

### **The Non-Identity of A Material Thing and Its Matter**

Many philosophers have thought that a material thing is, or may be, one and the same as its matter - that a statue, for example, may be the same as the clay from which it is made or a river the same as the water which flows through it. There appears to be a powerful argument against such views, for the thing in each of these cases would appear to have properties not possessed by its matter. Thus the clay of a statue may exist even though the statue itself has ceased to exist and the river may be composed of different water at different times even though this cannot be true of the water that composes it at any given time. However, these philosophers have responded to this argument by claiming that the apparent difference in properties represents, not a difference in the objects themselves, but a difference in the descriptions under which they may be conceived. We may conceive of a given thing as a statue or some clay or as a river or a body of water, for example, and, depending upon how the object is conceived, we will say one thing about it rather than another.

It is the aim of this paper to show that this counter-response cannot be sustained and that the original argument against identity should therefore be allowed to stand. This is no easy task since there would appear to be nothing in the immediate linguistic data to settle the question one way or the other. However, by working through the consequences of the counter-response for the rest of our language, I think it may be shown to be extremely implausible. The paper is in two main parts. The first (§§1-4) is largely concerned with setting up the problem. We characterize the different forms the identity theory can take (§1), explain how the argument in favor of non-identity might in principle break down (§2), present the most plausible versions of such arguments (§3), and then consider the most plausible counter-response to them (§4). The second part (§§5-8) embarks on a detailed investigation of the difficulties with the counter-response. It is shown to be unable to account for a wide variety of different linguistic data, that is loosely classified according as to how reference to a material thing might be achieved. Four main kinds of case will be considered: those in which a sort is explicitly invoked (§5); those in which it is implicitly invoked (§6); those in which the very notion of reference is itself used in securing reference (§7); and those in which there is reference to a plurality of things (§8).

I should begin with some words of caution concerning the scope and limits of my remarks. First, similar questions arise concerning the identity of events and acts. Is the avalanche the same as the movement of the rocks? Is Oswald's act of shooting the gun the same as his act of killing Kennedy? Although I have not discussed these further questions, I believe that they give rise to similar considerations and that similar arguments may be used to uphold the view that the events and acts in such cases are not the same. Second, I have not taken into account certain radical views concerning the nature of the identity relation. Some philosophers have denied that there is an intelligible notion of absolute identity; and other philosophers, who may have thought that there was such a notion, have denied that it has application across categories - one cannot even sensibly ask whether a number is the same as a fried egg or a material thing the same as its matter. The question of identity, as I have understood it, would not even arise for these philosophers; and I have made no attempt to show either

that it does arise or how the issues might be reformulated if it does not.<sup>1</sup> Third, there are philosophers who have unorthodox views as to what material things there are. Idealists believe that there are none at all. But even some philosophers who believe that they are material things deny that any of them are complex<sup>2</sup> or that any of them are both complex and nonliving<sup>3</sup>. I have not attempted to take these views into account. My opponent is someone who recognizes our ordinary ontology of material things but denies that it embodies a distinction between a thing and its matter. Finally, there are several arguments that my opponent might offer in favor of identity. The most powerful to my mind is the metaphysical argument: if a thing and its matter are not the same, then in what does the difference between them consist? Another that appears to be popular is the argument from theoretical dispensability: since we do not need these coincidents for theoretical purposes, there is no reason to suppose that they exist. I believe that these arguments can all be answered. However, it is not here my aim to provide the answers.<sup>4</sup>; and so the present paper should be regarded as only part of full defense of my position.

I should note, finally, that the considerations presented in this paper are almost entirely linguistic in character; I have been concerned, not with material things themselves, but with our language for talking about material things. I feel somewhat embarrassed about writing such a strongly oriented linguistic paper in connection with a metaphysical topic, since it is my general view that metaphysics is not best approached through the study of language. However, this is a very special case. One side to the debate presents a non-linguistic argument in favor of non-identity; the other side then accuses them of linguistic confusion; and, in order to defend themselves against this charge, they must then show their use of language is not subject to the confusion. Linguistic questions of this sort might arise in any field of enquiry; and, although they may be especially common - perhaps even endemic - to metaphysics, I do not believe that the subject is exhausted, or even chiefly constituted, by such questions.

### §1 Monism

My opponent thinks that coincident material things are the same. But there are various things that might be meant by 'coincident'; and we obtain different versions of the view according as to which is meant.

We should distinguish in the first place between *spatial* and *material* coincidence. Two things *spatially* coincide at a time when the exact spatial region that they occupy at the time is the same. Two

---

<sup>1</sup> Views of this sort are discussed in Griffin [71], Geach [80], Myro [86], Gallois [98].

<sup>2</sup> E.g. Unger [80] and Horgan[93].

<sup>3</sup> E.g. Van Inwagen [90].

<sup>4</sup> Simons [87], Heller [90], Burke [92], Zimmerman [95], Oderberg [96], Baker [97], Sider [99] and Sider [01] discuss some of the arguments in favor of identity, though each from somewhat different points of view.

things *materially* coincide at a time when their underlying matter at the time is the same.<sup>5</sup> It is my view that material coincidents need not be spatial coincidents, nor spatial coincidents material. Thus a loaf of bread and the bread that composes it are materially yet not spatially coincident and a water-logged loaf of bread and the loaf of bread that is water-logged are spatially yet not materially coincident. But there is no need to take sides on the issue. The proponent of identity can simply play safe and take two things to be coincident at a time if they are both spatially and materially coincident at that time.

There are corresponding notions of worldly and of necessary coincidence. We may say that two things are coincident *in a world* if they exist at the same times (and at least at one time) in the world and are coincident at each time at which they exist; and similarly, we may say that two things are *necessarily* coincident if they exist in the same worlds (and at least in one world) and are coincident in each world in which they exist.

*Extreme* monism may now be taken to be the view that any two material things that are coincident at a time are the same, *moderate* monism the view that any two material things that are coincident in a world are the same, and *mild* monism the view that any two material things that are necessarily coincident are the same (or perhaps we should take each form of monism to be the view that it is *necessary* that the relevant sort of coincidents are the same).

Where a pluralist sees several things - a statue, the clay from which it is made, the piece of clay - the monist sees a single thing. We might call it a 'mere thing', since it is not plausibly taken to be, in itself, one of the more specific things picked out by the pluralist.<sup>6</sup> Monists may differ among themselves as to the 'intrinsic' identity of the mere thing. The extreme monist may take it to be some (possibly 'holey') matter, or an instantaneous time-slice of such matter, or something whose identity across time is indeterminate. A moderate monist, on the other hand, may take the single thing to be some trans-temporal spatial/material 'content', or a world-bound slice of such a content, or something whose identity across worlds is indeterminate. For the most part, our criticisms will not turn upon possible these differences within the monist position.

The monist views are of varying strength: extreme monism entails moderate monism, and moderate monism mild. A moderate monist who is not extreme might be said to be *strictly* moderate and a mild monist who is not moderate might be said to be *strictly mild*. Thus a strictly moderate monist accepts that there may be distinct coincidents at a time though not distinct coincidents within a

---

<sup>5</sup>If there is ultimate matter, then we may take their underlying matter to be their ultimate matter. If there is no ultimate matter then we may, perhaps, take two things to coincide materially at a time if any matter composing either one is composed of matter composing the other.

There is an unfortunate tendency in the literature to define coincidents as things with the same parts. But this makes it too hard for things to coincide. Thus, given this definition, it might be denied that the statue coincides with the clay on the grounds that the statue (or the arm of the statue) is a part of the statue but not a part of the clay.

<sup>6</sup> This, of course, might not be true of the monist who does not accept our ordinary ontology; and nor is it true of someone like Burke ([92], [94]), who would be willing to 'privilege' the dominant kind.

world.<sup>7</sup>

Strictly moderate monism has seemed to many a reasonable middle ground. It avoids the metaphysical mystery of distinct worldly coincidents and yet accepts the strong intuitive evidence in favor of distinct temporary coincidents. However, in certain key respects, extreme monism is the more defensible position. For many of the strongest arguments in favor of monism and many of the strongest counter-responses to arguments against monism presuppose the truth of the extreme view. It is sometimes claimed, for example, that the fact that we can correctly say that the clay is a statue is evidence that the statue and the clay are the same. But in so far as this is indeed evidence for an identity, it is evidence for the identity of temporary coincidents and hence incompatible with a strictly moderate position. Thus the moderate monist faces the awkward dilemma of having to choose between the metaphysical strengths of the strictly moderate position, on the one hand, and the dialectical strengths of the extreme position, on the other.

I have no wish in this paper to prejudge how this dilemma might best be resolved and I have therefore attempted to develop criticisms that are equally effective against either position. To this end, let us suppose that a statue and some alloy are simultaneously created by pouring some molten copper and tin into a mold and that the alloy and the statue are simultaneously destroyed at a later date. The two are then worldly coincidents<sup>8</sup>; and we can show either form of monism to be mistaken by showing that in the envisaged circumstances the two are not the same. Some monists might object to this example on the grounds that the term ‘the alloy’ does not make singular reference to some stuff but plural reference to the constituents of the stuff (perhaps in much the same way that a term such as ‘the committee’ might be taken to make plural reference to its members).<sup>9</sup> However, even these philosophers will concede that there is such a thing as the *piece* of alloy, and most of my arguments will go through with ‘piece of alloy’ substituted for ‘alloy’.

My emphasis throughout the paper has been on the extreme and moderate forms of monism, but I also believe the mild form of monism to be in error - two material things, even things of the same sort, may necessarily coincide and yet still be distinct. However, the issue in this case gives rise to a special difficulty, for it is not so easy to come up with even *putative* counter-examples to the mild monist view. If, as I believe<sup>10</sup>, this can indeed be done, then the present considerations should be as effective as for the other forms of monism in undermining the charge that the putative counter-examples do not genuinely establish non-identity.

---

<sup>7</sup> Extreme monists include Gupta [80], Burke ([80], [92], [94]), van Inwagen ([81]), Sider ([96], [01]). Strictly moderate monists include Lewis [71], Gibbard [75] (chap. 6 of Rea), Robinson [82a], [82b], Heller ([84], [90]).

Opponents of moderate monism include Doepke [82], Wiggins ([68], [80]), Sosa ([87],[99]), Johnston [92], Baker [97].

<sup>8</sup> Similar examples have been considered by Gibbard [75] (pp. 96-7 of Rea [97]) and Thomson [83] (pp. 41-2 of Rea [97]).

<sup>9</sup> See Burke [94] (p. 258 of Rea [97]), for example, or Laycock [72].

<sup>10</sup> See Fine [00].

