relation between P-universals and particulars, and many other things. I want to say something about these matters now.

Instead of speaking of universals, most philosophers now speak of properties, relations being n-place properties. Those who speak freely of properties generally suppose that the predicate “property” picks out a definite or determinate class of objects. I have long regarded this supposition are erroneous, and I am glad to see that the same view has recently been expressed by a philosopher of David Lewis’s distinction. When he introduced his own unusual conception of a property in *On the Plurality of Worlds*, Lewis remarked:

> It is not as if we have fixed once and for all, in some perfectly definite and unequivocal way, on the things we call “the properties,” so that we are now ready to enter into the debate about such questions as...whether two of them are necessarily coextensive.... The conception [of a property] is in considerable disarray. It comes in many versions, differing in a number of ways. The question worth asking is: which entities, if any, among those we should believe in, can occupy which versions of the property role.[26]

Lewis claims that sets of *possibilia* are right for one version of the property role. I myself am not entirely happy with sets of possibilia as Lewis understands them, for I am reluctant to acknowledge *possibilia* as primitive entities. For this and other reasons, I want to develop another conception of P-universals. It may or may not be able to do the work of Lewis’ sets, but there is some work it can do very well.

The conception I want to recommend takes P-universals to be concepts. The word “concept” in current usage (even in current philosophical usage) is just as indefinite and equivocal as the word “property,” but it has connotations that make it suitable for the work I have in mind. Judging from an observation by Elizabeth Anscombe, the terminology of objects falling under concepts is not unusual in everyday German. She reported that Michael Dummett once saw in a Münster railways station a notice beginning

"All objects that fall under the concept *hand-luggage....*" (*Alle Gegenstände, die unter den Bergriff Handgepäck fallen...).* This anecdote reminds us that we commonly classify things by "concepts" that are humanly-invented and rest on conventions that may have significance only for special groups. *Hand-luggage* is such a concept, and so are *personal effects*, *engagement ring*, *American citizen*, *slave-driver*, *mule*, *venetian blind*, *reptile*,[27] *flotsam*, *jetsam*, *retriever*, *pointer*, *barber*, *typewriter*, *zipper, computer, computer-programmer*, *disk jockey,* and *play-boy*--this list can be extended *ad libitum*. It is true that things in nature fall under these concepts, but it is absurd to suppose that these concepts are "eternal entities" that define the structure of reality, as Plato's Forms were supposed to do. They all have histories, and they came into existence as the result of numerous contingencies.

Another important feature of the concepts we use to classify objects is that they--or the words that "express" them--are vague. A vague word, as I understand it, is one that clearly applies to some actual or imaginable things, that clearly fails to apply to some such things, and that neither clearly applies nor clearly fails to apply to other such things. *Bald* and *tall* are standard examples of vague words, but in fact every generic color word is vague, and so are most of the words we use in everyday life. Consider such words as *sarcastic, sardonic, frivolous, trivial, flimsy, superficial, paltry, petty, trifling, lucky, unimportant, yuppie, dismal, morose, severe, zaney, dour, carefree, windy, brisk, sparse*--again, the list can be continued almost endlessly. Although such words can perfectly well express vague concepts or ideas, they cannot stand for definite properties or items in reality, because nothing definite or determinate is connoted by them.

One might suppose that a word like *bald* could be construed to apply in a strict sense to people whose head is utterly hairless and to apply to people with some hair only in a loose and popular sense. But the word is not really used this way; and an analogous claim holds for vague words generally. Take the word "sarcastic," which is familiar to every adult speaker of English and is used with confidence even by high school students. No adult or adolescent has any doubt about its application to some people and some things they say. Some people are clearly sarcastic either generally or on some occasions; some people clearly are not; and a great many people exhibit behavior that is not clearly classifiable either way. In spite of the confidence with which "sarcastic" is commonly used, it is a very difficult word to define or even clarify by synonyms. Its etymology is very illuminating, however. It derives from the Greek sarkãzv (sar-cazô), which Lidell and Scott define as "to rend of flesh like dogs."[28] As this derivation indicates, "sarcas-

tic" was originally metaphorical. The metaphor is very tenuous today, but we still think of a sarcastic remark as one that is wounding, hurtful (and a sarcastic person as someone prone to making such remarks). Since we have encountered many clear cases of sarcasm and non-sarcasm, we have the ability to recognize such cases when we see them; but we are constantly presented with borderline cases that we cannot confidently classify either way. *Most of our vocabulary is like this*. Our words commonly involve metaphors--compare *inspire, inspiration; expire, expiration; understand, understanding*-- and their meaning is rarely precise or determinate.

