HERBERT HOCHBERG

Relations, Properties and Particulars

Tropes are introduced to avoid both extreme nominalism, a view that takes predicates to simply apply to ordinary particulars and not represent properties and relations, and the form of realism that takes predicates to represent universal properties and relations that can be common to numerous terms or pairs, triples, etc. of terms—a view Quine has characterized as a form of Platonism. Another motive for trope theory is the belief that tropes allow one to avoid bare particulars or substrata, that are the bearers of properties and, with properties, combine, in some manner, to form ordinary particular objects or facts or both. Thus tropes supposedly allow one to answer two classical questions. Given two objects, A and B, in virtue of what are they said to be the same in a respect? And, in virtue of what are they diverse or "individuated"? For tropes of the same kind, at least since Moore's turn of the century papers[1], are held to be numerically diverse—simply numerically different and not different in virtue of any thing or constituent. Thus if we had two objects that shared all non-relational properties, of shape, color, etc., for example, they would still be two in that the qualities while being exactly similar (or conceptually the same, in Moore's terms) would be numerically diverse—hence one could construe the objects as complexes of such "individual quality instances" without identifying them, as their constituent qualities would not be literally, or numerically, the same.

The term "trope," as a name for such individual qualities or quality instances, is apparently due to D. C. Williams, while an earlier commonly used phrase for such entities, *abstract particular*, was employed in 1923 by G. F. Stout in his well known dispute with Moore—"Are The Characteristics of Things Universal or Particular?" As Stout put it in 1923:

[1] G. E. Moore, "Identity," *Proceedings of the Aristotelian Society*, 1, 1900-01, is one.

> What is concrete is a subject to which characters belong and which cannot itself be a character of anything else. Characters are abstract particulars which are predicable of concrete particulars.[2]

While such matters of terminology are of no real import, Stout's use of the term reveals that he takes tropes to be things that are, in Aristotle's fashion, "predicable"—and that notion will be quite relevant as we proceed.

In a recent book defending a tropist account of predication, A. S. Maurin adopts the strategy of not offering an argument for the acceptance of tropes, in the sense in which Russell and Moore purported to offer arguments for universals by attempting to show that denying the existence of universals forced one to accept what was not acceptable—a purported vicious regress or a simple begging of the question at issue.[3] Instead, Maurin proposes to defend a trope account by rebutting purported arguments against tropes and showing how tropes allow one to resolve certain problems. This is a familiar strategy in philosophical disputes—for it is rare that one finds a blatant inconsistency, or even a subtle one, in an opposing view. What is different about the book is the opening declaration that the characteristics of tropes—being abstract, particular and simple—are such that "we must never lose sight of the fact that these traits are *postulated*, and that they are, in this sense, part of the basic set of assumptions from which the present work departs." (Maurin, p. 11) Of course one must start somewhere and cannot offer arguments for everything. The questions that arise are about where we start and how we employ the postulates we start from. Furthermore, to postulate or assume something does not license merely repeating the assumption in response to an objection—especially an objection that claims that while one postulates that tropes are "simple" entities they are employed in ways that indicate they are not really simple. One cannot simply respond to the charge that tropes are implicitly taken to be complex, in that they are taken to be entities that have a nature and therefore involve a distinction between what has the nature and the nature itself, by simply saying that the trope and its

[2] Originally in *Proceedings of the Aristotelian Society*, suppl. vol. iii, 1923, reprinted in L. Blackman, *Classics of Analytic Metaphysics* (New York: 1984), p. 203.
[3] A. S. Maurin, *If Tropes* (Dordrecht: 2002).

nature are one and the same—the trope is its nature. It will not do to hold that, by assumption, tropes are simple, and since they are simple we need not distinguish the nature from the trope. But, as always in such matters, it all depends on the details.

The discussion starts with a claim that I believe to be mistaken, and one that, interestingly enough, the author immediately proceeds to abandon after stressing its importance. Faced by the standard double-edged problem of feeling obliged to explain one's terms while recognizing that just as not everything can be argued for not everything can be explained, since some notions are basic, she tells us that we cannot explain "being simple" in terms of "having no spatial parts." We cannot do so since an explanation of simplicity "using the notion of having no parts is really no explanation at all." It is apparently a mere rephrasing since we can now ask "what does it mean to say of the trope that it is something without parts? Our answer will depend, in particular, on exactly what we mean by 'part' here." (p. 15) This sounds somewhat right, but not quite right. To be sure, explanation always must stop somewhere. But there is a difference between taking the monadic character of "being simple" to be basic—not explicable—and taking the dyadic relation of "is a part of" or "is a component of" as basic. One can do a lot more with the latter—just note the calculi of mereology that are current. It is hard to do much with the monadic property of being simple.

This is especially so if one keeps in mind that a number of variants of trope theory take ordinary particulars to be bundles of or to be composed of tropes—i.e. to have tropes as constituents or parts. And some involve taking classes of tropes that are all exactly similar, say the class or bundle of all red tropes of a specific shade, to overlap with a class or bundle of tropes that constitutes an ordinary concrete particular. And to speak of overlapping can be construed in terms of having a common part. (One need only keep in mind that a logical structure with dyadic predicates is quite different from one with only monadic predicates—it was not an accident that Russell spoke of monadic properties as one-term relations—as, in effect, a limiting case.) Such differences are not only lost at the outset by the author's desire to protect her type of trope theory from an obvious line of questioning, but, and it is an interesting *but*, on the very

same page, in response to arguments that tropes are not simple, she proceeds to tells us, to be sure with a qualifying phrase and in the context of a specific argument, that the "sense in which the trope is *not* complex is ... best put as follows: it does not contain (it is not constituted of) more than one kind of entity." What this does is make use of the quite natural idea that to be a simple entity is not to have other entities (or even one other entity) as a constituent (part, component). This is not, to repeat, to quibble. For one is not just saying the same thing when one construes the simplicity of an entity in terms of its not having one or more other entities as components. For, first, one needs some sort of part-whole notion in any case in dealing with a number of related issues (facts, bundles, etc.); second, just think of the following case. "x is not a part of y but is a part of z"—how will one analyze that out in terms of "is a simple" and "negation"?

After considering simplicity, the book proceeds to take up the notion of a particular. Maurin suggests that there is an intuitively appealing way of distinguishing particularity from universality, spatio-temporal position. She quotes K. Campbell:

> Universals are promiscuous about space-time: they can be completely present at indefinitely many places at once. But particulars, and in our case this includes above all the tropes, all have a local habitation, a single, circumscribed place in space-time.[4]

One is struck by the phrasing of Campbell's quotation, where no argument is offered, but it is conveyed that universals are entities that are ontologically "promiscuous"— entities that lack a proper place. One is almost invited to think they wantonly occupy various places—any place that will "keep" them. How universals have degenerated. From being the perfect, changeless, eternal prototypes in Plato's heaven of the Forms, they have fallen to being promiscuously distributed among indefinitely many places and particulars and are thus, unlike respectable entities, such as solid, localized, settled (bourgeois—one almost thinks) particulars. Colorful as Campbell's choice of terms may be, his view will hardly do.

[4] Maurin, 2002, p. 17.

But before turning to that, consider another, more philosophically interesting, but less picturesque, passage Maurin quotes from Campbell. She writes:

> As Campbell notes, in discussing tropes, if one is asked how two exactly similar items (tropes) can be two and not one, the intuitive and simple answer is: by "being at different places at the same time or by the one ceasing to be, at a time before the other comes to be." (p. 17)

I don't find this either intuitive or simple. In fact, given the sorts of things Campbell and other trope theorists, including Maurin, say about tropes, one would expect them to say that it is simply the two tropes themselves that suffice for the tropes to be different—something Maurin will eventually say. Thus the obvious, intuitive and simple answer would be: "they just are different—nothing, but the tropes themselves, accounts for their difference." This is what led Moore to speak of "numerical difference" as opposed to "conceptual difference." Aside from the obvious problem that tropes are such that different tropes can be at the same place at the same time, if one seriously follows the above cited line of reasoning one will be asked to produce an explanation as to how difference of space-time location accounts for the difference of entities. Clearly it doesn't in the case of universals, if such there be, and there are familiar arguments, from Russell, among others, that it cannot do so for ordinary particulars without the stipulated premise that no two such particulars can be at one place at the same time and that one such particular cannot be at two places at the same time. But if one brings in such a stipulation about tropes then the real answer is simply that that is what it means to be *a trope*. But that is not an intuitive answer that explains "how"—or explains anything.