## §2 Opacity

There is a standard argument against extreme monism. It is that a statue and the alloy from which it is made may have different properties - that they may exist at different times, for example. It therefore follows from Leibniz's Law, the principle that identical things have the same properties, that the two are not the same. There is a similar argument against moderate monism. Two worldly coincidents will not of course differ as to when they *actually* exist, but they may differ as to when they *might* exist. The alloy, for example, can still exist when it is in the shape of a ball but the statue cannot exist when it is in the shape of a ball. Since they differ as to their modal properties, they are also not the same.

There is, however, a standard response to such arguments. For it might be maintained that the apparent difference in properties merely reflects a difference in the way a single object is being described.<sup>11</sup> Consider the familiar example from Quine [61]: it is necessary that 9 is greater than 7 but not necessary that the number of planets is greater than 7. We would not wish to conclude from these facts that the number of planets is not the same as the number 9; and nor, by the same token, should we conclude from the facts concerning the temporal or modal vicissitudes of the alloy and the statue that they are not the same.

We may put the point more generally. Suppose that  $\phi(s)$  is a sentence containing a given occurrence of the singular term  $s$ . Say that the context  $\phi(-)$  marked out by given occurrence of  $s$  in  $\phi(s)$  is *transparent* if it licenses the inference from  $s = t$  and  $\phi(s)$  to  $\phi(t)$  and that otherwise it is *opaque*.<sup>12</sup> The response is then that the contexts employed in these arguments for non-identity are opaque.

One might try to meet this response by finding contexts which can be agreed upon to be transparent and yet which still suffice to distinguish between coincidents. Indeed, there is a standard way of converting any opaque context  $\phi(-)$  into one which is transparent: for instead of saying  $\phi(s)$  we can say 's is such that  $\phi(it)$ ' (or, more formally, 's is an x such that  $\phi(x)$ ').<sup>13</sup> Applying this transformation to the pair of modal sentences, we obtain:

- (i) the alloy is such that possibly it exists when in the shape of a ball;
- (ii) the statue is such that possibly it exists when in the shape of a ball.

Similarly, applying the transformation to the pair of temporal sentences, we obtain:

- (i)' the alloy is such that it exists at time t;
- (ii)' the statue is such that it exists at time t.

The opponent of monism will then claim that the first member of the appropriate pair is true, the second false, and the context transparent. My intuitions are with the anti-monist on this; but the monist will

<sup>11</sup>Responses of this sort are given by Lewis [71], Gibbard [75], Robinson [85] and Noonan [91], among others.

<sup>12</sup>This is not quite Quine's usage.

<sup>13</sup>Of course, 'it' must refer back to 's' and 'x' must be free in  $\phi(x)$ .

demur. He may agree that the transformation secures a transparent reading but maintain that, in this case, the sentences either lack a truth-value (given that the ‘mere thing’ lacks a determinate trans-temporal or trans-world identity) or their truth-value is the same (given that the mere thing possesses a determinate trans-temporal or trans-world identity). Alternatively, he may maintain that the transformation does not succeed in securing a transparent reading. This latter response is especially plausible for the monist who believes that the mere thing lacks a determinate trans-temporal or trans-world identity; for he may argue that, even if the ‘such-that’ construction generally provides a transparent reading, it will not readily do so in the present case, since we will tend to favor the intelligible opaque reading over the scarcely intelligible transparent reading. (It is for much the same reason, he might suggest, that it is so hard to achieve a transparent reading of ‘Boston is such that ‘it’ has six letters’.)

We therefore appear to have reached a deadlock. Whatever counterexample the opponent of monist might come up with, the monist will cry ‘foul!’. And this is where matters currently stand.

I wish in this paper to explore another strategy for breaking the deadlock. Rather than attempting to find transparent contexts that might serve to distinguish the coincidents, we shall explore the consequences of taking certain of the allegedly transparent contexts to be opaque. In other words, we shall take the monist’s view that these contexts are opaque as a serious hypothesis about the functioning of our language and then attempt to see whether it can be sustained in the face of its implications for the rest of our language.

The question of whether these contexts might actually be opaque has not been properly addressed. Philosophers of a monist persuasion have been content to show that we might talk as if their views were correct rather than that we actually do so talk. Thus they have been content to construct formal languages and semantics for those languages that are reasonably expressive and consistent with their views.<sup>14</sup> Under the intended rendition of the sentences of natural language into these languages, the anti-monists’ arguments for nonidentity then turn out to invalid and the contexts they employ opaque. But this has no bearing on the question of whether the arguments *are* valid or the contexts *are* opaque, unless it can be shown that the rendition is faithful, in the relevant respects, to our actual use of language.

When this further question is taken up, I think it will be found that the contexts cannot plausibly be taken to be opaque and that the original counter-examples should therefore be allowed to stand. However, I should admit at the outset that I know of no way of demonstrating that the die-hard monist must be wrong. The difficulties of so doing may be brought into relief by considering his extreme counterpart, the *fanatical mono-referentialist*.<sup>15</sup> This is someone who maintains that every singular referring expression refers to the very same thing, the ‘One’ (who is therefore the semantical analogue of the Absolute). When one points out to him that Bush won the election and that Gore did not and that Bush and Gore are therefore not the same, he responds that ‘- won the election’ is an opaque context: ‘Bush’ and ‘Gore’ both refer to the One but to say that Bush won the election is to say that the One

---

<sup>14</sup>I principally have in mind the formal systems of Lewis [71], Gibbard [75], and Gupta [80].

<sup>15</sup>To be distinguished from the fanatical mono-denotationalist of Kaplan [71], 117-8.

won the election in a Bushy fashion and to say that Gore failed to win the election is to say that the One failed to win the election in a Gorey fashion; and so all we have is the One winning or failing to win the election in one manner rather than another. It is clear that this kind of response might be made to ramify throughout the whole of language: what we see as a difference in reference within a transparent context, he sees as a difference in manner of reference within an opaque context; what we see as quantification over different objects, he sees as adverbial quantification over different modes of the One; and so on. There would therefore appear to be no reasonable prospect of demonstrating that he is wrong.

Now some philosophers may think that the hypothesis of fanatical mono-referentialism provides us with a new form of the indeterminacy of reference, to be placed alongside the more usual multi-referential forms, and that there is consequently no fact of the matter as to whether language is mono- or multi-referential. Yet surely there is; and surely the mono-referentialist position should be rejected as the height of absurdity. But on what grounds, for those of us who are prepared to be guided by ordinary standards of evidence, should it be rejected? By answering this question, we shall be in a better position to assess the grounds for rejecting the other, less extreme, forms of monism.

Let us distinguish between two versions of the fanatical position: one relatively conservative; and the other more radical. The radical proponent of the position claims that our ordinary judgements that Gore is not identical to Bush or that the name 'Gore' does not refer to Bush are mistaken; and it is only by abandoning these judgements that his position can be sustained. But to this one might object that even if, for the purposes of the debate, we treat these judgements as moot, there will be other, related, judgements that must also be given up. For our radical will presumably agree that Bush won the election but that Gore did not. But we have a strong intuition that the inference to the conclusion that Bush is not identical to Gore is valid and, indeed, is licensed by the context '- won the election'. Our radical must therefore reject the claim that the inference is valid or the context transparent. Thus not only must he give up particular judgements of identity and reference, he must also give up particular, strongly held, judgments concerning the validity of certain inferences and the transparency of certain contexts.

The conservative proponent of the position, on the other hand, accepts our ordinary judgements that Gore is not identical to Bush or that the name 'Gore' does not refer to Bush. He must therefore take identity and referential contexts to be opaque. But to this one might object that the context 'u refers to -' is a paradigm of a transparent context: in so far as a transparent context  $\phi(-)$  is one in which the truth-value of  $\phi(t)$  depends upon what  $t$  refers to, then it is evident that the context 'u refers to -' should be transparent. Moreover, correlative with the notion of reference will be a notion of identity for which: 'u' refers to  $t$  iff  $u = t$  (assuming that the terms 'u' and 't' both refer). But if reference is transparent, then so is the correlative notion of identity; for given  $u = t$ , it follows by the correlation that 'u' refers to  $t$ ; so, given  $t = s$ , it follows by the transparency of reference that 'u' refers to  $s$ ; and so, by the correlation again,  $u = s$ .<sup>16</sup> Thus the conservative's position will be at odds with our judgements of

---

<sup>16</sup> This gives transparency of the 'right-hand' context 'u = -'; transparency of the 'left-hand' context '- = t' then follows from the symmetry of identity.

transparency in the cases both of identity and of reference.

But there is a related difficulty. For the conservative monist wishes to maintain that the names 'Gore' and 'Bush' both refer to the One (and to naught else), and hence that 'Gore' refers to Bush and that Gore is the same as Bush. But how is that compatible with our ordinary judgement that the name 'Gore' does not refer to Bush or that Gore and Bush are not the same? Clearly we must take the notions of reference and identity in terms of which his position is formulated to be distinct from our ordinary notions of reference and identity. But it is not then clear how these notions are to be understood.

If such a monist's position is to be of any interest, he must maintain that he is using the notion of identity in the sense of strict numerical identity (and using the notion of reference in a correlative sense); and he must therefore hold that this is not the ordinary notion of identity. Now it is of course true that we sometimes use 'same' or 'identical' in a loose sense; we may correctly say 'this car is the same as that car', for example, to mean that they are the same model. But it is normally supposed that the notion of strict numerical identity may be identified as that notion of identity that is correlative with the notion of reference. Thus even though it may be correct to say that this car is the same (i.e. the same model) as that car, it is not correct to say that 'this car' refers to that car. The monist must therefore deny that his notion of identity is correlative with the ordinary notion of reference. But he can provide no grounds for the denial; there is no independent criterion - no alternative conception of reference, for example - to which he might appeal in identifying the notion; and so his claim to have staked out the strict numerical notion of identity appears to be completely without support. It is 'transcendental' in the bad sense of transcending any means we might appear to have for understanding what the notion is.

Even if we grant that the mono-referentialist's view can consistently account for the data, there are further problems of a purely theoretical sort. For if we compare his view with the ordinary view on the matter, we see that it suffers from needless complexity. The multiplicity of referents posited by the ordinary view is duplicated for him at the level of the 'modes' while the One itself does no work. It may be the central cog in a vast semantic machine, but it stands completely disconnected from all the moving parts. Thus purely on grounds of theoretical simplicity, we should abandon the One and take the central referential relationship to be one that holds between a term and the modes. But the so-called 'modes' are now not properly speaking modes *of* anything and, for all intents and purposes, will be indistinguishable from what are ordinarily taken to be the referents of the terms. The mono-referentialist view, though it once seemed so distant from it, will simply collapse into the ordinary multi-referentialist view.

We therefore see that there are at least two reasons for not taking the fanatic's views seriously, quite apart from the particular judgements of reference and identity that his position requires him to make: first, he is not able, except by appeal to a 'transcendental' notion of identity and reference, to account for certain paradigmatic cases of validity and transparency; and second, his theory is needlessly complicated and will collapse into the ordinary view once the needless complication is removed. The views of the monist about material things may not be as extreme as those of the fanatic, for in place of a single One he has many different ones, but we shall find that the consequences of his position are absurd in very similar ways and will provide us with very similar reasons for wanting to give it up.