A vague word does not specify an ordinary class of objects because it is not applicable to a definite totality of things. So-called fuzzy classes do not require definite totalities, and it is sometimes suggested that they can serve as the semantic correlates of vague predicates.[29] Fuzzy classes do not simply have members; they have members in various degrees. A particular fuzzy set is defined by a function $\mathbf{f_A}$ that assigns to every object $\mathbf{x}$ in the relevant domain $\mathbf{A}$ a number $\mathbf{f_A(x)}$ between 0 and 1 inclusively that represents **x's** degree of membership in **A**. If a vague predicate clearly applies to an object **a**, $\mathbf{f_A(a)} = 1$; if the predicate clearly fails to apply to an object **b**, $\mathbf{f_A(b)} = 0$; and if the predicate applies to **c** in a less decisive way, **s**'s degree of membership in **A** falls somewhere in the interval between 0 and 1, say 0.6.

Although it is often useful to think of vague predicates as associated with fuzzy sets, thinking of them this way involves a significant idealization, for vague predicates are generally too vague to be associated with a function assigning definite degrees of membership in the relevant class. Such membership degrees correspond to the degrees to which predicates are applicable to objects, and as matters stand one cannot rightly specify a degree to which a vague predicate ("bald," say) is applicable to every object. (Jones may be a bit on the bald side, but we cannot realistically say that there is a precise degree to which he is bald: the notion of being bald is simply not that determinate.) The significance of this fact for theories of properties or universals is that there is nothing in the world--no unitary class or thing--corresponding to vague predicates that is sufficiently determinate to be the A- or T-universal (the "property") that such predicates supposedly represent. By contrast, the concepts expressed by such predicates are just as vague, intuitively speaking, as the predicates themselves. The phenomenon of vagueness therefore poses no evident problems for a P-theory.

A New Look at Some Old Examples

Analytic philosophers attracted to A-theories often support their views by reflecting on statements such as the following:

(5) Honesty is a virtue.

(6) Red is a color.

(7) Napoleon had all the qualities of a great general.

Statements (5) and (6) here appear to be obvious truths, and if (7) is not true, a corresponding statement is no doubt true for some other outstanding personage--Caesar, Hannibal, or perhaps Rommel or McCarthur. Yet these truths seem to concern qualities, ostensible A-universals. If no analysis of them compatible with a rejection of A-universals is possible (the claim is), a theory of A-universals is *prima facie* acceptable and should be accepted if no preferable alternative can be found.

In view of what I have argued in the last section, (5), (6), and (7)--even if obviously true--do not actually support an A-theory: the principal words they contain--"red," "virtue," "honesty," "great general"--are patently vague, and vague words are very poor candidates for denoters of A-universals. Since the statements are general and not restricted to the particular qualities of this or that particular, they lend no obvious support to a trope theory either. Might they accord with a P-theory, one that takes P-universals to be concepts? The fact that they contain vague words and are universal in import is not at odds with the assumptions of a P-theory. Could one plausibly read them as saying something about concepts or as being explicable in relation to such things?

I think (5) and (6) can be plausibly interpreted by reference to a P-theory of concepts, but (7) is best understood as involving only the kind of predication that does not introduce universals at all. Since the development of a theory of concepts is the last item on my agenda, I shall dispose of (7) first. It is really not very complicated.

If we use schematic or "dummy" predicates as Quine often does,[30] we can express (7) without actually referring to qualities by (8):

8. If all great generals are F, Napoleon is F.

A dummy predicate stands in place of ordinary predicates; (8) is understood to be true just in case all substitution instances of (8) are true, a substitution instance being a well-formed sentence of English exactly like (8) except for having a predicate in place of the dummy predicate "F." An equivalent rendering of (7)

would dispense with a dummy predicate in favor of a variable bound by a substitutional quantifier. The use of substitutional quantifiers has been criticized in recent years, but not effectively. There is really nothing wrong with substitutional quantification if the language to which it is applied is appropriately regimented--as it should always be understood as being when formal devices are employed.[31]

The formulas (5) and (6) are so similar in logical structure that it might seem a waste of time to discuss both, but they actually raise slightly different problems. Anti-Platonists might be content to analyze (6) as "Anything red is colored," but a parallel analysis for (7) is clearly untenable, since "Anyone honest is virtuous" fails for honest people who lack other virtues--wisdom or courage, for instance. The fact that these analyses clearly fail for one case is good evidence that they fail for both, for (5) and (6) pretty clearly have the same logical structure. A different approach to both is therefore in order.