Maurin then, puzzlingly, asserts three things. First that the individuation of distinct tropes is a matter of epistemology, not metaphysics. I can only take this to mean that given that they are distinct, the metaphysical problem of individuation—in virtue of what are they different—does not arise. What arises is merely a question about how we would in fact distinguish them. But, if there is a problem of individuation at all, it does arise for tropes. It is just that the trope theorist simply says

that it is resolved by the tropes just being numerically diverse. Doing this employs a premise without articulating it—simple entities, and only simple entities, can simply differ without anything (other than the entities themselves) accounting for their diversity. Tropes being, by assumption, simple account, like Bergmann's bare particulars, for the diversity of complex entities, but require no further account of their own diversity—they just differ. Second, Maurin asserts that the problem of individuation only arises if we refuse "to accept that two different basic facts may be true of one and the same simple entity." What is puzzling is that what she says, as it stands, is not something that one would really argue about—for example one who holds to universals as simples will certainly accept a variety of basic facts about the same simple entity, as will one who holds to bare particulars, or one who holds that sets are simple, and on and on. What she seems to mean, though, is that those who argue that tropes are complex, because one must account for the diversity of two tropes and for the two tropes being of one and the same kind, refuse to accept her basic assumptions.

Some critics of tropes claim that tropes simply duplicate the classical problems that lead one to accept universals and substrata. This is not just a matter of "refusing to accept that two different basic facts may be true of one and the same entity." What is at issue is seen in a passage from Campbell:

> The resemblance relations among the Fs hold in virtue of the fact that those items are F, not the other way around. Tropes (abstract particulars, quality instances) must be particular natures. They are not 'bare particulars" which, without some similarity tie, would have no nature at all. The particularist glosses 'o is red' as 'a red trope is among those compresent at o's place'. He does not have to add 'that trope's being red depends on its resembling other members of the *red* similarity circle'.[5]

For Campbell, as for Maurin, tropes are thus natured. Moreover, and here is the "rub" as Hamlet might say, they are identified with their particular natures. Though they are natured they do not have a nature, since they

[5] K. Campbell, *Abstract Particulars* (Oxford: 1990), p. 60.

literally are their natures. The problem this raises is not settled by holding that those who raise it oppose the "very possibility of the entire trope-theoretical enterprise" and that it is of "no interest ... here (where the possible existence of tropes is *assumed*)." (p. 19) For what is at issue is a crucial difficulty and is not to be dismissed in such an offhand manner.

I will put it a bit differently. Let us forget about individuation and simply ask: how it is that a trope is identical with its nature? (Actually, here, only one aspect of its nature is relevant, but we may forget that too, for the moment, for the natures are quite rich as we will see.) We have two red tropes, say, that are both such that we can say we have cases, to quote Campbell, of "being red"—they are red tropes as opposed to blue tropes. Thus, unlike bare particulars they have a nature that they are. If the nature is distinct from the trope we have a trope and a red nature, or red making nature, or whatever one here says—that is what grounds the trope being red, and not the trope itself. If they are one and the same, as is now commonly asserted by trope theorists, then the nature (as the trope) is diverse from the nature of the other red trope—which is identified with that trope. How then are they of the same kind? Maurin wants to say they just are and that is that. But look at it this way.

One can allow a trope theorist the diversity of the two red tropes, whether we take diversity either as a basic notion or as the negation of identity. To say A is diverse from B is to say they are two—they are numerically different—and let us grant that there is nothing that need be added. Let that be so about tropes. Now we also say they are the same—but they are not one and the same—they are not identical. Rather, what we then mean is that they are of the same kind, red tropes. But here, unlike the case of diversity, a question does arise about the use of "same," since we don't mean literally one and the same. We mean of the same kind. And then the obvious question, going back to Plato, if not before, arises –what is involved in the use of the notion of a "kind"? We cannot simply accept, as a hypothesis of trope theory, that that question is taken care of, by assumption, by tropes being the kind of simples that they are. So argument must here cease. But I, for one, fail to see that the trope theorist takes us anywhere. In short, though I willingly grant the assumption that diverse tropes are simply different—what I fail to see is how diverse tropes are of

the same kind if they are said to "be their natures." But if they are not said to be so—what are their natures? And if there are no natures at all—then they are bare particulars or at least things about which the question of how they come to belong to the same similarity circle arises. This is why Campbell's statement strikes me as outlandish, though on the surface it appears quite reasonable. Red tropes are similar because they are red, and not red because they are similar. But that leads us into the quandary I just laid out. What Campbell doesn't seem to see, let alone appreciate, is why "deeper" trope theorists, like Meinong, turned to exact similarity, and, consistent to the end, took such a relation in terms of tropes themselves. The approach of Maurin and Campbell, simply assuming that all is well with tropes and their natures, is problematic at the very outset.

In a discussion of the particularity of tropes Maurin comes to the familiar and reasonable conclusion that particularity is primitive and not to be explained in terms of occupying spatio-temporal positions—as Moore characterized numerical diversity long ago. But the discussion raises another question about the rich nature of tropes. Unlike ordinary particulars that we assume do not occupy the same place at the same time, various tropes are "compresent" at a place at the same time. To avoid unnecessary complications let us think in terms of a time slice, as they used to say, which allows us to focus on space—whether in terms of places or spatial relations is not material at this point. Diverse tropes of the same kind are held not to be compresent at the same place at a given time. So in a time slice we cannot have two red tropes in a particular red circle—an object that, for simplicity, we can take to be an after-image. It would of course be redundant to have two red tropes compresent, but why is it not possible? Well, again, that is just the way tropes are. No two tropes that are exactly similar can be compresent. Assume that is necessarily true. Since Maurin makes use of "truth-maker" talk, what makes it true? I am not asking for the evidence, just taking it as an assumption, but just what is assumed—certainly not a general fact involving the relations of exact similarity and compresence—for as we will see there is no relation of exact similarity—just the predicate. In any case we have something else packed into the nature of a trope, for we deal with a necessary truth about the tropes—based on their nature as tropes. This is also the case with respect

to taking particularity as primitive—for what that really means here is that tropes are not shareable—they cannot belong to more than one ordinary particular object. Universals, by contrast, are shareable. Thus what Maurin does is take Russell's old, and not always explicit, two-fold characterization of a universal (obviously derived from Aristotle) as being what is predicable and predicable of many—and modify it to take a trope to be a particular in the sense of being a predicable, but not being predicable of many—that was the point of Stout's introducing the notion of an "abstract particular." This is also what gives tropes yet another name—"unit attributes" as some now call them.

The final term of the trio of *simple*, *particular*, and *abstract* that Maurin focuses on is "abstract." Due to the wide influence of Quine, philosophers have tended to lump together "things" like sets, numbers, properties, concepts, propositions, functions and so forth as "abstract" entities. The tendency has been, as in the case of talk of "particulars," to contrast concrete spatio-temporal objects with non-localizable abstract entities. It has been further aided by the familiar tendency, influenced by Carnap and others, to treat predicates, taken in extension, as standing for classes while, taken in "intension," as standing for properties or concepts. But clearly, classes, normally construed, are not predicable and neither are numbers, though on certain logistic constructions numbers have been taken as properties, properties of sets or other properties, for example. Then there is the tradition of taking properties to be separated in thought from the objects that instantiate them—thus one is said to "abstract" or remove them in thought. The idea here often being that what one then does "falsifies" the way things actually are. For properties do not, supposedly, exist apart from the things that they are properties of. Thus the phrase "abstract particular" is employed simply to suggest that tropes are both qualities and particulars—such as the red trope in virtue of which the sphere is red—as opposed to particulars that are not qualities, such as the sphere itself.

Truth-Makers and The Truth-Making Relation

Talk of truth-makers in the English speaking philosophical realm goes back, as far as I know, to Russell's now legendary Logical Atomism lectures, though Russell spoke of what "makes true" and of "making true" and did not use the catchy phrase "truth-maker." However, he used the term "verifier," rather than "truth-maker," in 1912 and 1921, and he used it precisely in the same sense in which many now use "truth-maker"—as that whose existence is the ground for a statement being true, and not, as the word may misleadingly suggest, in an epistemological sense. Much of the current fuss about truth-makers amounts to quibbles that result from trying to fit accounts of truth with familiar trivial features of elementary logic, such as a tautology being a logical consequence of any statement. There is, however, a quite legitimate reason for emphasizing facts as things that "make" sentences true or "ground" their truth. This is to contrast, and emphasize, the difference between offering a theory of truth and dealing with the role of a truth predicate in a calculus in such ways as to avoid the familiar paradoxes—the liar and its cousins being the most notorious. For the focus on language and predicates has led to a revival of Ramsey's teen-age views about truth that are now paraded under the rubric of "deflation." Armed with Tarski's semantic conception of truth, some now "deflate" truth. Deflation has even spread to reference as P. Horwich has picked up a footnote in Tarski's original paper and turned it into a deflational theory of reference. Talk of truth-makers, considered in such a context, is a welcome antidote, for it amounts to taking metaphysics seriously, just as trope theories, unlike Davidson and his mentor Quine, take properties seriously.