### §3 Choice of Example

We shall be looking at a range of conditions, or contexts, by means of which the pluralist will wish to distinguish between coincidents. The standard conditions of this sort have already been mentioned. They include temporal conditions, such as ‘existing at time *t*’; modal conditions, such as ‘possibly being in the shape of a ball’; and constitution-type conditions, such as ‘being constituted by such and such material’. Unfortunately, these conditions all suffer from one or another defect. The temporal conditions do not work against moderate monism. The use of the modal conditions requires appeal to substantive *de re* modal intuitions; and, whatever one’s view on the intelligibility or availability of such intuitions, it would be better not to have to appeal to them. The constitution-type conditions have too limited an application. Although the point is often ignored, it is not a *piece* of alloy but only the *alloy* itself that can properly be said to constitute or make up a statue. But this then means that it is open to the monist to claim that in the corresponding argument for non-identity, the term - such as ‘the alloy’ - which is used for the constituting material is not a genuine singular referring expression but serves some other linguistic function.

In order to avoid these various problems with the standard conditions, we shall use somewhat different examples. Fortunately, many are available. Thus in the familiar case of the statue, there will be a clear sense in which the statue may be *defective*, *substandard*, *well* or *badly made*, *valuable*, *ugly*, *Romanesque*, *exchanged*, *insured*, or *admired* even though the alloy which makes it up it is not. These examples are equally effective against moderate and extreme monism; they do not draw upon *de re* modal intuitions; and they work equally well with ‘the piece of alloy’ in place of ‘the alloy’. We shall therefore, for the most part, make use of them in attempting to distinguish between the statue and the alloy (or the corresponding *piece* of alloy).<sup>17</sup>

The fact that there is such a broad range of predicates by which the two might be distinguished is of more general significance for our argument and for the metaphysics of material things. In the first place, these predicates are not modal or temporal, though they may involve a modal or temporal element. Thus the formal models which focus on the modal or temporal dimension of material things are of dubious relevance to these cases. Indeed, the examples suggest, more generally, that the preoccupation with the temporal and modal aspects of material things may be misplaced and that the issue of identity can perhaps be resolved, along with other issues, without taking such aspects into account.

Secondly, there has been a general tendency, among monists and pluralists alike, to exaggerate the extent to which worldly coincidents are alike. Such coincidents have all of their underlying physical and spatial properties in common; and the only differences between them, it has been thought, are the marginal, and somewhat elusive, differences in nature and constitution. This has then made the idea that they are identical seem almost irresistible. For if only we can explain away the apparent counter-examples, we shall then have a simple and completely satisfying explanation of the agreement in properties: the objects agree in their properties because they are the same.

---

<sup>17</sup>I also believe that there are mereological examples that do not require reference to underlying stuff. Thus the arm of the statue is a part of the statue though not a part of the piece of alloy. But since these examples rest upon less robust intuitions, I prefer not to use them.

This view is driven by a picture of material things as objects *in extenso*; there is no more to them than the dimensions that they occupy - be they the dimensions of space, or time, or the modal plenum. But once we pay attention to how material things are actually described, we see that the view is something of a philosopher's myth. In addition to the differences mentioned above (defective, substandard etc.), there can be differences of a more purely physical sort. Thus an alloy can be light or stable or multi-colored even though the statue which it makes up is not or, to use the example from Fine [00], two coincident letters may differ as to which side of a sheet of paper is their front and which their back. The predicational differences between coincidents are numerous and far-reaching and, in no obvious way, attributable to differences in spatio- or spatio-temporal extension.

Third, these predicational differences often represent or reflect the point of having objects of a given sort in our ontology. It is worth emphasizing, in this connection, that these differences lie not merely in the *correct* but also in the *meaningful* application of the predicates. A chair can meaningfully be said to be *comfortable* or *uncomfortable*, though not the wood from which it is made; a statue can meaningfully be said to be *Romanesque* or *Romanesque*, though not the clay or the alloy itself; and one can meaningfully be said to *spend* a penny or a dollar, though not some metal or paper.<sup>18</sup> With each sort may be associated a characteristic range of predicates which have meaningful application to objects of the sort - what we may call its 'sphere of discourse'. The sphere of discourse associated with each sort then embodies the point - or, at least, part of the point - of having objects of this sort in the ontology. Chairs are for sitting on and this is why they may meaningfully be said to be comfortable or uncomfortable; statues are for aesthetic appreciation and, for this reason, may be described as being in one style rather than another; money is a unit of exchange and, as such, may be earned or spent. Thus any attempt to understand the role that objects of these different sorts play in our daily life must take serious heed of these categorial differences in predication.

#### §4 Predicational Shift

Consider one of the contexts by which the opponent of monism wishes to argue that two coincidents are not the same. Then in arguing against his opponent, it is not satisfactory for the monist merely to assert that the context is opaque. He should provide some reason for thinking that it *is* opaque and, what may not be quite the same thing, some explanation of *how* it is opaque. Let us focus on the second of these two challenges (the first will be considered later). How, according to the monist, does the argument for non-identity go wrong?

Let us consider in some detail what his options for answering this question might be. The argument for non-identity has the following general form:

$$\phi(s), \text{ not-}\phi(t)$$

---

<sup>18</sup>Burke [94] (252-3 of Rea [97]) makes a somewhat similar point though it is odd, given that he grants that the statue has aesthetic properties not possessed by the piece of alloy, that he does not see this as posing a threat to their identity. I do not agree with him that the range of properties 'entailed' by a subordinate sort is always included in the range of properties entailed by a dominant sort; a piece of gold is the kind of thing that can be more or less pure but a statue is not (or, at least, not in the same sense). Thus I do not think that the dominant sort can be identified as the one that entails the widest range of properties.

$s \neq t$

(with the premisses listed above the line and the conclusion below). The believer in transparency has the following justification for taking the argument to be valid. The singular term  $s$  refers below the line to a particular object  $x$ ; and likewise, the singular term  $t$  refers below the line to a particular object  $y$ . The singular term  $s$  refers above the line (on the left) to a particular object  $x'$  that is the same as the object it refers to below the line; and likewise, the singular term  $t$  refers above the line (on the right) to a particular object  $y'$  that is the same as the object it refers to below the line. The context  $\phi(-)$  signifies on the left a certain property  $P$ ; and likewise, the context  $\phi(-)$  signifies on the right a certain property  $P'$  that is the same as the property it signifies on the left. Now the first premiss is true only if the object  $x'$  referred to by  $s$  above the line has the property  $P$  signified by the context  $\phi(-)$  on the left; and the second premiss is true only if the object  $y'$  referred to by  $t$  above the line lacks the property  $P'$  signified by the context  $\phi(-)$  on the right. Since  $P$  and  $P'$  are the same, it follows, given the truth of the premisses, that  $x'$  and  $y'$  are not the same; and since the object  $x$  referred to by  $s$  below the line is the same as  $x'$  and the object  $y$  referred to by  $t$  below the line is the same as  $y'$ , it also follows that  $x$  and  $y$  are not the same. So since the objects referred to by  $s$  and  $t$  below the line are not the same, the conclusion is true.<sup>19</sup>

The monist should therefore say exactly where this justification for the argument breaks down.<sup>20</sup> Now there are some very radical ways in which the justification might be challenged. It might be claimed that one of the terms is not being used to refer or to refer to a particular thing, either above or below the line. Even if it is conceded that the terms do refer to particular things, it might be claimed that the context  $\phi(-)$  is not being used to signify a property, on either the left or the right. However, I take it that such pathological breakdowns in the reasoning are not relevant to the present case.<sup>21</sup> Also, given that each term, in each of its uses, refers to a single thing and that the context, in each of its uses, signifies a property, the stated truth-conditions cannot reasonably be questioned:  $\phi(s)$  will be true only if  $x'$  has the property  $P'$  (similarly for  $\phi(t)$ ) and  $s \neq t$  will be true if  $x$  and  $y$  are not the same.

We are therefore left with only two options: at least one of the terms  $s$  or  $t$ , in each of its two

<sup>19</sup>Appeal to properties in the justification is natural though not necessary. Thus we might talk of satisfaction of the context  $\phi(-)$  rather than of possession of the property signified by the context.

<sup>20</sup>Actually, it does not matter whether the proposed justification genuinely shows the argument to be valid, for it is readily converted into a semantic version of the argument (going from the premisses, via semantic ascent, to their truth, from their truth, via the semantical reasoning, to the truth of the conclusion, and thence, via semantic descent, to the conclusion itself). And so the monist should show what is wrong with this semantic version of the argument.

<sup>21</sup>Unless, of course, we use a term such as 'the alloy', which might be taken either not to refer at all or not to refer to a single thing. I assume that the kind of plural reference that might be thought to arise from vagueness is not here at issue since there will still be sense of 'refer' in which it will be correct to say that the terms in their various uses refer to a single thing.

The pathological cases are explored in Fine ([89], [90]) and Kaplan [86]; and these works contain a more general discussion of how the argument from substitutivity might break down. I should note that, at the present stage of the discussion, we should be open to the possibility that the terms  $s$  and  $t$  may be of help in determining the properties signified by the contexts that they occupy.

uses, does not refer to the same thing, i.e.  $x$  is not the same as  $x'$  or  $y$  not the same as  $y'$ , or else the context  $\phi(-)$ , in each of its two uses, does not signify the same property, i.e.  $P$  is not the same as  $P'$ . In other words, either there is a shift in reference as we go from above to below the line or there is a shift in what is predicated as we go from left to right. We might call the first of these *referential* shift and the second *predicational* shift. Thus despite the common syntactic form (the same term or the same context), there is not a common semantic function.

Let us call the reference of a term as it occurs in an identity statement its *standard* reference. The standard reference of a term is naturally taken to be its reference simpliciter, apart from any context. A referential shifter must take one of the terms  $s$  or  $t$  that occurs in the opaque context  $\phi(-)$  to have a nonstandard reference. A classic example of such a view is Frege's theory of indirect reference. In the inference from 'King George wished to know whether Scott was the author of Waverly' and 'King George did not wish to know whether Scott was Scott' to 'The author of Waverly is not Scott', the terms 'Scott' and 'the author of Waverly' refer to their standard referents in the conclusion but to their (customary) senses in the premisses. A familiar example of predicational shift, on the other hand, is Quine's example concerning Giorgione. In the inference from 'Giorgione is so-called because of his size' and 'Barbarelli is so-called because of his size' to 'Giorgione is not Barbarelli', the context 'is so-called because of his size' is plausibly taken to signify the property of being called 'Giorgione' because of his size in the first premiss and to signify the property of being called 'Barbarelli' because of his size in the second premiss (while the singular terms as they occur in the premisses are plausibly taken to refer to their standard referents).

