## THE PROBLEM OF NON-EXISTENTS

## Kit Fine

#### I. INTERNALISM

University of Michigan

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nume and Parso great	paper has benefited from the conversations and writerous people. I owe a special debt of thanks to Tim McKen Walton for many illuminating discussions and to lons, whose work first aroused my interest in the subject debt is to my wife, without whose patience our md have become a non-existent.	Carthy Ference ct. My
A. Introduction		

are none. But even if this is granted, we may still ask what they are like, just as the materialist may consider the nature of sensations or the nominalist the nature of numbers

On this further topic, there seem to be three main divisions of thought, which may be respectively labelled as:

- (i) platonism/empiricism;
  - (ii) literalism/contextualism;
  - (iii) internalism/externalism.

Let me attempt a rough characterization of these divisions. More refined formulations will come later. On a platonic conception, the non-existent objects of fiction, perception, belief and the like do not depend for their being upon human activity or upon any empirical conditions at all; they exist, or have being, necessarily. Under an empirical conception, on the other hand, these objects are firmly rooted in empirical reality; they exist, or have being, contingently. On an extreme conception of this sort, these objects are literally created and are brought into being by the appropriate activity

- either of or within the agent. On a literalist view, Sherlock Holmes literally has the
- properties of being a detective, of living at Baker Street,
- of smoking opium, and so on. For the contextualist, on
- the other hand, it is not true, and perhaps even false,
- that Sherlock Holmes has these properties. What is true is that he has these properties in the appropriate stories (the 'context').
- I used to contrast literalism with ellipsism. For the antiliteralist typically claims that the sentence 'Holmes is a
- detective' is, when used to express a truth, elliptical for
  - the sentence 'In the story, Holmes is a detective'. But even if the first sentence is used in these cases to express
  - the proposition expressed by the second sentence, this
  - is no ordinary case of linguistic ellipsis (as when we say
  - that 'John will' is elliptical for 'John will come'). And therefore I prefer to contrast literalism with contextualism.

Non-existents lead a double life. On the one hand, they have certain properties within the contexts in which they appear; they love and hate, thrive and fail, and live their varied lives. On the other hand, they also relate to the real world; they are created by authors, read by readers, and compared, for better or worse, with one another and with what is real. According to internalism, a non-existent may be individuated purely in terms of its internal properties, in terms of those properties which it has within the contexts in which it appears. It is as if our only access to the object was through the worlds created by those contexts. According to externalism, on the other hand, a non-existent

## A1. Outline

The main philosophical question about non-existents is whether there really are any. My own view is that there may be individuated purely in terms of its external properties, in terms of those features that are external to the contexts in which it appears. In this case, it is as if our only access to the object was through the real world and not the various worlds of its contexts. On a typical internalist view, Holmes would be individuated in terms of the properties of being a detective, of living at Baker Street, etc. On a typical externalist view, Holmes would be individuated in terms of his name or perhaps in terms of Conan Doyle's first inkling of him.

It should not be supposed that internalism implies literalism. A philosopher who holds to both doctrines may individuate non-existents directly in terms of the properties they have in their contexts. The internalist who is anti-literalist cannot do this. But he can individuate the objects in terms of the properties of possessing a certain attribute in a context. These complex properties may themselves then be taken to provide the appropriate internal features of the objects. One should also not make the common mistake of conflating literalism with the view that there are or really are non-existents. Perhaps the line of reasoning is that with contextualism the truth of 'Holmes is a detective' may be explained in terms of an implicit in-the-story operator and without appeal to any reference for 'Holmes', but that without contextualism the truth of the sentence will require a reference for its subjectterm. However, neither part of this argument is particularly compelling; there are other uses of fictional names whose referential role the contextualist cannot so easily dismiss and there may be other ways for the literalist to get rid of non-existents. So at least in principle, the distinction between literalism and some form of commitment to non-existents should be recognized. The three divisions are not, of course, exhaustive of the questions in the area. There are related issues. For example, platonism could be regarded as a more general doctrine of which only one strand concerned the necessary being of non-existents. Other strands might then include the question of their being abstract or the question of their being some sort of constructed entity. Again, there are other issues altogether. There is the question, which does not fit easily into our classification, of whether someone who accepts fictional entities must say that they exist or whether he can allow them to possess a broader concept of being. However, the present divisions do represent interesting and important differences in the prevailing theories of nonexistents and serve well as a preliminary scheme of classification.