Not surprisingly, many of the disputes and supposed problems faced by so-called "truth-maker theory" were taken up briefly by Russell. The serious problems he dealt with have to do with questions about whether atomic facts will suffice as truth grounds or whether one needs to acknowledge logically complex facts—especially negative and universally general facts. Both of the latter go back to Plato—the question about negation quite explicitly, the one about generality less so. In her defense of trope theory, Maurin sets out a number of "theses" concerning truth-making. They center on the notion of entailment. One can see what is

involved by simply considering a line Russell took. Let “p” and “q” be atomic sentences and F and F* the respective, existent atomic facts that ground their truth. “p **&** q” is then also true. Is there then a conjunctive fact? For Russell, the answer is no, since “p **&** q” is a logical consequence of the (set of the) two true atomic statements: p, q entails p **&** q. Whether one chooses to then say that the facts that make “p” true and make “q” true also make “p **&** q” true or not bother to talk of truth-makers in the case of the conjunction is a matter of taste. I think it suffices to note that the reason the conjunction is true is that both conjuncts are true. Talk about facts comes in when one asks about the truths of the atomic sentences and whether the facts that ground their truth suffice to “ground” the truth of other forms of statement—negations, universal generalizations, conjunctions, etc. In the context of such an analysis one might even suggest that to speak of a conjunction being true simply reduces to speaking of the conjuncts being true. But while there is no point in fussing about that, there is a point in fussing about whether the appeal to logical entailment involves recognizing a ground of truth for the logical truths and/or rules themselves—the truths and rules employed in taking the conjunction to be a logical consequence of the pair of atomic components. This is what is odd about papers concerned with the purported truth-maker, say the existent fact F, for a true atomic statement also being the truth-maker for any logical truth, say “ p **v** ¬ p,” since the latter is a logical consequence of the atomic statement. That is plainly silly. What makes the elementary tautology true, if anything does, is a law of logic—a logical form, one can say—that is fittingly and traditionally called the law of excluded middle. Or at least this is an issue that must be addressed, but is not. At best, one can point out that a disjunctive fact, say Fa **v** ¬ Fa, of the form p v ¬ p is not needed. The ontological issue concerns the form itself—or the law—(p)(p **v** ¬ p)—i. e. the ontological ground of logical truths and rules. The rest is pointless. And, as one would expect, we come across empty suggestions for modifying supposed “axioms” about truth makers, such as, for example, “ if x makes p or q true then x makes p true or x makes q true.”

Just think how absurd recent talk of truth makers gets, if you follow the discussions by the individuals Maurin considers. Assume Gödels

completeness and incompleteness theorems are taken as logical truths—assume also that the truths of elementary arithmetic, for simplicity construed as logicists do or, even if not taken as logicists do, are simply taken as logical truths. Would one then seriously say that the existence of the sun is the (or a) truth maker for Gödel's theorems or the truths of elementary arithmetic? What could this possibly mean, aside from the repetition of trivialities about entailment or derivation? Yet there are serious problems regarding truth-making as a relation and its connection to entailment. Such questions arise aside from those about the truth grounds for the truths of logic itself, where there clearly are issues. (As regards the latter, all. one need recall is the influence of M. Dummett's and P. Martin-Lof's writings about inference rules and the meaning of the logical signs.)

First, there is the use of "entailment" as a non-logical relation—for Maurin speaks, as do other figures she deals with, Armstrong for example, about the existence of entities "necessitating" something. Yet it is not logical entailment that is involved. This is clear from a recent paper by Barry Smith where, like Maurin, he conceives of a truth making relation (via *necessitation*) as a real "ontological tie."[6] Whatever he means by that, it is apparently contrasted with a "logical tie"—and he tries to define necessitation in terms of the modal hook of strict implication—which remains unexplicated, as do crucial concepts in Maurin's presentation. Perhaps they can't be explicated—but that becomes an interesting fact about the account and, again, it is always a question of how and why one has to take certain things as basic—as well as a question about just what things one so takes.

A second problem concerns the truth grounds of true negated atomic statements (propositions). She apparently finds a familiar attempt to avoid negative facts plausible and holds, limiting the discussion to atomic facts, that such a negative statement is true "simply in virtue of the fact that there exists no truth maker for the negative proposition's positive counterpart. This takes care of negative propositions." Well it doesn't, in any interesting way. Taken one way all she says is that the negative proposition

[6] B. Smith, "Truthmaker Realism, " *Australasian Journal of Philosophy*, 77, 3, 1999, p. 276.

is true if the positive counterpart is not. True enough, but not enough to resolve the issue. Taken another way what she says is that the negative statement is true "in virtue of the fact"—what fact?—that something does not exist! Put simply, '¬ Fa' is true if nothing makes 'Fa' true. In this simple case what would make 'Fa' true is the fact that a is F. So what seems to be asserted is that no such fact exists. And the obvious question is—Is that a way of talking about negative facts? There is a long story here that has been argued in detail in recent articles, and I will not repeat the argument. The simple point is that there is no way of getting to "¬ Fa" from the presumed generality—that *no* fact is the fact that a is F, without begging the question or at least appealing to certain claims about diversity, and views about the truth grounds for statements of diversity—issues that are reminiscent of Plato's discussion of negation in the *Sophist*. Moreover, one requires the generality involving "no fact" or "every fact is such that it is other than ..., " as well as a way of referring to a non-existent fact (or a detailed account of how to avoid doing so). Contrast the case of negation with that of purported conjunctive facts where we do have "p, q entails p **&** q" as a standard logical pattern. There is nothing corresponding to that in the case of negation.

This brings us to universally general facts. Maurin cites P. Simons on Russell's rather well known argument regarding the need for universally general facts, and assumes with Simons that Russell's argument is based on a mistaken assumption. As far as I can see, what Simons says is totally irrelevant to the issue. I will put matters closer to Simons' way of putting it as he speaks of facts making propositions true, as does Russell, and does not speak here of truth-makers, as does Maurin. I see absolutely no reason to take Russell to say, to put it in the general terms about propositions—as Simons does—that a number of facts that make a certain collection of propositions true cannot together make a further proposition true unless that proposition follows from the conjunction of the members of the collection of propositions. Russell is talking solely about atomic facts, atomic propositions and a true general proposition. What he assumes, to take a specific and relevant case in Simons' terms, is the following. If the facts Fa and Fb make "Fa" and "Fb" true then Fa and Fb make "(x)Fx" true only if "(x)Fx" follows from "Fa **&** Fb." Now, given that, as assumed, the

atomic facts Fa and Fb are the truth grounds for the atomic sentences “Fa” and “Fb,” the somewhat complex conditional sentence is true if and only if it is false that Fa and Fb make “(x)Fx” true. And that, of course, is what is at issue.

Russell’s view is that they do not make it true, since the generalization does not validly follow from the set of premises {“Fa”, “Fb”}. Simons says that he thinks Russell’s view is wrong, but he gives no reason—he simply endorses Wittgenstein’s purported *Tractarian* view—roughly that having the list—a, b, c, ... gives you “all”—the view Russell was arguing against. Russell is clearly right, for the simple reason, as Simons notes in passing, that “Fa” and “Fb” could both be true and the generality be false—if a and b were not all the individuals. And that of course is Russell’s point—for to say they are *all* is to employ a general proposition. Moreover, it is easy to see that Simons’ “argument” is weak.

Consider the following case. The truth makers are the atomic facts, T1= a is F and T2= c is G. They can be taken to make true the propositions, P1= “Fa or Fb” and P2= “Gc.” Then, if we take Simons literally, Russell is holding that another proposition, Q, is not to be “made true” by the truth makers a being F and c being G unless it logically follows from the conjunction of P1 and P2. Of course this is false. Just take Q to be “Fa.” It does not follow from “P1 **&** P2” but it is made true by T1. What Simons leaves out is the condition on the propositions being atomic, which is really what Russell’s argument is all about—the list of the “objects” or atomic facts does not suffice unless it lists “all” of them—but to *state* that you need a universal proposition (or understanding—i. e. assuming, without making explicit, that they are all, as Campbell takes for granted that certain collections of tropes are “all” of a “kind”.)

Resemblance as a Relation

Maurin seeks to solve two basic problems for trope theory—one of universalization, one of thing-construction. This involves: first, defending some aspects of other accounts of tropes—those of Stout, Williams and Campbell, for example—while criticizing other aspects, mainly of Simons’

version; second, rebutting critics of trope theory, such as Armstrong; and, finally, developing her own views out of her discussions of others.