Now whatever might be the merits of referential shift as an explanation of opacity in other cases, it is not really an option here. And this is because the monist is not merely proposing a semantic doctrine to the effect that certain contexts are opaque. He is also proposing the metaphysical view that all coincidents are the same and, indeed, it is presumably only because of the metaphysical view that he feels obliged to defend the semantic doctrine. But the danger now is that the explanation of opacity in terms of referential shift will run into conflict with the metaphysical view. For will not the nonstandard referents to which the explanation appeals be distinct from yet coincident with the standard referents for the very same terms?

Consider a particular case. We wish to be able to assert that the statue is badly made and that the piece of alloy is not badly made without being able to infer that the two are not the same. The proponent of referential shift will hold that 'the statue' in 'the statue is badly made' has a non-standard referent. Now clearly, the nonstandard referent of 'the statue' is distinct from the standard referent. But there is also strong reason for taking it to be a material thing coincident with the standard referent. For we may correctly say that 'the badly made statue is composed of bronze' or that 'the badly made statue is lying on the floor'. Thus it seems as if the non-standard referent has the very same underlying physical attributes as the standard referent. And given that this is so, it is hard to see how it could fail to be a material thing or fail to be coincident with the standard referent.

There are two points on which this reasoning might perhaps be questioned. First, it might be argued that the assertion that the badly made statue is made of bronze' is a case of metonymy; the nonstandard referent is not literally composed of bronze though the assertion that it is is being used to convey that a closely associated object, the 'mere thing', is composed of bronze. However, in

contrast to standard cases of metonymy (as in ‘the crown is weary of its reign’), we have no sense at all that the assertion is not literally true. Moreover, we can assert that the statue is over there and very badly made without any sense of a mid-sentence shift in reference (as in ‘the crown is studded with diamonds and weary of its reign’).

Second, it might be conceded that the standard and non-standard referent have the same underlying physical attributes and hence are coincident and yet denied that the nonstandard referent is a material thing. For it might be thought to be only in a derivative sense that the nonstandard referent has such and such a material composition or such and such location and that materiality and spatiality in this derivative sense are not sufficient to guarantee that the nonstandard referent is a material thing. But it is now hard to identify the disagreement between the monist and the pluralist. For even the pluralist might agree that ordinary material things are only derivatively material or spatial and that the doctrine of monism might hold up when restricted to a class of fundamental objects which are not derivatively material or spatial.

It therefore seems that predicative shift is the only viable option for the monist. In asserting that the statue is badly made but that the coincident piece of alloy is not, there must be a shift in the property attributed to the very same thing. We must be saying, in the first case, that the thing is badly made as a *statue* and denying, in the second case, that it is badly made as a *piece of alloy*. There is, moreover, a natural explanation of how the shift occurs. The condition ‘- is badly made’, absent any subject-term, signifies a two-place relation - with one argument-place to be filled by the thing said to be badly made and the other to be filled by the respect in which it said to be badly made. The terms ‘the statue’ or ‘the piece of alloy’, on the other hand, both refer to a certain thing and invoke a certain respect, be it *statue* or *piece of alloy*. A sentence, such as ‘the statue is badly made’, is then used to convey that the referent of the subject-term is badly made relative to the respect that it invokes. Thus the respect supplied by the subject-term is ‘matched’, or ‘coordinated’, with the respect sought by the predicate-term.

The question we therefore face is whether an explanation of the alleged opacity in terms of predicational shift can be sustained.

### §5 Explicit Invocation of Sorts

We shall consider a series of cases that raise difficulties for the hypothesis of predicational shift. They are classified according to the mechanism by which it might be thought that the relevant sort or sorts are invoked. In the present section, we look at cases in which the sort is explicitly given by the subject-term and we consider what role ancillary descriptions, relativization in the predicate, or nonlinguistic context might play in determining the relevant sort. We then look at cases in which the sort is given implicitly; and we finally consider cases in which a *plurality* of relevant sorts must somehow be given. The overall argument is cumulative in character: successive difficulties are raised; and in response to them, the monist view must become increasingly arbitrary and complicated until it no longer appears viable. I consider the arguments from reference (given in §7) to be especially damaging in this regard.

We begin with cases in which the relevant sort is explicitly invoked. The monist wishes to maintain that a sortal phrase, such as ‘the statue’, is capable of invoking the relevant sort in terms of which a given sentence, such as ‘the statue is badly made’, is to be understood. It is a remarkable fact

that corresponding descriptive material is not similarly capable of invoking the relevant sort.<sup>22</sup> Suppose instead of using the phrase ‘the statue’, one used the phrase ‘the piece of alloy that was molded into such and such a shape for artistic purposes, placed on a pedestal in museum etc.’. Then in saying ‘the piece of alloy that was molded into such and such a shape ... is badly made’ one would be saying that the piece of alloy was badly made rather than the statue. Indeed, we can incorporate in the qualifying clause exactly what it would take for something to be a statue or say explicitly ‘the alloy from which the statue is formed’ or ‘the piece of alloy that is coincident with the statue’. Still, the additional qualifying material will have no tendency to alter the respect in which the thing is said to be badly made. In general, when using a sortally governed phrase, such as ‘the statue that ...’ or ‘the piece of alloy that ...’, the sort that might be relevant to subsequent predications is simply a function of the governing sortal term (‘statue’ or ‘piece of alloy’) and not of the ensuing qualification.

The irrelevance of the non-sortal material is something the pluralist can readily explain; for the governing sortal term determines what kind of thing we are referring to and this is all that is relevant to the application of the predicates in question. But it is something of a mystery for the monist. For why should it matter how the information that might serve to invoke a relevant respect is presented? The monist might argue that a sortal term such as ‘statue’ or ‘piece of alloy’ does not merely have a predicative sense (predicating a temporary feature of the thing for the extreme monist and a temporal profile of the thing for the moderate monist), but that it also serves to pick out a relevant criterion of identity (of identity across time for the extreme monist and of identity across worlds for the moderate monist). The non-sortal material, by contrast, merely has - or is merely used in - the predicative sense. But even if a sortal term has these two senses, the criterial sense is presumably a function of its predicative sense (it is things with such and such a temporary feature or such and such a temporary profile that are subject to corresponding criteria of identity across times or worlds); and so it is still unclear why the qualifying material should not be capable of playing a part in invoking the relevant respect. Thus the metaphysical mystery of disparate entities at the ontological level is reduplicated for the monist as a mystery of disparate semantic function at the linguistic level.

The behavior of sortal terms is not merely something of a mystery for the monist, it is also anomalous as a species of opacity. For all the familiar cases of opacity are ones which can be triggered by appropriate descriptive material. Thus instead of using the names ‘Hesperus’ and ‘Phosphorus’ in the standard examples of propositional attitudes, we can use the descriptions ‘the morning star’ and ‘the evening star’; and instead of saying ‘Clark Kent entered the phone booth’ and ‘Superman came out’ (as in the examples of Saul [97]), we can say ‘the nondescript clerk entered the phone booth’ and ‘the savior of the world came out’. The fact that the opacity hypothesized by the monist is not of this general character should make us suspicious that it genuinely exists.

There is a way in which the absence of a descriptive trigger weakens the monist’s position even further. For it deprives him of the possibility of establishing the opacity of the contexts of interest to him in an uncontroversial manner. The most straightforward, and perhaps most convincing, means of showing that a given context is opaque is to show that substitution of clearly co-referential terms within

---

<sup>22</sup>A related point is made in Fine [82]; and it was the attempt to elaborate this point that led to the present paper.

the context can induce a change in truth-value; and one way to do this is to use two definite descriptions ‘the  $\phi$ ’ and ‘the  $\psi$ ’ for which it is clear that the very same object uniquely satisfies the two conditions  $\phi$  and  $\psi$ . But if definite descriptions fail for this purpose, then it is unclear which other examples might succeed in their place. Thus it appears that the monist will be unable to find any clear direct linguistic evidence in favor of the opacity of the disputed contexts; and, in the absence of such evidence, we should again be very cautious in supposing that the contexts are in fact opaque.

There are some other potential triggers of opacity that also do not seem to work in the present context as they should. We can bring this out by means of a comparison with other predicates that are clearly respect-relative and behave in the way that the monist thinks that his sort-relative predicates should behave. ‘Suitable’, ‘qualified’, ‘relevant’, and ‘important’ are obvious examples. It may be that the person who applied for the position of professor is qualified while the person who applied for the position of janitor is not. But we would not wish to conclude that the one person is not the same as the other. Moreover, what plausibly explains the opacity in this case is that the predicate ‘qualified’ is respect-relative; it is true of a person *relative to* a relevant respect. Thus in saying that the person who applied for the position of professor (janitor) is qualified, one is saying he is qualified *for* that position, where the relevant respect in which the person is said to be qualified is given by the subject-term.

Now for predicates of this sort, one would expect to be able to indicate the relevant respect directly within the predicate-term itself. Indeed, by indicating the respect within the predicate- rather than within the subject-term, one brings it ‘home’ to where it most naturally belongs. Now for the clear cases of respect-relative predicates, this can indeed be done. Thus one can say that the person who applied for the position of professor is not qualified *for the position of janitor* - or is *also qualified* or *more qualified* for the position of janitor. Here, in the first example, the subject-term plays no role in picking out the relevant respect while, in the second two examples, it does play this role though in concert with the explicit relativization given in the predicate-term.

But such constructions are not readily available in the sortal case. One cannot very well say that the statue is not damaged as an alloy or as a piece of alloy, or that it is more damaged as an alloy or as a piece of alloy, or that the alloy or piece of alloy is not well made as a statue, or that it is better made as a statue, or that the alloy or piece of alloy is not Romanesque, or more Romanesque, as a statue. Of course, one can make some kind of sense of these claims but only in that one can see what the speaker might have been inappropriately trying to convey. Nor is the difficulty due to the fact that these various predicates cannot be directly relativized. We can indeed talk of the respects in which a thing may be damaged or well made or Romanesque. It is merely that these respects are not properly taken to include the status of the thing as a sort.<sup>23</sup> We have up to now gone along with the monist in supposing that we can sensibly talk of something being damaged as an alloy, or well made as a piece

---

<sup>23</sup>There may be a few cases in which the predicates in question can be relativized to a sortal-term with something like the intended meaning. Thus I can say that the alloy is defective as a doorstep, meaning that it is inadequate in its use as a doorstep. Should the alloy actually constitute a doorstep (which it may not even if it has been used as doorstep), then the conditions for it to be defective as a doorstep will be roughly the same as the conditions for the doorstep itself to be defective. But these odd ‘coincidental’ cases should not be thought to detract from the general line of criticism.

of alloy, or Romanesque as a statue; for it was by means of such phrases that we made explicit the relativity of the underlying predicates to a given sort. We now see that these phrases are a philosophical invention and have no basis in ordinary usage. There is perhaps no harm in using them in this way. But we should not think that the proposed sort-relative interpretation receives any sanction from ordinary usage; and, in order to avoid any suggestion that it does, let us henceforth use the quasi-technical term 'qua' in place of an ordinary preposition such as 'under' or 'as'.