All in all, the three divisions provide for  $8 (= 2^3)$  combinations of positions. Each, I think, is coherent, but some are more natural than others. For example it is natural, though not necessary, for the 'platonist' to accept internalism and for the 'empiricist' to accept externalism; for the means by which the objects are individuated will naturally be taken to provide conditions for their existence or being.

My own view on these questions is given by empiricism, contextualism and externalism, not that this

is a common combination in the literature. This view will be defended in the second part of this paper. In the present part, I am concerned to discuss a view that combines internalism with contextualism and platonism; and in the third part, I shall discuss the literalist position, mainly in association with platonism and internalism. I have not attempted systematically to consider all of the possible combinations of position. I have only looked at the more prominent or plausible of the views, though what I say on them should throw light on what is to be said of the others.

The plan of the present part is as follows. In section A2, I discuss general methodological issues facing any philosophical study of nonexistents and, in particular, defend the claim that one can say what they are like without presupposing that there really are any. In section B, I try first to delineate more precisely the subjectmatter of our theories and then to describe the problems of providing identity and existence conditions with which any such theory should deal. In section C, I give an initial formulation of an internalist theory, which is successively refined in section D. Finally, in section E, I give two major criticisms of the theory as thus developed. A more detailed account of each section is given in the list of contents.

It is of the greatest importance to note that the present part does not contain my own views on the subject. It is only in the last section of this part that the internalist position is criticized, and it is only in the second part of this paper that my own, more positive, views are developed.

I have begun my account with the consideration of a false theory for a variety of reasons. First, the theory has been developed in order that it may more effectively be criticized. Since the internalist theory is a very natural one, it is of great interest that its more promising formulations are still open to criticism. Second, even though the internalist theory is incorrect, it has theoretical advantages over certain views further removed from my own and therefore serves, indirectly, to undermine those other views. Third, many of the difficulties faced by an internalist theory are ones that face any view, and so the discussion of the solutions in the present case should suggest solutions in the other cases. Finally, the internalist theory, though not correct as a theory of objects, may correctly be interpreted as a theory of the contents of those objects and, as such, may usefully be grafted onto the more satisfactory theory that is to follow.

In stating the present theory, I have taken pains to make the exposition accessible to the general reader. For this reason, elementary points and distinctions in metaphysics and the philosophy of language have sometimes been expounded at length, and I hope that the experts in these fields will bear this in mind. For the same reason, I have not tried to formalize the theory; most of the technical remarks are tucked away in footnotes, where they may safely be ignored. However, it is fairly clear from what I say how the theory, or various parts of it, are to be formalized; and I certainly think that this is something that should be done. It is only in

this way that one can state and prove with mathematical precision what, for the informal theory, must remain at the intuitive level.

There are various problems I have not considered, either in this part or the others. I have not tried to spell out the semantics for the in-the-story operator, nor the conditions for de re attribution to non-existents, nor the conditions for their reidentification from one context to another. I have not considered any of the traditional questions of aesthetics bearing on the interpretation or evaluation of works of art. And I have only touched incidentally on connected topics in the philosophy of language and metaphysics. I do not wish to deny that these problems have their interest; they are merely the casualties of some attempt at containment. In this part I have also not considered the views of others in the field. Perhaps the views closest to mine are Howell's '79 and van Inwagen's '77; but in many respects I differ from these authors. The views furthest from mine are those of the literalist school, including Castañeda and Rappaport, on the one hand, and Parsons on the other. It is in the third part of the paper that I give more detailed attention to these other views.

# A2. Methodology

Let us distinguish two tasks: one the task of formalizing, and of otherwise getting straight, the principles implicit in our ordinary talk of certain objects, the other the task of saying whether there really are such objects. The first is the question of systematizing an intuitively given body of data; the second is the question of discovering the ontological ground for that data. In mathematics, for example, we may distinguish the task of formalizing intuitive number theory (something done by Peano's postulates) from the question at issue between the platonists and nominalists, as to whether there really are numbers. Or again, we may distinguish the task of systematizing the principles implicit in our ordinary talk of material objects (something that has not properly been done) from the question at issue between the realists and idealists as to whether there really is an external world.