She starts by characterizing the problem of universalization as the problem of constructing "universality" from tropes. This involves making what she takes to be an important distinction that Campbell has made—between what he and she call the A and the B questions regarding the classic problem of universals. Consider some object, a, that is an F. The A question is—What makes it an F? (What makes it true that a is F?) The B question is—What makes it true that two objects, a and b, are the same F? That way of putting matters is a bit awkward—for it makes matters clearer if one asks what makes them the same in a respect or what makes them both Fs. In any case, she tells us the classic problem of universals is not the problem of universalization. Of course it isn't—especially if you don't believe in tropes, or even if you do, as Plato apparently did, it was not the problem of how to construct Forms out of tropes—but of accounting for certain tropes being of a common kind—or as she puts it: How can distinct particulars all have what appears to be the same nature? She claims that classical theories of properties, including realism about universals, have assumed that the A and the B questions must receive the same answer, and, what is worse, sometimes assumed that the questions are the same. That is too simple a story, or, perhaps better, it is too contentiously put in the form of making a debating point. The questions go together because one naturally develops arguments for universals by starting with two things of the same kind. Or even starting with two things in a relation and focusing on the difference between a relation and its terms, or, perhaps, starting with predication in language and focusing on the different roles of subject and predicate terms. If one just looks at the history, perhaps from a different perspective than Maurin's, one finds her attempt—which follows a common strategy in philosophical disputes—to show that the realist isn't clear about the difference between different questions—is misguided. For the moment, consider Plato's *Phaedo* where, by a kind of consensus, one takes a fairly clear Platonic theory of Forms to first be set out. There, you already have the distinction, not only of the two questions, but of the difference between a trope (quality instance), an object (something that has a quality) and a universal form (the quality *itself*). For Plato raises

questions concerning the "tallness" *in* or *of* an individual, Theaetetus say, and the "Tallness" itself—which is not in or of an ordinary individual. One often also forgets that the classic problem of individuation erupts in the early phase of the golden age of medieval philosophy with William of Champeaux starting from the common universal nature of Socrates and Plato—humanity say— and asking what makes them different. His answer was that one set of accidents modifying that common nature gave us Socrates and the other gave us Plato. Abelard first enters the history books, so to speak, by supposedly arguing that such a view is absurd—as the same thing would then have both sets of accidents. The point of relevance here is that, as a standard account goes, for William it was supposedly the universal that was the subject of predications, and not what was predicated. William clearly took what makes Socrates human and what makes Plato and Socrates both human to be the same "thing"—but it was not the same thing that made Socrates short and Plato short. If we jump to more modern times, say Frege at the end of the 19th century, it is clear that it is the difference between argument and function (and object and "concept")—subject type entity and predicate type entity if you will—that is crucial. It is not the common feature suggested by predicates—that makes for the difference between objects and concepts. Though more than one thing may fall under the same concept, it was the incomplete nature of the concept (function) that struck him—as well as the failure of mathematicians to recognize the need to acknowledge functions as well as numbers. He was also concerned to solve what has become known as "the Bradley problem"—but then so did Aristotle, and it is there, if only implicitly, in Plato's concern with "participation." But take the classic case—classic because it is the classic argument for universals that Russell lays out in 1911 that is based on, as Russell acknowledges, Moore's 1901 paper.

He starts out with the trope view as his target and proceeds to argue that it will not do—by means of the well known argument about the similarity relation. Of course, to phrase the argument as he does, he starts with a case of two things of the same quality, since, for his argument, one thing will not do (actually he starts with four things, yielding two cases of similarity). But then, assume he is right for the moment, once you have universals—and as he holds via his argument, perhaps all you need is

similarity (whether exact similarity or similarity in a respect, color say, need not detain us) as a universal—what is the point of bothering to consider one thing? Moreover, even if we consider a case of only one thing having a quality—Russell's line of argument would be the following—consider the possible case of having another one or more—i.e. two or more things with a common quality. Philosophical views deal with such matters—and have to—that is why so many arguments depend on "philosophical thought experiments." (Though perhaps it is also because philosophers have no real experiments to conduct.) Thus the charge against the *universalist*, of not distinguishing two simple questions, is hardly compelling—no more so, in fact, than Campbell's suggestion about universals being promiscuous. But that aside, forget the terms "universal" and "particular" and focus on Frege's discussion. It was the difference in the kind of entity that he saw as important and the need to distinguish between objects and concepts—between objects like 2 and 4, on the one hand, and functions like *square of* on the other—that he saw as crucial—and that has nothing, as such, to do with whether one deals with a common or a unique "concept"—square of or being even and prime or being even and prime and greater than 2. For the point is that one needs two kinds of entities. This has an ironic twist that will emerge when Maurin takes up a purported relation of compresence—for her question will be whether she must recognize something of a kind other than that of being a trope. What drives her to that is the need for compresence to link tropes—so one apparently ends with two different kinds of entities—tropes and what links tropes—a connector of some sort. Her problem is then to construe that as a trope. But the issue is there independently of dealing with one or two cases of such "linking"—that was what Frege had focused on over a century ago, and Russell was quite aware of, as was Aristotle in his famous definition of what is universal—it is what is predicable of many. To be sure the mention of "many" is there—but the point of emphasis is on "predicable"—on what is possibly predicated of many, and not on what is in fact had by many or is *truly* predicable of many. (Here "predicable" is not simply taken in terms of "what can be asserted" in a linguistic sense—which leads to the absurdities of taking "is red or square" and "is to the left of Peter" as indicating properties.)

Maurin says that she will make it clear that quite a few of the objections to trope theory stem from a "refusal to accept and acknowledge that the problem of universalization arises as soon as one attempts to answer the B-question, but *not* when one attempts to answer the A-question." (p. 63) In the course of arriving at that statement, it is important to note that the talk about particulars has shifted from talking about an ordinary particular, some red object or other, say, to a particular being a trope. If one thinks about it, given what she has said about the problem of universalization—the problem of how to construct universality from tropes—that problem can only arise for a trope theorist. At this point Maurin will speak of making this shift, after making the claim about the purported confusion of questions—and she does so in order to raise the question about what makes two tropes of the same kind being such that they are of the same kind. The way it is all put is really not quite fair to her opponent. For in claiming that the opponents of tropes confuse the A and B questions, she holds that the A question, which has become— Why is some particular trope a red trope or a wisdom trope?—rather than a question about what it is in virtue of that this ball is red or Socrates is wise—can now be simply answered: it is a red trope, for example, because it is a red trope. That is it. But we must note two things. First, we have simply returned to the themes of the early discussion of tropes being abstract particulars. And the issue is, again, the distinction between a trope and its nature. But, second, it should be obvious why proponents of universals focus on what she, following Campbell's lead, distinguishes as the B question. For one makes the universalist's point about the nature of the trope by considering two things of the same kind. To put it simply—her problem of "universalization"—the construction of the universal or kind from the tropes sets a question begging task, from the universalist's point of view. For one has to have the right kind of tropes to build with. But how do you get the right kind of tropes?—well you just do—they just are what they are and that is that. Sartre, I think, has put the type of view most spectacularly and, given his linguistic skills, most accurately in speaking about acts of consciousness forming a "synthetic unity": they unify

themselves.[7] Tropes are really quite miraculous simple things, aside from being virtuous, as opposed to promiscuous—though if they are continuants they are promiscuous with respect to time. True virtue, I suppose, is to be found solely in the momentary bare particulars of someone like Gustav Bergmann (and possibly of Russell). But Sartre recognizes what trope theorists like Campbell do not—that there is more to the issue of universals. Thus, unlike Stout, who talks of "distributive unities," recalling Plato's discussion of whether a universal can be a "whole," like a piece of cloth, whose pieces or parts are present here and there, Sartre speaks of "transcendent unities." However, his notion of a transcendent unity is no clearer than that of a distributive unity—a notion we will shortly return to in considering Maurin's defense of Stout. Aside from that, the question will remain in terms of just what is a universal on her view—it may be constructed from tropes but is it nothing more than the tropes it is constructed from? In current fashionable parlance: does it supervene? But such talk would be as puzzling as David Lewis' mereological fusions that are nothing more than the parts that are fused. Of course the idea is that there is nothing more since there is no real connection or relation combining the elements—but then what is it that is composed of exactly similar tropes—nothing? But then the universals red and green are the same thing, namely nothing—though they are composed of different elements. Be that as it may, the focusing on the A and B questions being different is misleading. For, if one is serious about the problem of universals, one faces the B question as soon as one answers the A question.