What are Concepts?

Earlier, I said that (6) and (7) could plausibly be interpreted by reference to a theory of concepts. To provide such an interpretation, I must first explain what I shall understand by concepts. Analytic philosophers constantly speak of concepts and their analysis, but they rarely explain what they conceive concepts to be. As I noted, there is no definite and unequivocal sense in which the word is normally used in philosophy. There is general agreement in limited respects--for example, it is commonly presumed that concepts are associated with general words: A person who understands the adjective "red" is said to have the concept of red, and this same concept is said to be possessed by someone who understands a word synonymous with "red." If we accept this presumption, we can say that the concept *red* is something associated with "red" and its counterparts in other languages. The question is, "What is the 'something' and how is it associated with the relevant words?"

One way of answering the question is suggested by the observation that a person who uses the word "red" in speaking or thinking would generally be held to be *employing* the concept *red*. The same concept would be employed by a French person who uses "rouge." Now, if "rouge" is a good translation of "red," the words are used in formally analogous ways: Speakers of French apply "rouge" to objects that speakers of English would describe as red, and each would relate their word to other words of their language in a way that is parallel, formally speaking, to the usage of the other. Thus, the French would use "rouge" in relation to "bleu" in basically the way that we use "red" in relation to "blue." It is convenient to have a

general term by which to classify words that are functional counterparts in this way. Such a term was supplied years ago by Wilfrid Sellars; he constructed it by means of his dot quotes: any expression that is a functional counterpart to "red" can be described as a *red*.[32] (I use asterisks where Sellars uses dot-quotes.) If we use Sellars' terminology, we can say that the concept *red* is something that is common and peculiar to *red*s.

D. M. Armstrong once said that the task of giving an account of "the" type-token distinction is a "compulsory question on the [philosopher's] examination paper."[33] A plausible way of relating *red*s to the concept *red* is to say that the latter is the type of which the former are tokens. Saying this requires that one come to terms with *a* type-token distinction (their may be more than one), but it accords with the common assumption that if you understand and use "red," you have and employ the concept *red*, and that if you understand and employ "rouge," you have and employ the same concept.

When we think of types, we often describe them in ways appropriate to tokens. This tendency is perhaps evident in Plato's practice of describing particulars as imperfect imitations of perfect Forms,[34] but it stands out in Hilaire Belloc's amusing lines:

> The llama is a woolly sort of fleecy hairy goat,
> With an indolent expression and an undulating throat.[35]

It is obvious that what is said of the type here is properly predicated of the tokens, for only particular llamas are fleecy hairy goats with indolent expressions and undulating throats. Surely no abstract object is hairy and has an indolent expression! Wilfrid Sellars devoted a lot of attention to expressions such as "the llama"; he called them *distributive singular terms* (or *DSTs*) and said that statements containing them are definitionally equivalent to statements about concrete things. In his view a statement of the form "the llama is f" can be paraphrased as "Llamas are f." [36]. His view is very plausible, I think, for "The llama is a woolly sort of fleecy hairy goat" seems to be about actual llamas. Doubts have been raised about whether the view is actually true, however; and I want to say something about these doubts before proceeding with the subject of concepts. They are clearly pertinent to the view I wish to defend.

Some Problems about DSTs

The doubts in question were directed to a claim by Nelson Goodman, who viewed types pretty much as Sellars did. Goodman had said that a statement ostensibly about types, "'Paris' consists of five letters," is short for "Every 'Paris'-inscription consists of five letter-inscriptions."[37] Linda Wetzel has recently objected to Goodman's claim on two principal grounds.[38] The first was that the statement ostensibly about the type "Paris" is true but the alleged equivalent is actually false: Many "Paris"-inscriptions are misspelled, damaged, or contain typos, and as a result do not contain five letter-inscriptions. Wetzel's point is a general one: what is true of the type is not correspondingly true of all tokens: "the species *Ursus horribilis* can be characterized as ferocious," she says, "even if some members of the species are timid" (p. 363). The second ground was that there may be truths about types in the absence of any tokens of those types. Many sentences of English have never been uttered or written down; and while there may be tokens of formulas Φ and Ψ, there may be no tokens of their conjunction, although the conjunction-type unquestionably exists. (This last objection, as I have formulated it, obviously needs some development to provide a counter-example to Goodman's claim, but I shall give that later. It does clearly conflict, however, with the idea that statements about types are short for statements about tokens.)