These two tasks are more or less independent of one another. Two philosophers, for example, may both accept Peano's postulates as an adequate formalization of intuitive number theory and yet differ on the issue of realism; or conversely, two philosophers may agree on the metaphysical issue and yet differ on how a certain part of mathematics is properly to be formalized.

It is important, though, that the nature of the two tasks and their independence be properly understood. I am not suggesting that the data can be intuited independently of and prior to any theory. In the systematization of the data, theoretical considerations will play a significant role. The contrast is not between the data and its theory, but between that theory which is at the level of the data itself and the one that attempts to provide its ontological underpinnings. It is here that the suggested independence exists.

Secondly, it is not as if the one theory belongs entirely to metaphysics and the other not at all. The theory at the level of the data may deal with questions concerning the identity of objects, with their existence conditions and essential properties. These questions are metaphysical in a broad sense of the term, though they may be considered independently of the question of whether there really are such objects. Elsewhere<sup>2</sup> I have called that part of metaphysics whose focus is on what there really is *foundational* and the rest *naive*. Thus the independence of the data is from foundational, not naive, metaphysics.

Finally, it is not being claimed that there is complete autonomy between the data and the ontological theory; for the theory should explain, or otherwise accommodate, the data. This is not to say, however, that the cogency of the ontological position entirely derives from its success in explaining the data. On the contrary, it may have a strong prima facie plausibility that is quite independent of any view as to how the data is ultimately to be explained; and there may be considerations of a different sort altogether in its favour. An ontological thesis is often taken to be equivalent to a claim of reduction; but the reduction or explanation of the data is better regarded as merely one piece of evidence in its favour.

Nor should it be thought that, in cases of conflict, between theory and data, the theory must always give way. Adjudication between theory and data, here as elsewhere, is a delicate matter. But even if some of the intuitive data is ultimately to be given up, it will be helpful to formalize the data prior to any ontological consideration; for it is only in this way that one can grasp the data in toto and the prima facie constraint it imposes on an ontological theory. If then, part of the data is to be given up, one will have a systematic understanding of what must be rejected and what may stay. In such a way, our understanding of intuitionism has been enhanced by the formalization of classical mathematics; for it has thereby become clear exactly what principles in the classical realist position need to be given up. In first approaching the data one should pose as a realist, and only when the act is no longer convincing should the disguise be removed.

In applying these general remarks to the case of non-existent objects, we see the need to distinguish a theory that takes our statements about these objects at their face value and one that attempts to provide some type of ontological underpinning for them. For a variety of reasons, which I shall not go into, many philosophers have been led to underestimate the extent to which our ordinary talk commits us to non-existent objects. It has been denied that we refer to them, express propositions about them, and so on. The possibility of a naive theory has therefore not even been considered.

However, as several philosophers' have recently stressed, we talk about non-existent objects in much the same way as we talk about other objects. We say that a character in Hamlet is a prince, that two characters in Hamlet appear in a play of Tom Stoppard's, that

'Hamlet' refers to Hamlet, and so on. It therefore appears that the possibility of a naive theory, with quantification or other reference to non-existents, should indeed be taken seriously.

At this point, it is appropriate to consider a view of Ken Walton's<sup>4</sup> which, in a way, accepts the data yet disputes the commitment. On his view many apparent claims about non-existents are not literally assertions but merely assertions within a game of make-believe that we play with stories, dramas, films, and the like. Thus what makes these claims acceptable is not that they are true, but that they are appropriate within the game of make-believe.