[7] J. P. Sartre, *The Transcendence of the Ego* (New York: 1988), pp. 38-39. Sartre there is discussing individual conscious acts unifying themselves, but the same pattern applies to the color blue, as a transcendent object that is a synthetic unity of things like "the blue of the blotter." Thus he writes: "…to say 'I hate' or 'I love' on the occasion of a particular consciousness of attraction or repugnance is to effect a veritable passage to infinity, rather analogous to that which we effect when we perceive *an* inkstand or *the blue* of the blotter." pp. 63-64. The passage to infinity is to the color blue as the "synthetic unity" of the instances of blue (both actual and possible, as I read him). While he holds that we effect this passage, as he "explains" in a later work, one can "...seize Red through his impression of red. By Red is meant the principle of the series—the electric current through the electrolysis, etc..... in order to be grasped as an appearance-of-that-which-appears, it requires that it be surpassed toward infinity."J. P. Sartre, *Being and Nothingess* (New York: 1956), p. xlvii.

That is why we cannot forget that Russell assumed the tropist's answer to the A question—that qualities were particulars—in order to argue against the tropist's view by then raising the B question.

Maurin carefully discusses Stout's tropist view, in connection with Armstrong's arguments against what he calls "class nominalism," as a form of class nominalism. Though defending Stout in various ways against Armstrong, she concludes Stout's view is not "good enough." (Actually it is not good enough as it stands, as she sees it, for she will in effect end up with a variant of it—by introducing the "pseudo" relation of exact resemblance (similarity) to form the "classes" that will be "necessitated" by the existence of their member tropes.) The reason it is not good enough as it stands, to put it in my terms and not hers, is that classes can be arbitrary objects. Thus we distinguish between classes given in extension, as one says—the class whose members are my shirt and this room—and classes specified by elements satisfying a condition—or, to put it another way, having a certain property. The second way will not do in this context; the first way does not separate classes that can serve as universals, to solve the problem of universalization, from those that can not. Personally, in spite of his use of the term "class" at places, I doubt if Stout's distributive unities are classes in the sense we, including Goodman and Quine, speak of classes and sets. I think what he has in mind is actually not much different than what Maurin has in mind—and she notes that at the very end of the discussion. She also suggests that in one of her responses to Armstrong—by defending Stout along lines that suggest he is what she calls a "primitivist"—i.e. holding that the connection of the elements into a unity is not to be further explained—they just form such a universal. And it is, in fact, the basis for her own view. Except Stout seems to recognize that something more needs to be said, or at least emphasized, than saying that tropes are what they are—and thus attempting, as Maurin will suggest, to speak of exact similarity as a "pseudo-addition" to trope theory. I think Stout has a real addition—but it is hard to specify just what it is. Unlike Maurin, he seems to recognize that you don't get very far by appealing to the nature of tropes—whether you take the tropes to be identified with their natures or not.

An interesting problem arises, suggested by the analogy with classes that is, in a way, the opposite of the problem of the arbitrary nature of some classes—an objection Maurin overlooks. If you have a universal being a distributive unity—whatever you call it—of exactly similar tropes—why is there not also such a unity of any subset of tropes that are exactly similar (whether *exactly similar* is a pseudo-relation or not)? You have to make another stipulation or "axiom" about tropes to avoid that. The alternative is a view that is ontologically promiscuous, at least as regards the problem of universals. For, oddly enough, you then have more universals than you have particular tropes, whenever you have four or more tropes of the same kind. Of course, one can say that just as tropes being what they are suffices to form a universal, and thus solve the problem of universalization, so their being what they are means that only the totality forms such a required unity. (Can one trope form a total unity?)

Maurin proceeds to argue that exact similarity (resemblance) is an internal relation. She reiterates that tropes do not have their natures—they are their natures. Thus, given her understanding of an internal relation, it is essential to exactly similar tropes being what they are—the tropes that they are—that they be exactly similar. And this brings us to its status as a "pseudo-addition" to her ontology of tropes—for that is the one of three alternative ways of taking that relation that she finds the most attractive.

She does however explore the other two alternatives, one of which is to accept a primitive relation of exact similarity, taken in terms of tropes themselves, and argue that Russell's classic argument that appealing to such a relation involves a vicious regress does not hold. This is a well-traveled road. Properly stated, Russell's argument is correct—but I have spelled out why elsewhere.[8] Here I merely note two things. First, even if a vicious regress is not involved, merely a trip to infinity, the same objection arises that Russell raised against Frege's account of sense and reference. To account for the sense of one term, the theory is forced to accept indefinitely many entities. In this case, to avoid a single promiscuous universal, the theory introduces indefinitely or infinitely many tropes

[8] See "Russell's Proof of Universals Reproved," originally in *Philosophical Studies* 37, 1980, reprinted in revised form in H. Hochberg *Russell, Moore and Wittgenstein: The Revival of Realism* (Frankfurt: 2001a).

generated by one simple fact. And one must not be misled by the analogy with the series: p, p is true, p is true is true, etc. In that case one generates, with an appropriate apparatus, infinitely many sentences, just as in p, p **&** p, p **&** (p **&** p), etc. Here we deal with entities, not language.

Second, there are further arguments, which I just mention without supporting them. The relation of exact similarity, being transitive and symmetrical, which it needs to be to be the basis for a similarity circle or "universal," no longer can be naturally characterized as being of those logical kinds. For being taken in terms of tropes, the same exact similarity trope cannot be taken to hold of diverse pairs of tropes. But then the (relational) exact similarity tropes are, paradoxically, not symmetrical and transitive. It would be the similarity circle of relational exact similarity tropes that is transitive and symmetrical, though it, of course, and oddly, does not stand between any terms—its elements do. But then we have another problem. Tropes t and t*, for example, will stand in the exact similarity trope es—in that order, and t* and t will stand in es*, in that order. So now we have to account for the order in such facts, for they are different facts as they have a different constituent, the relational trope, and differ as to order of terms. How a trope theorist does that becomes a curious matter. Moreover, a question arises about the status of the tropes t and t*, as natures, grounding the truth of both relational statements and thus guaranteeing that the relation is symmetrical—and hence grounding the obtaining of the relation with diverse orderings of terms. Their natures get richer and richer it seems, but perhaps not promiscuous. But a real problem arises in specifying the similarity circle of exact similarity relational tropes. For membership in it must be specified in terms of reference to it. It is one similarity circle that cannot be specified by employing exact similarity. A similarity circle would then really be circular. And this, by the way, has nothing to do with whether or not you take exact similarity to be a genuine relation or a "pseudo" entity. That is why this point is not simply a way of rephrasing Russell's argument.

But, in any case, Maurin does not prefer to appeal to relational tropes of exact similarity. Instead she construes the purported relation as a "pseudo-addition." This type of move has appeared under different names in the literature. In earlier days one heard of "distinctions of reason" as

opposed to distinctions in being—in more recent times one hears of formal relations, non-entity relations, internal relations (as some use that notion), supervenient relations, fusions that are nothing more than what they fuse, and ontological "free lunches." The quick response is simple. In rigorous ontology, nothing is free—if it is a "pseudo-entity" then one should either not talk about it or not employ it in one's analysis. Regarding the idea of a formal relation, more can be said. Basically what goes on is, again, that since the tropes t and t* are the truth-makers for the statement that they are exactly similar, given that it is true, nothing further is needed. So while one may make use of exact similarity to characterize similarity circles, one does not thereby really employ a relation of exact similarity.—just exact similarity talk, so to speak. Thus Maurin says "For two tropes to exactly resemble one another it is enough that they exist." (p. 109)

There is, I believe, a formidable argument against her view. She takes it up, but, as I see it, fails to deal with it. The argument is this. Let a basic proposition be one that is either atomic or the negation of an atomic proposition. Then consider tropes t and t* where "t is different from t*" and "t is exactly similar to t*" are both true. Assume you take either "diversity" or "identity" as primitive. Then both propositions are basic propositions. But they are logically independent. Hence they cannot have the same truth makers. Yet, for a trope theory of the type Maurin espouses, they do and must have the same truth makers. Thus the theory fails.

One response Maurin makes is to hold that logically independent sentences may have the same truth makers. She claims the theoretical foundations for this have already been set down earlier in her book. What that amounts to is simply repeating her view of tropes—but that is no answer to the problem. In fact it is demonstrably false on a standard use of "logically." Given basic two propositions having the same truth makers, it is not logically possible for one to be true and the other false. Therefore they are not logically independent.