Wetzel's first objection is clearly right: tokens often fail to live up to the type. This fact does not require one to reject the suggested analysis, however; it merely requires an obvious amendment.[39] Ostensible type-statements seem to involve idealizations: "the" llama has the traits of typical examples of the species, not unusual examples that have been shaved, burned, starved, or beaten. An analogous point holds for words and letters. The type "Paris" has the traits of undamaged, unblemished, well-formed tokens. To save the analysis, we therefore adjust the domain of quantification relevant to the tokens. "'Paris' consists of five letters" is thus short for a qualified statement about inscriptions: ""Every well-formed 'Paris'-inscription (every good example) consists of five letter-inscriptions."

Goodman actually eludes Wetzel's second objection by the way he formulates his view. His claim about ostensible types is actually restricted to inscriptions: it is any "'Paris' consists of five letters"-*inscription* that is supposed to be short for "Every 'Paris'-inscription consists of five letter-inscriptions." Since every "'Paris' consists of five letters"-*inscription* contains a "Paris"-inscription containing five letter-inscriptions, there can be no problem *for Goodman* of not having enough tokens to vindicate his analysis. A problem apparently remains, however, for a claim I think he ought to accept. He ought to agree that

there are sentences of English that have never been tokened and never will be tokened, and that there are falsehoods about these sentences (these sentence-types) that correspond to vacuous truths about the untokened tokens. Consider the following nonsense that can be kicked away like Wittgenstein's ladder once the relevant point is grasped: "Sentence type Φ contains one hundred and twenty words" is false (because it contains a hundred and twenty-one words) but "∀t(t is a Φ-inscription ⊃ t contains 121 word-inscriptions)" is vacuously true (because ~∃t(t a Φ-inscription)).

Goodman has a solution to this last problem, however. It is owing to his calculus of individuals. According to his sum axiom, the sum of any two individuals is an individual, no matter how scattered those individuals may be.[40] As the result of this axiom, Goodman would say that if there are inscriptions of Φ, Ψ, and "&," an inscription that is the conjunction of Φ and Ψ also exists. This solution seems acceptable to me, but if one is unwilling to make use of it, one could equally say (as I have earlier) that a token of every sentence of English can be found in any token of the alphabet: to find it one simply has to go through the alphabet in the right way.[41]

More about Concepts

My concern here is concepts, not sentence-types and sentence-tokens; so I shall say no more about Goodman's views of word-types and word-tokens. The hypothesis I am considering is that what is ostensibly true of concepts reduces to what is true of certain tokens, specifically certain general terms. The idea seems reasonable in view of some standard assumptions about concepts: Jacques has the concept *snow* iff he understands some general term, perhaps "neige," that is a *snow*; Jacques and Tom have a common concept iff they understand general terms that are functional counterparts; and I have a concept that is applicable to snow iff I have a general term that is applicable to it.

Since I am using Sellars' dot quotes to create special predicates applicable to tokens that are functional counterparts, I should emphasize that Sellars applied these predicates to mental tokens as well as physical ones. He did this because he was convinced that we can think what we can say and that we can do so without saying anything to ourselves in the way we mentally say something when we silently recite a poem to ourselves. If, without uttering anything, we think "That snow is yellow," we are employing concepts of snow and of something yellow, and doing this requires that certain elements of our thought do the

functional work of “snow” and “yellow.” These elements are reasonably described as *snows*s and *yellow*s even though they differ from audible *snows*s and *yellow*s in material (that is, nonfunctional) respects.