Another potential trigger of opacity that does not play out as it should is nonlinguistic context. Suppose that, in a desperate attempt to find qualified candidates for the position of professor, we search through the candidates for other positions. It would then be entirely appropriate to say 'the person who applied for the position of janitor is qualified', meaning that he is qualified for the position of professor. Or again, suppose that I am talking to myself about the merits of various candidates. I may then use the form of words 'the person who applied for the position of janitor is qualified' to mean that he is qualified for the position of professor if what I have in mind, in saying that he is qualified, is that he is qualified for the position of professor. In all of these cases, the sort introduced by the (nonlinguistic) context may trump, or over-ride, the sort associated with the subject-term.

Can something similar happen in the sortal case? Suppose I say 'the alloy (the piece of alloy) is Romanesque' or 'the alloy (the piece of alloy) is badly made' (other examples could have been used). Can I appropriately use these words to convey that the statue is Romanesque or that the statue is badly made? Not very readily, though there are some cases in which it seems as if one might. Suppose I am describing the styles of statues made from various materials. Then I might say 'the alloy (or even the piece of alloy) is Romanesque' to mean that the statue is Romanesque; and similarly for the predicate 'badly made'.

The pluralist will not put this case down to contextual trumping but will provide some other account of what is going on. He might say, for example, that there is ellipsis ('alloy' is understood as 'alloy statue') or metonymy (the piece of alloy goes proxy for the alloy statue) or a special usage of 'piece' in which it is taken to mean *piece of art*. We may 'control' for these factors that might be in dispute between the monist and the pluralist by slightly changing the example. Instead of saying 'the alloy' or 'the piece of alloy', let us say 'the alloy from which the statue is formed' or 'the piece of alloy that was made at the same time as the statue'. Suppose we now ask: can we appropriately use the words 'the alloy from which the statue is formed is Romanesque (badly made)' to convey that it is Romanesque (badly made) qua statue? Then I think the answer is 'no'.

If there is any lingering doubt over the example, then I suspect that it arises from the phenomenon of 'predicational slide', whereby the application of a predicate may be extended to include objects that are closely related to the objects to which it applies (it is perhaps in this way that a person can be said to be 'out of gas' when his car is out of gas).<sup>24</sup> Given predicational slide, we might be warranted in saying that an alloy is badly made or Romanesque on account of its constituting a statue that is badly made or Romanesque. We may control for this additional factor by further complicating

---

<sup>24</sup> Predicational slide is, of course, to be distinguished from metonymy, which is a form of referential slide. I suspect that various linguistic data that are usually explained by appeal to metonymy might often be more plausibly explained by appeal to predicational slide.

the example. Let us now suppose that there are two statues, with the first statue being badly made (though not its alloy) and with the alloy of the second statue being badly made (though not the statue itself). Let us grant, with our opponent, that we may correctly say ‘the alloy from the first statue is badly made’. If there were predicational slide, then it would be correct to add ‘and so is the alloy from the second statue’, since ‘badly made’ would have a broad extension which indifferently includes statues and their alloys; while if there was, as he thinks, an implicit relativization to the sort *statue*, then it would not be correct to add ‘and so is the alloy from the second statue’. But it seems to me that one cannot understand the remark ‘the alloy from the first statue is badly made and so is the alloy from the second statue’ in such a way that the first conjunct is true and the second false. Given that the first statue is badly made and the alloy from the second statue is also badly made, how can we so understand the remark that it true that the alloy from the first statue is badly made and yet false that the alloy from the second statue is badly made?

The monist’s attempt to allow for contextual relativization in these cases is therefore not satisfactory; and the general moral to be drawn from the present discussion is as before. First, the behavior of the allegedly respect-relative predicates is anomalous, they do not behave in the same way as predicates that are clearly respect-relative. Second, their behavior is something of a mystery; it is unclear how their anomalous behavior is to be explained, since it is not in conformity with one’s general understanding of how respect-relative predicates might be expected to behave.

Still these criticisms are not completely devastating. For the kind of respect-relative predicates posited by the monist might be regarded as *sui generis* and subject to their own special principles. However, if the monist adopts this tack, he must say what these special principles might be. He cannot simply maintain that the context is never relevant to the determination of the sort. For suppose I spot something in the corner and, thinking it a mere piece of alloy, say ‘that thing over there is badly made’, meaning that it is a badly made piece of alloy. Presumably what I say is true just in case the piece of alloy is badly made. But this then means, for the monist, that the context can help determine *piece of alloy* as the relevant sort (for the pluralist, by contrast, it will help determine what I am referring to).<sup>25</sup>

In attempting to make due allowance for the possible role of context, the monist should adopt something like the following three principles: first, one can only specify a relevant sort (one that might be picked up by a sort-relative predicate) by means of the context or the subject-term, and never through qualification of the predicate; second, the sort specified by the subject-term (if there is one) must be picked up by the predicate (if it is sort-relative) - in preference to any sort that might otherwise have been specified by the context; and third, the sort specified by a sortal phrase (such as ‘the statue that ...’) is given by its governing sortal term (‘statue’) and not by its ‘body’. It is not at all satisfactory that the sort-relative predicates should not be treated as a special case of respect-relative predicates in general, and the principles themselves are somewhat *ad hoc*. But all the same, once the principles are accepted, one can then account for the apparent anomalies described above.

---

<sup>25</sup> For the moderate monist, the context may also help determine the referent; and both kinds of monist might think that the context determines the relevant sort by first assigning it to the subject-term rather than directly to the predicate.

In what follows we shall therefore focus on the question of whether a special theory of this kind can be sustained.

### §6 Implicit Invocation of Sorts

In considering the monist's special theory of sortal-relativity, it will be particularly helpful to look at cases in which the relevant sort is not explicitly specified in the subject-term. We shall look at three main kinds of case of this sort in each of the following three sections. There are first the cases in which the subject-term is an anaphor and 'inherits' its sort from its antecedent or in which the relevant sort is specified in the subject-term via a sort-relative predicate. There are then the cases in which the relevant sort is invoked through explicit use of the notion of reference. And there are finally the cases in which an assortment of sorts is invoked through reference to a plurality of different things. The first cases are relatively straightforward and principally serve to indicate the direction in which the theory should be developed. The second and third cases are far more serious, in my opinion, and render the sort of theory that the monist needs to develop completely untenable.<sup>26</sup>

We begin with anaphor. The interest of anaphor in the present context derives from the fact that it provides a natural device for 'shaking off' opacity. For we may move the given term, which is implicated in the opaque reading, to outside the opaque context and replace it with an anaphor. Given that the anaphor is understood referentially, this should then provide us with a transparent context for the transplanted term. Thus instead of saying 'Ralph believes that Orcutt is a spy', we may say 'Ralph believes *of* Orcutt that he is a spy' or 'Orcutt is such that Ralph believe that he is a spy', or 'it is true of Orcutt that Ralph believes that he is a spy'.

In the sortal cases, however, these devices do nothing to 'soften' the allegedly opaque reading. Suppose that instead of saying 'the alloy from which the statue is formed is badly made', I say 'it is true of the alloy from which the statue is formed that it is badly made'. Then the reformulation is no more capable of a transparent reading than the original sentence. The interpretation of the sentence is not left 'dangling' (for want of a relevant respect), and nor is it any more susceptible to having the relevant respect fixed by the context.<sup>27</sup>

A related kind of case is one in which the relevant sort is implicitly given by a sort-relative predicate, as with subject-terms such as 'the item Al created' or 'the item Bo admired'. Suppose that the item Al created and the item Bo admired is a piece of alloy (she said 'what a lovely piece of alloy!')

---

<sup>26</sup>Let me here mention a difficulty which I shall not pursue, since it depends upon accepting the data from Fine [00]. I there claim to have an example of two letters which coincide (even always coincide). Now these letters would appear to differ as to their front and their back. Thus 'front of' and 'back of' for the monist must be sort-relative - not merely to the sort *letter* but to more finely individuated sorts, which somehow serve to distinguish between what appear to be two different letters. But this seems very ad hoc and it is not at all clear what in general would count as, or be determinative of, one of these more finely individuated sorts.

<sup>27</sup>As I have indicated, I believe the same is also true of the modal examples, such as 'possibly the alloy is in the shape of a ball'. There is no softening in the alleged opacity when we move to 'the alloy is such that possibly it is in the shape of a ball'.

perhaps without even realizing that she had a statue in her hand).<sup>28</sup> Then in saying ‘the item A1 created is badly made’ or ‘the item Bo admired is badly made’, we are saying something whose truth requires the piece of alloy to be badly made. There appears to be no more possibility in this case, than in the case in which the sort is made explicit, for the interpretation to be left dangling or for it to be fixed by the context.

These findings are more disturbing than before, since one would naturally think that the further removed one is from an explicit specification of the sort the less compelling is the interpretation which the specification then provides. Thus it is a further mark against the monist that the interpretation of these sentences is not more flexible than they actually are. But again, the monist might attempt to tailor his theory to suit the facts. He will say, as before, that any respect specified by the subject should be picked up by the sort-relative predicate. But he will now work with a broader conception of which respects might be specified by the subject-term. It is not only suffices that the sort be explicitly specified by a sortal term; it can also be ‘transferred’ from an antecedent expression and be brought into play through an appropriate description of the thing (though not one that spells out what it is for something to be of the sort!).

If the monist’s theory is to be extended in this way, then there are two questions that need to be considered: first, what are the further means by which a sort might be specified?; and second, why should the sort as so specified be picked up by the predicate or take precedence over a sort that originates in the context? The general form that an answer to both questions should take is clear. There must be some kind of semantical mechanism at work. This mechanism then explains how the sort might be determined. It also explains why the interpretation is thereby fixed; for it will be semantical matter, not only what the sort specified by the subject-term should be, but also that it should match the sort required for the interpretation of the predicate-term. Thus what accounts for the inflexibility of the interpretation is that it is semantically enforced. There is a natural way of explaining what this mechanism might be. We may suppose that certain singular terms are assigned both a referent and a sort and that certain predicate-expressions are only assigned an extension relative to a sort (or perhaps several sorts, one for each of several arguments). There are then systematic rules for determining how these sorts play out in the semantic evaluation of more complex expressions. Suppose, for example, that  $\phi(x)$  is a sort-relative predicate-expression. Then when  $t$  is a term to which has been assigned the referent  $r$  and the sort  $s$ ,  $\phi(t)$  will be true iff  $\phi(x)$  is true of  $r$  relative to  $s$  (i.e.  $\phi(x)$  is true under the assignment of  $r$  and  $s$  as referent and sort to the variable  $x$ ). Or the referent  $r$  and the sort  $s$  may be assigned to the definite description ‘the  $x$  such that  $\phi(x)$ ’ just in case  $(r, s)$  is the unique object-sort pair for which  $\phi(x)$  is true of  $r$  relative to  $s$ . Or again, ‘some  $x$  is such that  $\phi(x)$ ’ will be true iff  $\phi(x)$  is true of some object  $r$  relative to a sort  $s$ .<sup>29</sup>

---

<sup>28</sup>In case we want the statue and the piece of alloy to be worldly coincidents, we may suppose that A1 was responsible for the mixing of the metals and his partner for the design of the mold. A1 will then have created the piece of alloy though not the statue.