Maurin also says their is another response to the argument that she will not pursue. They are not logically independent because they are not both atomic. But that is not relevant. The issue is about basic propositions, not just atomic propositions. This is where she is led to consider denying that exact similarity is reflexive. For she holds it might be possible to claim

that a exactly resembles b entails that they are distinct. However, she can't hold this. Given that it is transitive, symmetric and not an empty relation, it is reflexive. (Also, it is worth asking what the sense of "entails" is in such a claim since it is not "implication." The claim would have to express an "axiom" about tropes and exact similarity.) Finally, she adds that it is a verbal question as to whether the sentences are logically independent, suggesting that it is a matter of deciding whether "being logically independent" means "having different truth-makers." That is simply false. The simple argument I gave above is not merely a matter of making a decision about the use of the words. "logically independent"—there is a history and a context that we operate within and which connect "x entails y" to "y is true in any model in which x is true" (or one can speak in terms of possible worlds if one prefers). Maurin's dismissal of objections as due to merely verbal disputes comes out again in the immediately following summary section where she criticizes an argument of Armstrong's against the trope theorist's appeal to exact resemblance. Given that the relation is taken as primitive, Armstrong has argued that the trope theorist requires axioms about that relation and about identity. The realist about universals, construing resemblance in terms of sharing universals, and hence as not primitive, only requires axioms about identity. Maurin responds by stating that "whether or not primitive axioms of identity are preferable to primitive axioms of resemblance is surely a matter of taste." (p. 116) That, as I see it, totally ignores Armstrong's argument. It is not a question of whether one prefers one set of axioms or another. His argument is that both theories require identity, and the axioms about it, but the trope theory requires further axioms employing its further primitive relational predicate. Whatever the merit of his argument, it cannot be dismissed as easily as Maurin dismisses it.

Seeing a major problem that a successful trope theory must deal with to be how to construct or construe ordinary things, a red ball, the moon, etc., in terms of tropes, she begins by discussing the notion of a *thing* in reference to classical figures like Husserl as well as contemporary figures (Campbell, Simons). Before considering what she has to contribute to that issue it is worth noting another, general issue for trope theorists. That concerns the problems posed by relations, taken as tropes. For

relations are absurd candidates for location in space and in time—just consider temporal and spatial relations themselves. A familiar would-be "solution" goes back to the days before, as one now puts it, philosophers understood how to handle relations—think of Aristotle's logic for example or the medieval discussions. Some sought to ground talk of relations between things in terms of so-called "fundaments" in things. In effect one takes, or tries to take, dyadic relations, for example, in terms of something like a pair of monadic relational properties—the internal foundation of the relation. Where John kisses Mary or Mary kicks John, you have a kisser and a kissee or a kicker and a kickee—and not relations of "kisses" and "kicks." The apparent relation is said to be founded on such internal foundations—a foundational pair of tropes, so to speak, as the truth makers for relational statements.

To make a point, consider the natural numbers as objects. Then, following the pattern of employing fundaments, in place of relations, 7 and 5 are the truth makers for "7 > 5" while 7, 5 and 12 play that role for "7 +5 = 12." But one can just as easily, given the Dedekind-Peano achievement, take 0, (or any one natural number), to be the foundation or truth-maker for all such truths, the truths of elementary arithmetic, just by taking the familiar postulates to express the nature of 0. In short, given the existence of 0, we have the "foundation" for the existence of 5 and 7 and 12. So, we can say that the nature of 0 is such that all of the truths of elementary arithmetic are made true by the existence of 0. Such a view is totally hopeless, but it is worth noting that something like that view was what was behind Bradley's talk about the paradoxes that beset relations, including, or especially, exemplification. For, as he saw it, everything would somehow be internal to everything else, as everything was "related" to everything else, by diversity if nothing more—and thus we were on the road to the ONE in the form of THE ABSOLUTE.

Maurin adopts a version of such a view to dismiss the problems relations pose for trope theory (as do others and as Armstrong did for "internal" relations, and as we will shortly see, lately suggests doing for all relations). But she finds, even in her own terms, that she must provide some further discussion when it comes to the compresence of tropes to form a thing—a relation to hold the constituent tropes together to form the

thing. Before turning to that relation, it is worth noting that serial order, such as time involves, depends on relations of certain logical kinds. Such logical characteristics of relations (transitivity, symmetry, etc.) must then be packed into fundaments, as there are supposedly no relations to provide the order for a series or the grounds for relational truths. Instead, there are supposedly places that objects are at and times that events occur at. Thus one speaks in terms of objects being *at places* and events taking place *at times*. But then, aside from other problems posed by recognizing *places* and *times*, one introduces the relations of *being at* and *occurring at*. Moreover, if you try to specify such situations in terms of places and moments, questions about relations arise that are similar to those about the numbers. We will return to these questions shortly.

Space and time aside, Maurin's compresence relation cannot be construed in terms of fundaments internal to the thing, but must be taken as external to the entities it relates, if constituent tropes are not taken to necessarily go together, given that they exist. Furthermore, such a relation must be taken in terms of tropes—as qualities are. Compresence differs from other tropes, however, in being recognized by Maurin as a relation-trope. We are then told that as a relation-trope it differs from other tropes in that, given that it exists, it must relate exactly the tropes that it does in fact relate. It is "specifically dependent" on them. It is thus, as those in a somewhat Husserlian tradition speak, *dependent*—where the dependency is "one way" or "one sided." It is also, supposedly, external to the tropes, in that they can exist without being in that relation, but they are "internal" to it in that it cannot exist without relating the tropes it relates. Its doing so is "its nature."

Maurin discusses the Bradley regress at considerable length. Recognizing a relational trope, she feels obliged to show that the regress doesn't apply to her view. I do not think her analysis or attempt to show that she avoids it succeeds, but that is a well worn trail and I will only note that what she does is adopt a familiar pattern that she cites R. Grossmann as defending. It is the basic pattern Frege took to resolve the problem. (I assume it is clear that Frege was not merely concerned with how the constituents of a "thought" or proposition are united, but with the threat of a regress if one introduces a relational connection among such

constituents.) That is the point of his concepts being incomplete. It is a pattern Russell adopted for relations, and sometimes for properties. And it is the Russellian variant that she and Grossmann advocate. Relations don't need to be related to what they relate. The pattern also appears in Johnson and later in Strawson, Bergmann and others—taking the predicative tie (not using "predicative" in a linguistic sense, but in an ontological one) to be special, i. e. not a relation but a tie, for what makes it special is that ties do not require further ties, while relations require ties. Russell didn't bother with the additional step, he simply stopped the regress with the exemplification relation—and Frege didn't even bother with the step from monadic concepts to relational concepts that Russell sometimes took. What they all do is simply proclaim there is no Bradley problem. In Maurin's version, it is a "brute fact about relations" that no further additional connection is needed. (p. 165) But that is not an answer to Bradley. It is an interesting historical note that Quine, some time ago, took an alternative line that others have recently repeated, holding that the resulting Bradley regress is no problem—you just have an abundance of additional, but harmless, relational predications.[9]

In contrasting compresence with exact resemblance Maurin notes that the relation, in the case of exact resemblance, "follows necessarily"—since what the related tropes are "is intimately connected to the relation in which they stand." (p. 165) I find this odd, for if I have understood her, there is no such relation, and hence no relational tropes of exact similarity, so what are the related tropes intimately connected to—besides each other—and what does the talk of being "connected" really amount to here? Be that as it may, she proceeds to tell us that though the connection is not as apparent in the case of the compresence relation (relational tropes), something along similar lines can be argued. Compresence is a relation, but, as for any other trope, being what it is exhausts its being—it is its nature, recall.

But other questions arise about her recognition of different kinds of tropes by introducing compresence tropes as different kinds of tropes that unify ordinary tropes into complexes. One question is the one raised earlier

[9] In a letter to C. Hartshorne written between 1952 and 1960.

in connection with Stout. Given that you have a compresence trope tying a variety of tropes, do you also have a subset of those unified tropes also unified by another compresence trope of a smaller adicity? Whatever you say, unless you stipulate that all complexes of tropes are of the same adicity, you will have compresence tropes of different adicities. Do they all form a similarity circle? Or do only those of the same adicity do so? Or are trope relations what Quine called "multi-grade"? A notion that itself is problematic, but has recently been given new attention in the revival by F. MacBride of Ramsey's celebrated attack on the distinction between particulars and universals.[10] In any case, given that diverse compresence tropes will be internally dependent on the different ordinary tropes that they combine—by their very nature—doesn't that mean that they are essentially different in that respect? Hence, how can they be exactly similar? Recall red tropes don't need to combine with the tropes they combine with. So why are compresence tropes tropes? Or do we ignore such differences?