One more point about concepts. Could a concept exist at a time if no tokens “expressing” it exist at that time or any time before it? Since I believe that concepts are plainly created by human beings (some evolve in human speech; some are created deliberately), I want to say no. But surely a concept could still exist if everyone were asleep and no tokens of it were written down anywhere. This sounds right. One could, of course, say (as I did earlier) that every sentence of English can be found in any instance of the English alphabet, but it seems reasonable to concede that a given concept could exist if everyone were asleep and no English letter-tokens existed at all. For the concept to exist under such conditions, I would maintain, however, that it must be “present in potentiality,” as Aristotle would say: people must have instances of it in their verbal repertoire, so that they can bring it to mind if they want to. (If they have actually lost it, it is gone and can exist only if it is recreated.) This last contention requires a further qualification to the definitional schema for concept DSTs: the *A* is F just when every typical *A* is F *and* there are *A*s in someone’s verbal repertoire. The last clause need not actually appear on the right-hand side of the formula if it is allowed that it is implied by the left-hand side. I think the implication should be allowed because we would not speak of *the llama* if there were no llamas. I think we would speak of *the unicorn* only in a mythological context. If someone spoke of *the unicorn* in an ordinary context, we would probably say “What do you mean, *the* unicorn? There aren’t any, you know.”[42]

I have now said enough about concepts to return to the problem sentences (5) and (6)--namely, “Honesty is a virtue” and “Red is a color.” If the term “honesty,” owing to vagueness and other things, must represent a concept rather than an A-universal, then the predicate in “Honesty is a virtue” must be appropriate to such a concept. Intuitively speaking, the idea must be that *honesty* is a *virtue concept.* Sentence (5) is thus reconstructed, according to the P-theory I am recommending, by a kind of semantic ascent. As thus reconstructed, (5) is not equivalent to an assertion about mere words; it is equivalent to an assertion about items (words or thought-fragments) that are *honest*s and virtue-predicates. Since both terms of (5) are implicitly general, its copula has the sense of “are”: All (typical) *honest*s are virtue-predicates. A

similar analysis is appropriate for (6): All *red*s are color-predicates. A predicate in the sense in point here is simply something that plays the role of (that is, functions as) a predicate.[43]

The Plausibility of the P-theory

The treatment just given of (5) and (6) may seem excessively contrived, but it gives the right results, fitting together nicely with the arguments of preceding sections.

We obviously have a concept of honesty; and when we apply it to Tom and Sally (or say, in a Fregean moment, that they "fall under" it) we are describing *them*, saying that t*hey* are honest : we are not talking about an object that is separable from human beings.[44] We may apply the same concept to other people, too; if we are right about them and also right about Tom and Sally, they are all relevantly similar. We know what an honest person is like, and if we are pressured into trying to describe honesty, we either talk about our concept or we end up describing someone behaving honestly--just as John Locke's blind man, trying to say what scarlet is like, ends up describing something that is as bright and strident as he knows the sound of a trumpet is. (What is thus bright and strident is a visible thing, not an abstract entity "possessed" by visible things.)

Since the predicate "is honest," like the predicates "is virtuous" and "is wise," is vague, a treatment of "honesty" that construes it as referring to a concept has additional merit--as is a treatment that declares concepts to be human inventions.. The advantages increase when concepts are construed as reducible to predicates. Predicates are vague or nonvague, and they are also human creations belonging to contingently existing languages. As for the application of concepts to reality, this can be explained by means of the application (or denotation) of predicates. Concepts "apply to" objects just when things "fall under" them; and if "the (concept) honesty applies to x's" can be understood as equivalent to "all *honest*s denote x's," the notion of a thing "falling under" a concept will be explicable in relation to *denotes*, a concept relating fragments of utterances or inscriptions to linguistic norms (or dispositions) and associated natural objects. Since norms or dispositions relate utterances and inscriptions to natural objects in naturalistically understandable ways, the P-theory I have been sketching lacks the other-worldly mystery of the Platonic original. It accords nicely with the naturalistic view of the world that is becoming common in analytic philosophy.[45]

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Endnotes

[1]I speak loosely of universals here. The term is best applied to the objects of A-theories or P-theories, but T-theories provide an alternative account of what general terms supposedly denote, and it is convenient to have a word that applies to the supposed objects of all such theories. My choice of "universal" seems well-suited for this limited purpose.

[2] D. M. Armstrong, *Nominalism and Realism* (Cambridge: CUP, 1978), p. xiii.

[3]Armstrong says, "If two things have the very same property, then that property is, in some sense, 'in' each of them," *ibid., p. 108.*

[4] Keith Campbell, "The Metaphysics of Abstract Particulars," in D.H. Mellor and Alex Oliver, eds., *Properties* (Oxford: Oxford Univ. Press, 1997), pp. 125-139.