<sup>29</sup> This ‘parallel’ semantics is reminiscent of Carnap’s method of extension and intension (Carnap [47]) though, for many of the intended applications, it will not be helpful to think of the sorts as intensions or even as intension-like.

It is now clear, on the basis of such rules, why ‘the item Bo admired is badly made’ is true just in case the piece of alloy is badly made. For by the second rule, ‘the item Bo admired’ will be assigned a certain mere thing as referent and *piece of alloy* as sort and so, by the first rule, the sentence ‘the item Bo admired is badly made’ will be true iff the mere thing is badly made qua *piece of alloy*. There is still the question of why these various interpretation should be forced upon us and why, in particular, it should not be possible for the context to decide what the relevant sort or sorts should be. It would have to be maintained that just as there is an binding semantical connection between ‘unqualified’ and ‘candidate for the position of professor’ in ‘unqualified candidate for the position of professor’ which prevents ‘unqualified’ from being understood as anything other than *unqualified for the position of professor*, so there is a more distant, though equally binding, semantic connection between ‘admired’ and ‘badly made’ in the sentence ‘the item Bo admired is badly made’. But that there should be such a tight connection in the present cases is perplexing and the need to posit it creates yet a further mark against the monist’s view.

There is a variant on the above mechanism that is also worth mentioning. A predicate such as ‘admired’ is taken to have both a sort-independent and a sort-relative sense; for an object to be admired in the sort-independent sense is for it be admired relative to some sort. Thus the sort-independent sense is the ‘existential’ counterpart of the sort-independent sense. The truth-conditions of the sentence ‘the item Bo admired is badly made’ are then essentially given by the following reconstruction, ‘the item Bo admired under some sort is badly made with respect to the sort under which it was admired by Bo’. Thus a description for the relevant sort is constructed from the subject-term and slotted into the predicate-term.

There are, I believe, reasons for the monist to prefer the first of the proposed mechanisms over the second.<sup>30</sup> But we see, in any case, that he will be capable of accounting for the implicit invocation of sorts. The theory may not be the most lovely creation and it is hard to avoid the impression that the systematic invocation of sorts is merely an ad hoc device to avoid reference to a pluralist ontology of noncoincident things. But still, it must be conceded that, when the theory is developed in this way, it then becomes capable of accounting for the current crop of cases.

### §7 Implicit Invocation via Reference

I now wish to argue that the monist’s theory comes to grief once we look at cases in which the notion of reference is itself employed in securing reference. We shall be concerned with two sets of problems. One is a problem of under-generation; the generation of certain readings will call for the unwelcome adoption of a sort-relative notion of reference. The other is a problem of over-generation;

---

I have stated the sample rules for a form of Loglish, but it should be clear how they might be extended to natural language.

<sup>30</sup> One such reason is that it is not so clear, under the second proposal, why the given interpretation should be forced upon us. For the sort is already there to be slotted into the predicate-term under the first proposal while, under the second, it must be extracted from the subject-term. But if from the subject-term, then why not from somewhere else?

the monist's adoption of a sort-independent notion of reference will generate certain unwanted readings. The difficulties strike me as being especially severe; and I do not believe that any reasonable modification of the monist's view might be made to accommodate them.

Suppose Al makes an inventory of items that he considers well made; its sole entry is 'the alloy' (or 'the alloy from which this statue is formed'. I then say 'an entry in Al's inventory refers to a badly made item' or, more idiomatically, 'Al referred to a badly made item'.<sup>31</sup> Let us suppose that Al is right, the alloy is well made, though the (coincident) statue that is formed from the alloy is badly made. Then on the most natural understanding of my remarks, they are false. After all, Al refers through the sole entry in his inventory to the alloy, which is *not* badly made.

If the predicate 'refers' is not sort-relative, then it is hard to see how the monist is to account for these readings. For we want my second remark, for example, to mean that Al referred to a badly made item under the sort with respect to which it is badly made or, equivalently, to mean that Al referred to an item badly made with respect to a sort under which it was referred to. But when 'refers' is not understood in a sort-relative way, it is hard to see how the required coordination in sorts is to be achieved. For, in the first place, since 'refers' is not sort-relative, it cannot be the recipient of a sort (from the predicate 'badly made'), thereby excluding the first gloss. One might think, if 'refers' is given an existential reading that is capable of being the source of a sort. However, it is barred, by virtue of its syntactic position, from being the source of a sort (for the predicate 'badly made'). For since it functions as a verb, the sort should originate in the quantifier-phrase 'a badly made item' which it governs.<sup>32</sup> So the second gloss is also excluded. And, given the failure of either gloss, it is not clear what else might be used in their place.<sup>33</sup>

To obtain the desired reading we must therefore suppose that 'refers' is sort-relative and, indeed, once we do, the difficulties disappear. Thus, on the first version of the monistic semantics, the quantifier-phrase 'a badly made item' in effect ranges over the object-sort pairs  $(r, s)$  for which it is true that  $r$  is badly made qua  $s$ ; for any sort  $s$ , the predicate 'Al referred to -' will have its extension the set of objects  $r$  which are such that Al referred to  $r$  relative to  $s$ ; and so the sentence 'Al referred to a badly made item' will be true iff there is an object-sort pair  $(r, s)$  such that  $r$  is badly made qua  $s$  and Al

<sup>31</sup> My main concern is with the reference of terms but, in the interests of readability, I have usually formulated my examples in terms of speaker reference.

<sup>32</sup> This becomes even clearer if we place the quantifier-phrase in subject-position, as in 'a badly made item was referred to by Al' or if we 'delay' the predication, as in 'a badly made item was left on the shelf and referred to by Al'. We might also note that the predicate 'refers' is also not well-suited to being the source of a sort by virtue of the fact that it is sort-independent. The monist cannot even treat the sort-independent notion as the existential counterpart of the sort-relative notion, since he will wish to allow that such expressions as 'the object occupying such a such a location at a given time' or 'the object occupying such and such a space-time region' might refer to a mere thing without invoking a sort.

<sup>33</sup> Note that we cannot in general take the context in which Al sets up the inventory to specify the relevant sort. For I might be reporting on what Al will be doing in the future ('Al will refer to a badly made item'); and I might even be mistaken in thinking that Al will refer to anything at all. But the truth-conditions of my statement will still be the same.

referred to  $r$  relative to  $s$  - which is what we want. Or again, under the second version of the monistic semantics, the sentence can simply be taken to have the same truth-conditions as 'Al referred to a badly made item relative to the sort with respect to which it is badly made', with the reference predicate relativized to the description 'the sort with respect to which it is badly made', which is picked up from the phrase 'a badly made item'.

However, the imputation of a sort-relative sense to the predicate 'refers' is not without its problems. It may be granted that the predicate is capable of bearing a relative sense - thus we may sensibly say that Al referred to such and such a thing *as* a statue or *as* a piece of alloy; and we may also concede that, in the analogous case involving 'qualified', we may say 'he referred to a qualified candidate' to mean that he referred to a qualified candidate in respect to the position for which he was qualified. However, the sort-relative notion of reference that is in general required to secure the desired interpretation in the sortal case is not the ordinary notion. Suppose that the sole entry in Al's inventory is 'the referent of the sole entry in Bo's inventory' and that the sole entry in Bo's inventory is 'the alloy from which the statue is formed'. Then again, the natural reading of the sentence 'Al referred to a badly made item' is one in which it is false (and similarly for even longer referential chains). But we would not ordinarily say that Al referred to what he did as an *alloy*; rather, he referred to it as a *referent*. The required notion of sort-relative reference is a kind of ancestral of the ordinary notion; and given its artificial character and the fact that the terminus of a referential chain may be so remote from the actual context, it is unclear why the sort it invokes should so naturally come into play. Certainly, the sort is not salient in any obvious or straightforward way and, indeed, in the analogous case involving 'qualified', the corresponding respect does *not* naturally come into play. Suppose that I say 'Al referred to a qualified person' and that there is a long referential chain terminating with an expression of the form 'the person who applied for the position of professor'. It is then only with considerable strain that we can read the sentence as requiring that the person should be qualified with regard to the respect invoked by the terminus of the referential chain, i.e. the position of professor.

But even if we go along with the ancestral notion, it is not clear that it provides us with the correct explanation of *how* the given reading is made available. For consider the sentence 'he referred in one way or another to a badly made item'.<sup>34</sup> One would naturally think that even if 'refers' in the original sentence took a sort-relative reading, the qualification 'in some way or another' would require the qualified phrase 'refers in some way or another' to have an existential reading. Thus what one would be saying is that there is a badly made item, i.e. a mere thing that is badly made with respect to some sort, and that Al referred to it with respect to some sort, though not necessarily a sort with respect to which it is badly made.<sup>35</sup> But then the sentence should come out true, since the mere thing to

---

<sup>34</sup> Or, better still, the sentence 'a badly made item was referred to, in one way or another, by Al'. We should recall that the reference-predicate cannot be the source of the sort for which the predicate 'badly made' is then the target.

<sup>35</sup> Indeed, in the analogous case involving 'qualified', 'he placed a qualified candidate' might be taken to mean that he placed a qualified candidate in a position with respect to which he was qualified, but 'he placed in some position or another a qualified candidate' must be taken to mean that he placed a qualified candidate in some position, though not necessarily the one with respect to which he was qualified.

which he referred is badly made qua *statue*. And yet surely the most natural reading is still one in which it is false: he referred, in the way he did, to an alloy and the alloy was *not* badly made.

The other major difficulty for the monist arises from his having to embrace a sort-independent notion of reference. It is clear that he cannot rest content with the sort-relative notion, since the sort-independent notion is required to formulate his characteristic referential theses - that 'the statue', for example, refers to the coincident piece of alloy or 'the piece of alloy' to the coincident statue. The monist might *state* his view by means of identities alone, merely claiming that the statue is one and the same as the alloy. But it is hard to see how he could subscribe to such identities without also be willing to maintain that there is a correlative sense of 'refers' in which the 'statue' refers to the alloy or 'the alloy' to the statue; and it is hard to see how the ordinary term 'refers' could fail to bear this correlative sense which, after all, is the most natural sense that the term could possibly bear. However, when 'refers' is used in its sort-relative sense, it will not be true to say 'the statue' refers to the piece of alloy, since the term 'the statue' does not refer to the piece of alloy *as* a piece of alloy. Thus it is only by using the term 'refers' in its sort-independent sense, that there is any chance of his characteristic referential theses being true.