There are further obvious questions that bring us back to problems I touched on earlier. How does a trope theorist deal with time and space in terms of tropes? Take it at its simplest—with places in space and moments of time. Two obvious problems arise (and variants of them will arise whatever your treatment of space and time is). How can one treat moments and places (say points in space) as tropes? Even with such points and moments one does not avoid spatial and temporal relations, as Maurin seems to think you do. Recall the point about the natural numbers. You require relations like > to serially order them. To simply say "7>5" is made true by 7 and 5—by their "natures"—without recourse to the relation > is simply to reiterate the old theme that internal relations are not relations and to pack true relational statements into the "meaning" of the signs for the terms. As noted earlier, one can, on that pattern, pack all of elementary arithmetic into 0. And the crucial points remain—to have a serial order you need relations of a certain logical kind—while, as we also noted earlier,

[10] F. MacBride, "Whence the Particular-Universal Distinction?" *Grazer Philosophische Studien,* 2004, 67. See also H. Hochberg, "Russell and Ramsey on Distinguishing Between Universals and Particulars," *Grazer Philosophische Studien,* 2004, 67.

one faces the issues raised by the relational "being at" and "occupying. " Aside from other problems, if you try to construe things occurring prior to others in terms of their occurring at moments—then, as with the numbers, are not the moments temporally ordered by temporal relations? Or is it the, or in the, nature of a moment to be related to all the other moments—prior to and after it? Moreover, even if you do maintain that moments and places "found" the relations by their natures—are not their natures then sufficiently different so that the tropes being identical with the natures, become tropes of different kinds, and hence not "exactly" similar? So how can we have a similarity circle of moments or one of places—without separating diverse aspects of such moments and places—and thus acknowledging they are complex? Tropes will clearly not do to resolve the problems of predication and, in particular, relational predication. But, if tropes will not do and if "bare substrata" are problematic, how then are we to construe particulars, predication and, in particular, relational predication on a view recognizing universal properties and relations?

Particulars as Relational Facts and the Purported Necessity of Predication

Traditionally particulars serve, via the connection of exemplification, to unite with several properties and thereby form the core of unity of an object, say a red square. The ordinary object is construed in terms of a basic particular exemplifying the color and shape properties—red and square. Such a basic particular, as in Descartes' well known example of the wax provides for the basis of "identity" or persistence through change of properties over time. In addition such a type of entity purportedly resolves the problem of individuation, since it is presumed that two objects can have all non-relational properties in common and therefore cannot be construed as *collections* or *complexes* of properties. (One also presumes, or argues, that relations cannot serve to resolve problems regarding individuation.) Trivially, basic particulars are not needed as a basis for the unity of an ordinary object, **o**—the red square. One can take **o** to be a relational fact—a fact involving all of its "elements" in a basic relation—compresence, say, following Russell's terminology—and described as

follows: the relational fact with R and S and ....as the terms of the fact and CO (compresence) as the attribute (relation in this case) of the fact.

(1) **o** = (ιp) (A(CO, p) **&** T(R, p) **&** T(S, p) **&** .....).

One can trivially add that if there is a problem of individuation and it requires a "pure individuator"—or "thisness" of Scotus—such an entity can be added as an additional term of the fact—the fact that the object is taken to be. Giving "bare" or "thin" particulars such a role in such a way graphically shows how trivial they are, along with the problem of individuation. One simply adds a clause "T(ß, p)," with "ß" as a sign for such an "individuator," stating that ß is a term of p.

Standard predications, such as the statement that the object **o** is red can now, in a sense, be said to be necessary, since the property red can be said to be a constituent of **o**. What that means, if carefully expressed, is that:

(2) E ! (ιp) (A(CO, p) **&** T(R, p) **&** T(S, p) **&** T(ß, p)) **iff**
R((ιp) (A(CO, p) **&** T(R, p) **&** T(S, p) **&** T(ß, p)))

is a logical truth. That is, it follows from "the fact" that **o** exists that it is red, given (1). That (1) expresses the analysis of the object **o** as a fact with certain terms is, of course, also part of the story. In a crucial sense, however, what is stated is clearly not necessary—for standard predications have, in a way, been "replaced" by existential claims like "E ! (ιp) (A(CO, p) **&** T(R, p) **&** T(S, p) **&** T(ß, p))." And those are in no sense "necessary" or logical truths.[11] Actually what this reflects is a feature of "bundle" ontologies, whereby it is, in an imprecise sense, taken to be necessary that the bundle composed of R, S, etc. contains R. [One may also say that the truth ground for a statement of class membership is not a relation between

[11] H. Hochberg, *The Positivist and The Ontologist: Bergmann, Carnap and Logical Realism* (Amsterdam: 2001b), pp. 128-32.

an element and a class, but the class itself. That involves a particular ontological analysis of what a class "is."][12]

Such an analysis of particulars and their connection to properties allows one to dissolve the notorious Bradley-problem. For, suppose one raises that problem by suggesting, for example, that employing (1) and (2) forces the acknowledgment of an additional fact, the fact that R is a term of the fact (ιp) (A(CO, p) **&** T(R, p) **&** T(S, p) **&** T(ß, p))—i. e. the fact that grounds the truth of "T(R, (ιp) (A(CO, p) **&** T(R, p) **&** T(S, p) **&** T(ß, p)))." The regress is blocked by noting that such a statement, by Russell's theory of definite descriptions, simply reduces to the claim that the fact (ιp) (A(CO, p) **&** T(R, p) **&** T(S, p) **&** T(ß, p)) exists—the fact that is the truth ground for "R**o**, " i. e. for "E ! (ιp) (A(CO, p) **&** T(R, p) **&** T(S, p) **&** T(ß, p)). " No further fact is forced upon one, and the same holds for "CO" and "A. " This is one major point behind the present analysis of atomic facts and the specification of the truth grounds for atomic sentences.[13]

Armstrong has recently resurrected what appears to be a variant of the "bundle" analysis of particulars. He takes the particular objects to be "partially identical" with the properties they instantiate—but not, as in a bundle view, reducible to them, since "the factor of particularity is not analyzed away as it is in bundle theories." Moreover, properties are "partially identical" with the particulars they "run through"[14] since partial identity is symmetrical. In virtue of this partial identity, he holds all predications to be necessary. For, if a case of exemplification that holds did not hold, the particular and the property would not be the respective particular and property that they are. This will purportedly allow one to avoid the familiar Bradley-type problems associated with a purported relation or nexus or connection of *exemplification*. In the familiar fashion

[12] On classes sufficing as the ontological ground for true statements of class membership, without recourse to a membership relation, see H. Hochberg, "Facts and Classes as Complexes and as Truth Makers," *The Monist*, 77, 2, 1994; "From Carnap's Vienna to Meinong's Graz: Gustav Bergmann's Ontological Odyssey, "*Grazer Philosophische Studien*, Summer/Fall, 48, 1995; 2001b, pp. 256 ff.

[13] For the details see H. Hochberg, 2001a, pp. 83-84 and 2001b, pp. 123-132.

[14] D. M. Armstrong "Particulars Have Their Properties of Necessity," in P. F. Strawson & A. Chakrabarti (ed.) *Universals, Concepts, and Qualities* (to appear—page numbers are to the manuscript text).

that has become a crutch for trope theories, the idea is that "internal" relations—involving necessary predications—are not "there." The terms of the relation suffice as "truth-makers" for the relational statements. But Armstrong's variant of the pattern involves him in the use of metaphorical use of key phrases, like "runs through" and "partial identity," to obtain the necessity he seeks. In that sense, his new analysis is unclear and, in a way *ad hoc*, as he simply postulates that, in unexplicated senses, the properties are "constituents" of the particulars that "instantiate" them, and thus partially identical with them—as the one is a part of the other. Then, by the symmetry, of the quite mysterious and unclear notion of "partial identity," the universal is partially identical with, but does not contain as a constituent (or perhaps it does?), the particular that instantiates it. Thus he purportedly arrives at the necessity of predication that some take to be characteristic of a bundle view, while supposedly avoiding adopting a bundle view of properties (as Stout may be said to have such a view with "general" properties being composed of tropes—as particular "instances") or particulars (as Russell once held to such a bundle view and as the view sketched above, taking particulars as facts of compresence, is a kind of bundle view in Russell's style). Clearly, if we take (1) above to contain a description of a particular then we could hardly hold that a property, say R, was such that it was composed of **o**, along with other particulars that instantiate it. Suppose we think in terms of a relational fact that parallels (2) for the attribute R—all the particulars that instantiate R being the terms of a co-instantiation relation, in place of compresence in (2), thus yielding, with "CI" for such a relation:

(3) R = (ιp) (A(CI, p) **&** T(**o**, p) **&** T(x, p) **&** .....).

The incoherence of such a view becomes manifest if we replace '**o**' by the description in (1) that employs 'R'. Such a view is not, of course, what Armstrong offers. His view faces a different problem.