[5] I have criticized it in Bruce Aune, *Metaphysics: the Elements* (Minneapolis: U of Minn. Press, 1985), pp. 48f.

[6] See Armstrong, *Nominalism and Realism*, pp. 89-101.

[7] See below, p. 8

[8] John Locke, *An Essay Concerning Human Understanding*, ed. G. A. Fraser, vol. 1 (Oxford: Clarendon Press, 1984), p. 392.

[9]See Edwin Allaire, "Bare Particulars," *Philosophical* Studies, XVI (1963),

[10]D. M. Armstrong, "[Reply]To Aune," in Radu J. Bogdan, ed., *D.M. Armstrong* (Dordrecht: Reidel, 1984), p. 254.

[11] *Ibid.*

[12] *Ibid.*

[13] R. M. Chisholm, *Person and Object* (London: Allen & Unwin, 1976), pp. 43f. Chisholm says the first argument "seems" to have been offered by Edwin Allaire in "Bare Particulars," (*op.cit.)*; he quotes the second argument from Bertrand Russell, *An Inquiry Into Meaning and Truth* (London: Allen & Unwin, 1948), p. 97.

[14] Chisholm, p. 39.

[15] In "To Aune," Armstrong expresses a cautious attitude to this principle, saying "It may be that some such

principle is true' (p. 252); but in discussing the view that he calls Predicate Nominalism, he raises the question, "In virtue of what do these general terms apply to the things that they apply to?" implying that a satisfactory answer will have to refer to universals. See *Nominalism and Realism,* p. 19.

[16] Armstrong, "[Reply] To Aune," p. 252.

[17] See p. 3.

[18] David Lewis, "New Work for a Theory of Universals," *Australasian Journal of Philosophy*, 61/4 (December, 1983), 343-77; reprinted in *Properties*, pp. 188-227. (Lewis' remarks about predication occur on pp. 197-201.) I interpret Lewis' claim that predication should be acknowledged as primitive as equivalent to the claim that a predication to the effect that a thing *a* is *F* may be incapapable of any ontologically more revealing paraphrase. I say "may" rather than "is" because some predications do admit of such paraphrases. "∃x(x is a brother of Tom or x is a sister of Tom)" may be a revealing paraphrase of "Tom is a sibling."

[19] Actually, I made essentially the same point as Lewis in both *Metaphysics: the Elements*, p. 44 , and in "Armstrong on Universals and Particulars," where I said "Whatever the ultimate entities of the world may be, a proposition of the form "*a* is *F*" must be true of them without implying the existence of further, more elementary entities. If universals did exist, they themselves would be describable by propositions of this form; but the proponent of universals would not insist that such propositions could be true only if entites of a further sort exist. To parody Wittgenstein, Predication has to come to an end somewhere" (Bogden, *D.M. Armstrong*, p. 167)..

[20] *Ibid*., p. 254.

[21] This claim would not be made by my colleague Jonathan Shaffer, who postulates tropes only to account for the causal properties (or interactions) of empirical objects: he does not suppose that a trope corresponds to every true predication. In opposition to his view, I say that the special tropes he recognizes are excess baggage, for a thing's causal interactions are adequately explainable by reference to its own empirical character: a window shatters, for example, because *it* is brittle and struck by a sufficiently heavy object. The same principles applies to the interactions of micro-entities: they behave as they do because of what *they* are like. No special tropes are needed.

[22] Aristotle, Categories, 1a20-25.

[23] See Gottlob Frege, “On Concept and Object,” trans. P.T. Geach in P.T. Geach and Max Black, eds., Translations from the Philosophical Writings of Gottlob Frege (Oxford: Blackwell, 1952), pp. 42-55.

[24] That is, they do not require that “a falls under the concept **C**” is true only if **a** falls under the concept *falls under the concept **C***--as “**a** swims” is supposed to be true only if **a** falls under the concept ***swims*.**

[25] There are, of course, certain cases in which a thing satisfies the conditions for being **F** only if it is related to a further thing: to be a brother one must be suitably related to another person. The point is simply that there is no general requirment to this effect.

[26] David Lewis, *On the Plurality of Worlds* (Oxford: Blackwell, 1986), p. 55.

[27] The word “reptile” is apparently now obsolete for the purposes of zoological classification. According to Gribben and Cherfas, zoological species are now classified (at least among influential groups) partly by reference to DNA and histological properties, and animals formerly classified as reptiles are often quite dissimilar in these respects, turtles sharing more DNA with chickens than with snakes. See John Gribben and Jeremy Cherfas, *The Monkey Puzzle* (New York: McGraw-Hill, 1983), p. 93.