However, recognition of a sort-independent notion leads to difficulties of its own (of which some are far worse than any so far encountered). For one thing, it is hard to believe that there is a sense of 'refers' in which it is true that 'the statue' refers to the alloy and also a sense in which it is false. Whether true or false, the sentence, on the face of it, is *unambiguously* true or *unambiguously* false.

But the difficulties I wish to emphasize are ones that arise without having to suppose that the monist also acknowledges a sort-relative sense of 'refers'. Granted that there is a sort-independent notion of reference, it should presumably be possible to understand the predicate 'refers' as it occurs in the sentence 'Al referred to a badly made item' as being sort-independent. How then, given that the predicate is so understood, might the whole sentence be construed? We have seen that the predicate 'refers' is not capable of being either the recipient or source of a sort. The question therefore arises as to what to make of the sort that appears to attach to the predicate 'badly made'. And here, it seems to me, there is nothing that the monist can sensibly say.

One possibility is that the sort attaching to the predicate 'badly made' is given by the context. In saying that 'Al referred to a badly made item', I may have in mind that the thing is of a given sort and use the sentence to convey that Al referred to a mere thing that is badly made qua this sort. In particular, I may have the sort *statue*, rather than the sort *alloy*, in mind and so use the sentence to convey the true proposition that Al referred to a mere thing that is a badly made qua *statue*.

Now I do not believe that, in the envisaged circumstances, my words can appropriately be used to convey something true. Al referred to some alloy; and my sentence is true only if the alloy is badly made, which it is not. Although I make no explicit reference to the relevant sort, it seems to be me that my sentence is no more capable of being true than its explicit counterpart 'the alloy (from which the statue is formed) is badly made'.

However, someone in the grip of the monist position may have a different view of the matter. Mindful of the fact that 'the item to which he referred' refers to a mere thing, which in itself is neither a statue nor some alloy, he may claim that the sentence 'he referred to a badly made item' *can*, with the

appropriate linguistic intentions, be understood as conveying that the item is badly made qua *statue*. I am inclined to think that such a monist has placed his linguistic intuitions at the service of his metaphysics. Perhaps it is possible to indulge in predicational slide and so use the predicate ‘badly made’ that some alloy can be said to be badly made when the statue that is formed from the alloy is badly made. But once we take a sentence - such as ‘he referred to an item that was badly made but formed from some alloy that was well made’ - that is expressly designed to exclude predicational slide, then it barely seems possible to understand it as conveying something true.

Moreover, quite apart from the difficulties in taking the sentence to be true, there are also difficulties in accepting the different ways in which, under the proposed interpretation, the sentence might be false.<sup>36</sup> If I can interpret the sentence by reference to the sorts *statue* or *alloy*, then I should also be able to interpret it by reference to the sorts *skyscraper* or *soap dish*. But it is hard to see, even if I believe that the item Al referred to is a skyscraper or a soapdish, how my words might appropriately be used to convey that the item was a badly made skyscraper or soapdish. Could the mere fact that the item Al referred to was not a skyscraper or a soapdish be sufficient to make it false - or, at least, not true - that he referred to something badly made?

Another interpretative possibility is that the sentence is used to convey that Al referred to a mere thing that is badly made with respect to some sort or another. This is the interpretation that falls out of the first version of the monistic semantics. For the quantifier ‘a badly made item’ will in effect range over the pairs  $(r, s)$  for which  $r$  is badly made with respect to  $s$ ; and ‘he referred to a badly made item’ will be true iff for one such pair  $(r, s)$  it is true that Al referred to  $r$ . As I have said, I do not believe that the sentence can properly be construed as being true (except perhaps through predicational slide). But the explanation of how it might be true is especially shocking in this case, since it seems to lead to true contradictions. It is true that Al referred to an item that is badly made (overall), since he referred to a mere thing that is badly made (overall) qua *statue*. It is also true that Al referred to an item that is well made (overall), since he referred to a mere thing that is well made (overall) qua *alloy*. But Al referred to only one item. So it follows, as a matter of logic, that the thing that Al referred to is both badly made (overall) and well made (overall). For similar reasons, it will be true that the item Al referred to is more badly made than (and less badly made than and just as badly made as!) the item Al referred to - or, if we wish to avoid repetition in the description, it will be true that the first item Al referred to is more badly made than the last item Al referred to, even though the first and last items he referred to, in his one-entry inventory, are the same. Or again, even though he only referred to one thing and it is true that he referred to a badly made item, it is not true that he referred to only badly made items, i.e. that every item he referred to was badly made.

We should also note that the monist faces a curious difficulty in even getting ‘Al referred to a badly made item’ to have the same truth-conditions as ‘an item Al referred to was badly made’, when the predicate ‘refers’ is sort-independent. For the quantifier-phrase ‘an item Al referred to’ in the second sentence simply ranges over the mere things that Al referred to, and so the assignment of the sort necessary for the evaluation of the predicate ‘badly made’ is left dangling. It does not help to

---

<sup>36</sup> Similar difficulties arise for some of the earlier attempts at contextual relativization.

suppose that ‘badly made’ might be construed to mean ‘badly made qua some sort’; for, as we have seen, ‘badly made’ is capable of receiving a non-existential reading and the equivalence would appear to hold regardless of how the phrase is interpreted. The only way to secure the required equivalence, it seems to me, is to make the implausible assumption that the invocation of sorts is such an institutionalized feature of our language that a sort is automatically invoked even though there is no particular mechanism by which it is invoked. Thus a quantifier-phrase such as ‘an item AI referred to’ will in effect range over object-sort pairs  $\{r, s\}$ , where  $r$  is an object that AI referred to and  $s$  is a sort that it possesses, even though the sort  $s$  is entirely irrelevant to the application of the predicate ‘refers’.<sup>37</sup>

A final possible interpretation is that the sentence ‘AI referred to a badly made item’ is used to convey that AI referred to a mere thing with respect to a particular, though unspecified, sort. The sort, in other words, is left dangling; and, the sentence, under this interpretation, would lack a truth-value. As I have indicated, I do not think that the sentence *can* properly be construed as failing to be false. But even if we grant that this interpretation is available, it should surely then be possible to fix the sort by means of context - in which case the earlier set of difficulties would arise.

It therefore appears that all possible ways of construing the ordinary predicate ‘refers’ as sort-independent break down; none of them corresponds to a reading that actually exists. The monist should therefore conclude that the ordinary predicate is incapable of bearing a sort-independent sense and that the only sense it can bear is sort-relative. But this means that any notion of identity correlative with the ordinary notion of reference must also be sort-relative. And since such a notion of identity would appear to be involved in the ordinary judgement that the statue is identical with the (coincident) piece of alloy, the monist should conclude, along with the pluralist, that all such judgements are false.

How then is he distinguished from the pluralist? He must argue that the notions of reference and identity which he wishes to employ have been ‘kicked upstairs’; they are purely theoretical notions, without any counterpart in ordinary language. But if we then ask, ‘by what right does he claim to have latched onto the *genuine* notions of strict numerical identity or of sort-independent reference?’, there is no answer that he can give. His position is exactly analogous in this respect to that of the conservative mono-referentialist. Neither can provide any conceptual underpinning for the claims they wish to make; and their positions should accordingly be dismissed as either unintelligible or absurd.

### §8 Plural Invocation of Sorts

The monist’s view has further bizarre consequences in connection with reference to pluralities; and these difficulties make his position even more akin to the fanatical form of monism.

Consider the following sentence ‘a diverse collection of items was referred to (insured, admired etc.)’. For the monist, the quantifier-phrase ‘a diverse collection of items’ will range over collections of mere things (I assume that only material objects are here in question). But whether a collection of mere things is diverse does not merely depend upon its members but also upon how they are ‘given’. If all the members are given as statues, for example, the collection might not be diverse; whereas if some are

---

<sup>37</sup>The more formal semantical approaches tend to treat all predicates as uniformly sort-relative and so these difficulties get ignored.

given as statues, others as pieces of material, and others still as just plain stuff, then it might be diverse. Thus whether a collection is diverse will be relative to the sorts by which its members are given. But it is not sufficient merely to be given the corresponding collection of sorts. For if just one thing in the collection were given as a piece of alloy, just one as some alloy and the rest as statues, then it might not count as diverse; whereas, if more or less the same number of items were given as pieces of alloy, as alloys, and as statues, then it might count as diverse. (For similar reasons, it is also not sufficient to be given the corresponding *multi-set* of sorts). Thus whether a collection is diverse will be relative to a correlation between the members of the collection and sorts (where a particular member might, of course, be correlated with more than one sort).

Call a respect of this sort a *plural* respect. The possible need for such respects will arise whenever pluralities are in question. Thus every non-distributive predicate of collections - such as 'diverse' or 'interesting' or 'is referred to' - should be taken to be relative to a plural respect. The same is true of distributive predicates - such as 'are badly made' or 'are Romanesque' - as long as they are taken to be predicates of pluralities rather than of individuals and as long as the corresponding predicates of individuals are sort-relative. Quantification over collections - as in the example above - must generally be taken to be accompanied by quantification over an associated respect. And the designation of a plurality, such as the 'collection of F's' should not merely be taken to refer to the collection of mere things that F but it should also be taken, when the predicate F is sort-relative, to invoke the associated plural respect, i.e. the correlation that links any object  $r$  that is an F to any sort  $s$  for which it is true that F is true of  $r$  qua  $s$ .

What is remarkable about the apparatus of plural respects is that the concomitant apparatus of referents is entirely irrelevant to its operation. For we can read off from any plural respect the plurality of mere things with which it must be associated; for given the nature of the respect as a correlation, the associated plurality will simply be the plurality of items in the domain of the correlation. Nor does it seem possible to 'weaken' the respect so as to effect a genuine division of labor between the collection of mere things and the respect. Thus even though we have treated the respect-relative predicates of pluralities as if they were true of a plurality relative to a respect, the appeal to the plurality is otiose and might as well be dropped. This suggests that the respect itself is the true referent and that it has been metamorphosed from a collection of sortally embodied things, of the kind favored by the pluralist, into a correlation between mere things and sorts.

Another bizarre consequence concerns the relation of membership that holds between an individual and a plurality of which it is a member. One would naturally suppose that this relation was not sort-relative, but the monist must take it to be relative to a sort and a plural respect. Thus it will hold for him between an individual *qua* sort and a collection *qua* plural respect. For consider the sentence 'every member of the collection of items that Al referred to is well made' (this is of the form 'all F's are G's', where F is 'member of the collection of items that Al referred to' and G is 'badly made'). Now the alloy is a member of the collection of items that Al referred to. According to the monist, the statue is the same as the alloy. So given that membership is not respect-relative (and hence induces a transparent context), we may infer that the statue is a member of the collection of items that Al referred to. But it then follows that the statue is well made (here we appeal to the principle that if all F's are G's and  $t$  is an F then  $t$  is a G).