The problem with Armstrong's alternative view is easily seen if we follow what he says:

> ...if you accept universals and have particulars instantiating them, then you will have to recognize facts or states of affairs, such as a's being F. A and F form a unity of some sort with a and F as parts. A and F are linked in some special way, they form a fact or state of affairs. But what is this link? Baxter's suggestion that I have embraced is this: what you have here is a partial identity of the particular and the universal. (Armstrong, p. 10)

But, we have to ask, what is this "partial identity"? Consider how he proceeds.

> Consider, first, that a particular in some way embraces its properties: the latter are in some sense parts of the particular, at least if we confine ourselves to non-relational properties. (A term that I find convenient for these special sorts of parts is 'constituents' although I don't think of this bit of terminology as solving any ontological problems.) I think then of the particular as one running through the many properties, a 'one in the many', a uniting factor in virtue of which they are all properties of the same particular. This is not a bundle theory, however. The factor of particularity is not analyzed away as it is in bundle theories. (p. 11)

So what he does is this. As in the case of a bundle theory like Russell's or the pattern of (1) he takes an object like **o** to have its properties as parts ("in some sense"), hence, *and in that sense*, as partially identical. But there is, as with the addition of an individuating element in the case of the view employing (1) above, something else that is involved in the analysis of the object—the "factor of particularity." Then, since partial identity is held to be symmetrical the universal is held to be such that it would not be the universal it is if it were not instantiated by that particular. But the universal is not partially identical with the particular in the sense that the particular is a constituent of it—that would clearly be incoherent in the sense that combining (1) and (3) would be. Yet, he borrows the necessity from a bundle view–as a class would not be the same class if an element were "withdrawn" or "added" to "it." For what is the basis for the claim that a universal would not be the universal it is if it were not instantiated by a particular that in fact instantiates it? There is no basis at all aside from the attribution of "partial identity" that is derived from the universal being a constituent of the particular. The purported "symmetry" of partial identity

covers up a basically incoherent pattern. For there is *no symmetry at all with respect to the one thing being a constituent of the other*. Thus the claim that the universal would not be the same universal simply reduces to a proclamation. Moreover, the analogy with classes that he uses is completely inappropriate. Consider **o** and the class {**o**, **m**}. One can hold that the statement that **o** is an element of {**o**, **m**} is made true by the existence of the class {**o**, **m**}. For, given the element and the class, and hence classes as entities, the class "must" contain the element to be "the class that it is." In short, the element must belong to the class, given that classes are taken to exist, with appropriate conditions for class existence. But properties are not at all like classes—the property R is not taken to be an object of a certain category formed from elements like **o** and a "form" or "operator." Armstrong has simply ensnared himself in web of terms he has woven. He further complicates matters by applying the pattern to relations. All that amounts to, for "external" relations, is a variant of an old theme taking relations as a form of monadic property—something on the order of the set theorist's taking a relation as a class of (ordered or unordered) pairs. What he does is form the mereological sum of **o** and **m**, **o + m**, and take it as the term for a "structural" property—i. e. one that by its "structure" will provide places "in" the relation for the right number of terms. But as a mereological sum does not involve order, he faces the hopeless task of getting the right term in the right place. Hence he is tempted to think that all basic relations might be symmetrical. But even in the unlikely event that that should be true, when we examine what he has in mind as a structural monadic property of a mereological sum, we discover that relations are involved in specifying the purported monadic property—in examples like the monadic structural property of a knife (as a mereological sum of a blade and a handle) "having a blade and a handle standing to each other in this way." (Armstrong, p. 15) Here one clearly plays with forms of expression as one's grammatical manipulations dictate one's ontological conclusions. As for internal relations, Armstrong follows the by now familiar line of the trope theorists and takes the terms to suffice as truth makers for the appropriate statements with relational predicates. This, involves the problems, discussed earlier, that all such views face.

It is interesting that what Armstrong does in a way follows a pattern Bergmann developed in the 1970s and became a significant part of his posthumously published 1992 book. Bergmann, however, designed his version of putting relations and monadic properties "on a par" so that it employs set theoretical style devices rather than mereological ones. That enables him to offer an at least apparent solution to the problem posed by order in relational facts. Bergmann took any two "things," where thing is used in a broad sense to include particulars, properties and relations, to form what he called a *diversity* or *diad*. Thus, a particular, say **p**, and a universal, say **U**, formed a diad—(**p**, **U**)—as did any two particulars. In the case of a relation **S** exemplified by two particulars, **p** and **p***, there were two relevant diads to start from: (**p**, (**p**, **p***)) and (**p***, (**p**, **p***)). Those gave us the ordered pairs, < **p**, **p***> and < **p***, **p**>, respectively. With **γ** as the exemplification nexus, we then had the states-of-affairs (either actual or potential)—**γ** (**p**, **U**), **γ** (**S**, <**p**, **p***>), **γ** (**S**, <**p***, **p**>)—being, respectively, **p** exemplifying **U**, **p** standing in **S** to **p***, and **p*** standing in **S** to **p**. Thus relations were treated, in a sense, on the order of monadic properties—just as relations and properties, in effect, both become sets in set theory, albeit sets with different "types" of elements.

Taking particulars as facts of compresence, as in (1), one can recognize an additional term/factor that is compresent to "individuate" the ordinary particular. Such a "pure individuator" could be taken either as a special kind of property, or as Bradley's "abominable bare particular" that Bergmann consistently argued for or, as in Bergmann's ontology of his later years, the individuating "item" that even a bare particular "contained"—as did universal properties and relations. What that amounts to is simply an ontological correlate of each simple thing (objects, properties, and relations) being what it is and not another thing. But there is an irony in the recognition of such particulars, an irony that an analysis employing the pattern of (1) clearly brings out.

By now the rational adherents of bare particulars have come to recognize that they cannot claim that when they are presented with (directly acquainted with, directly apprehend) an object, say the red square **o**, they are (are also) presented with the individuating item it purportedly "contains." One argues for there being such an item—dialectically as

Bergmann put it. In so doing one employs principles such as the claim that diverse complex entities cannot share all constituents. Thus, suppose we label such an individuating item in **o** by the sign "**i**." It is clear that we think of **i** as the individuating item in **o**—while **o** is the object we are presented with. So what we really do is offer a description of **i** by referring to **o**, which itself is now described in terms of containing **i**. Thus in addition to seeing the utter triviality of the introduction of *entities* like **i**—as pure individuators whose task is to individuate—we see an odd feature of such purported entities. They are identified in terms of what they supposedly individuate. This is not a real paradox of identification, since we are presented with **o**, without having to know its "analysis," as Moore might once have put it. We don't identify **o** by means of **i**. Nevertheless, it is odd and there is nothing corresponding to that in the case of taking the property R to be a universal, rather than a trope, or offering an "analysis" of R. But there is a final point worth noting about this.

As he finally acknowledged in his 1967 book *Realism* that his arguments for bare particulars required a principle or premise that two complex entities could not share all constituents,[15] Bergmann eventually came to recognize that all his bare particulars shared a common logical property—they were such particulars, as tropes are all of a common kind, being tropes or instantiating "tropiness," as one might say. He was thus led to hold that bare particulars were composites of an individuating *item* and a *nature*, which he called an "ultimate sort."[16] Simple universals were also held to be composites, in that sense, of an item and a sort. He declared that the obvious regress of entities stopped there. We need not consider his pattern further here. One might, however, take **i** to be just such an individuating item and not his "bare particular." For **i** is not the basis for either uniting the properties of **o**, as a common substratum, nor even the

[15] G. Bergmann, *Realism: A Critique of Brentano and Meinong* (Madison: 1967), p. 22. On the pesent view facts have term etc., but they are not reducible to them.
[16] G. Bergmann, *New Foundations of Ontology* (Madison: 1992), pp. 56-58.

sort of thing that exemplifies them. It would simply play the role of individuating one ordinary object from another—a mere "marker" as it were or "factor of particularity." That is why the problem of individuation or particularity becomes trivialized. It does not become that trivial on Armstrong's view—for, recall, **o** is not reduced to a bundle of properties for him since it retains its "factor of particularity." His "factor of particularity" thus uses the notion of *particularity* in a two-fold way: it grounds the "fact" that **o** is a particular and the individuation of **o** as diverse from other particulars. Thus he has particulars as well as "factors of particularity"—though his particulars, like **o**, are suggestive of a bundle comprising universals along with a "factor," like **i**. On the view presented here, employing (1), particulars like **o** explicitly become facts or states of affairs—only "individuators" like **i**, if needed, remain *basic particulars*—i. e. basic entities that are neither facts nor universals.