[28] *A Lexicon Abridged from Liddell and Scott’s Greek-English Lexicon* (Oxford: Clarendon Press, 1984). p. 630.

[29] See Paul Kay and Chad K. McDaniel, “Linguistic Significance of Meanings of Basic Color Terms,” in Alex Byrne and David R. Hilbert, eds., *Readings on Color*, vol. 2 (Cambridge, MA: MIT: 1997), pp. 411-414.

[30] See W.V. O. Quine, *Set Theory and Its Logic* (Cambridge: Harvard, 1969), pp. 9f.

[31] See Saul Kripke, “Is There a Problem about Substitutional Quantification?” in Gareth Evans and John McDowell, eds., *Truth and Meaning* (Oxford: Clarendon Press, 1976), pp. 325-419. More recently, the use of substitutional quantification has been criticized in certain contexts by Peter van Inwagen and James Tomberlin: they obtain false conclusions from true premises by introducing expressions that would tacitly be excluded by a thoughtful user of the device. It is well known that standard logical axioms are easily falsified if schematic letters are replaced by unintended substituends such as “This statement is false,” but the class of such substituends is not explicitly identified when logic is informally used. The same is true for the informal use of substitutional quantifiers. See Peter van Inwagen, “Why I Don’t Understand Substitutional Quantification,” *Philosophical Studies*, 39 (1981), 281-285, and James Tomberlin, “Belief, Nominal-

ism, and Quantification," in Tomberlin, ed., *Philosophical Perspectives*, vol. 4 (Atascadero, CA: Ridgeview, 1990), 573-579.

[32] See Wilfrid Sellars, "Abstract Entities," *Review of Metaphysics*, XVI (1963), reprinted in Sellars, *Philosophical Perspectives* (Charles Thomas: Springfield, IL, 1967), pp. 229-269.

[33] *Nominalism and Realism*, p. 17.

[34] As in *Republic* 597a.

[35] Hilaire Belloc, "The Llama," in H. Belloc, *Complete Verse* (London: Duckworth, 1970), p. 245.

[36] See "Abstract Entities" and also Sellars, *Naturalism and Ontology* (Atascadero, CA: Ridgeview, 1979), pp. 89-99. For a general discussion of the logic of DSTs, see C.H.Langford, "The Institutional Use of 'The'," *Philosophy and Phenomenonogical Research*, X (1949), 115-120.

[37] Nelson Goodman, *The Structure of Appearance*, second ed. (Indianapolis: Bobbs-Merrill, 1966), pp. 360ff.

[38] Linda Wetzel, "The Trouble with Nominalism," *Philosophical Studies*, XCVIII (2000), 361-370.

[39] Frege noted this in "On Concept and Object"; he said that "The horse is a four-legged animal" is "probably best regarded" as expressing a universal judgment, say "All properly constituted horses are four-legged animals"; see Frege, p. 45.

[40] See *Structure of Appearance*, p. 51.

[41] I expressed this view in my book, *Metaphysics: The Elements*, p. 66.

[42] What about the assertion "The passenger pigeon is extinct"? It seems to me that in this context "the passenger pigeon" is not a DST but the name of a species. Individual pigeons are not extinct; the species is: it has no instances.

[43] As my qualification is intended to indicate, speaking of a predicate *playing a role* does not "commit one to the irreducible reality of roles," for "functions as a predicate" merely describes a predicate as "is red" or "acts foolish" describes a thing or a person.

[44] If we want to retain the word "property" in espousing a P-theory, we may easily do so by employing the schema, x has the property of being F just when x falls under (or satisfies) the concept of being F . If we adopt this theoretically limited usage for "property," which does not take the word to denote irreducible objects distinct from particulars, we can say that a bald man has the property of being bald or sarcastic even

though we insist that the only things vague in the world are words or concepts. Our talk of properties will be a mere *façon de parler,* having no ontological significance.

[45] My treatment of a P-theory featuring concepts is indebted to Wilfrid Sellars's "naturalistic" treatment of abstract objects in *Naturalism and Ontolog*y, but it is considerably less ambitious: my account is restricted to a theory of P-universals, not abstract objects generally. What I say here is actually consistent with a realist view of classes, species, and numbers.

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