The conclusion of the argument, that the statue is well made, is false. Surely, also, the premiss of the argument, that every member of the collection of items that Al referred to is well made, is true. Indeed, surely it is true that every item that Al referred to was well made (for recall, an item he referred to was well made and he referred to only one item); and from this, surely, it follows that every member of the collection of items that Al referred to is well made. Where then is the flaw in the reasoning? It is hard to see how one might deny, given the truth of the premiss, that if the statue is a member of the collection of items that Al referred to then it is well made. And so that only leaves the sort-independence of membership as open to question.

We therefore see two further respects in which the monist will be sucked into embracing the same kinds of implausibilities as the fanatical mono-referentialist. First, when it comes to reference and quantification over pluralities, reference to the different ones (or their collections) will be otiose, just as reference to the Big One is otiose for the mono-referentialist. Indeed, everything we say might be framed in terms of membership. Thus instead of saying that an item is badly made we may say that it belongs to the collection of badly made items. And when things are framed this way, reference will be completely irrelevant for the sortal monist just as it is for the fanatical monist. Second, the monist is obliged to adopt the respect-relativity of membership (and of related notions), in addition to the sort-relativity of reference and identity itself. Again, certain paradigms of transparency must be dismissed as opaque.

The difficulties that beset the monist are just those that one would expect to arise if one conflated entities that are in fact distinct and which are illustrated in their most extreme form in the doctrine of mono-referentialism. Standard devices for triggering opacity or securing transparency will not work; contexts that one would normally expect to be transparent will be opaque; and the mechanism by which opacity is achieved will simply mirror the standard mechanism of reference. The fact that these difficulties can so readily be understood to be the product of conflation provides yet another reason for preferring the pluralist view. We may conclude that the monist's attempt to undermine the argument from Leibniz's Law for the nonidentity of coincidents is an abject failure. The argument should be allowed to stand; and we can therefore be spared both the bad metaphysics that arises from not accepting its conclusion and the bad linguistics that arises from the need to see it as invalid.<sup>38</sup>

### References

Baker, L. R. [97] "Why Constitution is not Identity," *The Journal of Philosophy* 94, pp. 599-621.

---

<sup>38</sup> I wish to thank the participants of a seminar at Princeton, of a talk at UCLA, of the Metaphysical Mayhem conference of 2001, and of the SALT conference of 2001 for many helpful comments. I am especially grateful to Rogers Albritton, Ruth Chang, Cian Dorr, Hartry Field, Mark Johnston, David Kaplan, Gideon Rosen, Stephen Schiffer, Dean Zimmerman, and an anonymous referee for *Mind*.

- Burke, M. B. [80] "Cohabitation, Stuff and Intermittent Existence," *Mind* 89, pp. 391-405.
- Burke, M. B. [92] "Copper, Statues and Pieces of Copper: A Challenge to the Standard Account," *Analysis* 52, pp. 12-17.
- Burke, M. B. [94] "Preserving the Principle of One Object to a Place: A Novel Account of the Relations Among Objects, Sorts, Sortals, and Persistence Conditions," *Philosophy and Phenomenological Research* 54, pp. 591-624. Reprinted in Rea [97].
- Carnap R., [47] 'Meaning and Necessity', Chicago: Chicago Univ. Press.
- Doepke, F. [82] "Spatially Coinciding Objects," *Ratio* 24 (1982), pp. 45-60. Reprinted in Rea [97].
- Fine K., [89] 'The Problem of De Re Modality', pp. 197-272 of 'Themes from Kaplan' (ed. J. Almog, J. Perry, H. Wettstein), Oxford: Oxford University Press.
- Fine K., [90] 'Quine on Quantifying In', in 'Proceedings of the Conference on Propositional Attitudes' (ed. Anderson, Owens), CSLI, 1-25.
- Fine K., [82] 'Acts, Events and Things', in 'Language and Ontology', Vienna: Holder-Pichler-Tempsky), 97-105.
- Fine K., [99] 'Things and Their Parts', *Midwest Studies in Philosophy XXIII*, 61-74.
- Fine K., [00] 'A Counter-example to Locke's Thesis', *Monist* 83.3, 357-61.
- Gallois A., [98] 'Occasions of Identity: A Study in the Metaphysics of Persistence, Change and Sameness', Oxford: Clarendon Press.
- Geach P., [80] 'Reference and Generality', 3<sup>rd</sup> edition, Ithaca: Cornell Univ. Press.
- Gibbard A., [75] "Contingent Identity," *Journal of Philosophical Logic* 4 (1975), pp. 187-221. Reprinted in Rea [97].
- Griffin N., [77] 'Relative Identity', Oxford: Clarendon.
- Gupta A., [80] 'The Logic of Common Nouns', New Haven: Yale University Press.
- Heller, M., [84] 'Temporal Parts of Four-dimensional Objects', *Philosophical Studies* 46, pp. 323-34, reprinted in Rea [97], 320-32.
- Heller, M. [90] *The Ontology of Physical Objects: Four-Dimensional Hunks of Matter*, Cambridge: Cambridge University Press.
- Heller, M. [92] "Things Change," *Philosophy and Phenomenological Research* 52, pp. 695-704.
- Horgan T. [93] 'On What There Isn't', *Philosophy and Phenomenological Research* 53, 593-700.
- Johnston, M. [92] "Constitution is not Identity," *Mind* 101, pp. 89-105. Reprinted in Rea [97].
- Jubien, M. [96] "The Myth of Identity Conditions," in *Philosophical Perspectives* 10, *Metaphysics*, pp. 343-356.
- Kaplan D., [69] 'Quantifying In', from 'Words and Objections: Essays on the Work of W. V. Quine' (ed. D. Davidson and J. Hintikka), Dordrecht: Holland: Reidel, pp. 178-214, reprinted in 'Reference and Modality' (ed. L. Linsky), Oxford University Press (1971), pp. 112- 144.
- Kaplan D., [86] 'Opacity', in 'The Philosophy of W. V. Quine' (ed. L. E. Hahn and P. A. Schilpp), La Salle, Ill: Open Court.
- Laycock H. [72] 'Some Questions of Ontology', *Philosophical Review* 81, pp. 3-42.
- Levey, S. [97] "Coincidence and Principles of Composition," *Analysis* 57, pp. 1-10.
- Lewis D., [71] 'Counterparts of Persons and Their Bodies', *Journal of Philosophy* 68, pp. 203-11.
- Lewis, D. [93] "Many, but Almost One," in *Ontology, Causality, and Mind*, eds. Keith Campbell,

- John Bacon, and Lloyd Reinhardt. Cambridge: Cambridge University Press, reprinted in Lewis, *Papers in Metaphysics and Epistemology*.
- Lewis, D., [86] 'On the Plurality of Worlds', Oxford: Basil Blackwell.
- Lewis, D. [93] *Papers in Metaphysics and Epistemology*. Cambridge: Cambridge University Press.
- Lewis, D. [88] "Rearrangement of Particles: Reply to Lowe," *Analysis* 48.2 (1988), pp. 65-72.
- Lewis, D. [76] "Survival and Identity," in *The Identities of Persons*, ed. Amelie O. Rorty University of California Press, 1976. Reprinted in Lewis's *Philosophical Papers*.
- Myro, G. [86] "Identity and Time," in *The Philosophical Grounds of Rationality*, eds. Richard E. Grandy and Richard Warner. New York: Clarendon Press. Reprinted in Rea [97].
- Noonan H., [91] 'Indeterminate Identity, Contingent Identity and Abelardian Predicates', *Philosophical Quarterly*, XLI, 183-93.
- Oderberg D. S., [96] 'Coincidence under a Sortal', *Philosophical Review*, cv2, 145-71.
- Quine, W.V., [61] 'Reference and Modality', in 'From a Logical Point of View', New York: Harper, pp. 139-57.
- Quine, W.V., [69] "Ontological Relativity," in *Ontological Relativity and Other Essays*. New York: Columbia University Press.
- Rea, M. C. [00] "Constitution and Kind Membership," *Philosophical Studies* 97, pp. 169-193.
- Rea, M. C., [97] 'Material Constitution: A Reader', New York: Rowman & Littlefield.
- Rea, M. C., [98] "Sameness without Identity: An Aristotelian Solution to the Problem of Material Constitution," *Ratio* XI, pp. 316-328.
- Rea, M. C., [97] "Supervenience and Co-Location," *American Philosophical Quarterly* 34, pp. 367-375.
- Robinson, D., [82] 'The Metaphysics of Material Constitution', Ph. D. Dissertation, Monash University.
- Robinson, D., [85] "Can Amoebae Divide Without Multiplying?", *Australasian Journal of Philosophy* 63, pp. 299-319.
- Robinson, D. [82] "Re-Identifying Matter," *The Philosophical Review* 91, pp. 317-341.
- Saul, Jennifer [97] "Substitution and Simple Sentences", *Analysis* 57, 102-8.
- Sider, T., [96] "All the World's a Stage," *Australasian Journal of Philosophy* 74, pp. 433-453.
- Sider, T., [99] "Global Supervenience and Identity across Times and Worlds," *Philosophy and Phenomenological Research* 59, pp. 913-937.
- Sider, T., [00] "Recent Work on Identity Over Time," *Philosophical Books* 41, pp. 81-89.
- Sider, T., [01] 'Four Dimensionalism', Oxford: Clarendon Press.
- Simons, P. M., [87] 'Parts: A Study in Ontology', Oxford: Clarendon Press.
- Sosa, E., [99] "Existential Relativity," *Midwest Studies in Philosophy* XXIII, pp. 132-143.
- Sosa, E., [87] "Subjects, Among Other Things," *Philosophical Perspectives* 1, *Metaphysics*, ed. James E. Tomberlin. Atascadero, CA: Ridgeview, reprinted in Rea [97].
- Thomson, J J., [98] "The Statue and the Clay", *Noûs* 32, pp. 149-173.
- Unger P., [80] 'There are no Ordinary Things', *Synthese* 41, 117-54.
- van Inwagen, P. [81] "The Doctrine of Arbitrary Undetached Parts," *Pacific Philosophical Quarterly* 62, pp. 123-137, reprinted in Rea [97].

van Inwagen, [90]. *Material Beings*. Ithaca: Cornell University Press.

Wiggins, D. [68] "On Being in the Same Place at the Same Time," *Philosophical Review* 77, pp. 90-95.

Wiggins, D. [80] *Sameness and Substance*. Cambridge, Massachusetts: Harvard University Press.

Zimmerman, D. W., [95] "Theories of Masses and Problems of Constitution," *Philosophical Review* 104, pp. 53-110.