It is doubtful whether this theory applies across the board to all apparent claims about non-existents. But even where it does apply, Walton faces a problem of systematization similar to that facing the philosopher who takes a more literal view of these claims. For where the one will formalize the principles that are true, the other will formalize the principles that are appropriate to the game of make-believe. Moreover, even if our interest is ultimately in truth, this second project will be of great relevance, since a significant class of truths will be obtained by prefixing the theorems of the formalization with the prefix it is appropriate in the game of make-believe that'. It is in just this spirit that the formalist, who believes that mathematics is a game with symbols, may attempt to formalize the discipline, for he thereby comes to understand what sort of game

Failure to give due recognition to a naive theory of nonexistents has led philosophers into error. For one thing, it has led them to distort the data, to see it in the light of their metaphysical views, and not as it is. One example, concerning reference to non-existents, has already been given. Another example, concerning the creation of non-existents will be considered in section E1.

This lack of recognition has also led philosophers to misconstrue certain problems. A good example is from the philosophy of language. Is 'Hamlet' a proper name and, if so, to what does it refer? The correct answers are: Yes, it refers to Hamlet. But because of their distrust of non-existents, many philosophers have hunted around for another reference for 'Hamlet' or, failing that, have tried to give some other account of how it functions in ordinary discourse. This strikes me as mistaken. The idealist does not deny that the 'Eiffel Tower' is a proper name for the Eiffel Tower, nor the materialist that the sensation name 'S' is a proper name for a sensation. At the level of semantic theory, they accept these facts; it is only at the deeper metaphysical level that they will attempt to account for them in other terms. In exactly the same way, the fictional anti-realist should accept the alleged semantic facts concerning non-existents. Why should the semanticist kowtow to the metaphysical prejudices of the fictional anti-realist and not those of the idealist or materialist? Surely he should remain equally neutral on all metaphysical fronts.5

This confusion of the metaphysical and semantical enterprise is not only methodologically unsound; it also leads to bad theories. Suppose I ask: What proposition is expressed by the sentence 'Hamlet does not exist'? The correct answer, in my opinion, is that it is the *genuinely singular* proposition to the effect that Hamlet has the property of not existing.

However, seeing no alternative, the anti-realist has been tempted to substitute for this proposition another that involves no non-existents as constituents. But first, this obscures the generality of the semantic theory; for one would like to say, on current views, that the use of *all* proper names in sentences yields genuinely singular propositions. And second, the proposed substitution is wrong; for it is always possible that one should believe the proposition expressed by the sentence and yet not believe the substitute.

But, the anti-realist may rejoin, does not the acceptance of propositions with non-existent constituents commit one, ontologically, to non-existents? The answer is no. How does one talk about propositions? By saying that they are true, are believed, are expressed by certain sentences, and so on. As an anti-realist, then, I should show how all such talk, when it involves propositions with non-existent objects, can be paraphrased away or otherwise explained. Thus I should explain in antirealist terms the conditions under which one expresses a singular proposition to the effect that Hamlet, say, does not exist. But these conditions are not necessarily ones in which I express a proposition lacking nonexistent constituents. It is an old saw of reduction that it is contexts as a whole, not individuals, that yield to analysis.

We see, then, that the premature infusion of metaphysics into semantical theory leads one to mislocate the proper place for reduction; this is not in the propositions that the theory posits or uses, but in the statements that the theory itself makes about those propositions.<sup>7</sup>

My main concern in this paper is to develop a satisfactory naive theory of non-existents, though in the second part I also attempt to support the claim that there really are no non-existents. Given that the anti-realist position is so extremely plausible, it may be wondered why I should spend so much time in developing a naive theory. Certainly, the topic of non-existents is not one that should engage our deepest philosophical concerns. But it has an interest beyond that of the merely bizarre. In the first place, its study has certain general methodological advantages. To the extent that it is thought to be obvious that there really are no nonexistents, the study may serve to throw the methods of naive metaphysics into relief; for it will then be clear that there is no real conflict between a naive metaphysics that accepts certain objects and a foundational metaphysics that rejects them. The study is also relevant to the foundational question of whether there really are non-existents. For it will become clear from the naive theory that the standard attempts of explaining away non-existents are inadequate. It will become clear, for example, that non-existents are not possible existents, that they cannot be constructed in any straightforward way from properties, and that they cannot be eliminated in favour of any simple form of existential generalization. The failure of the standard attempts at reduction should then throw doubt on the standard accounts of what reduction is. For how can they be accepted when they are unable to sustain even the most plausible of anti-realist positions? The naive theory is relevant, in addition, to the history of philosophy. For the topic of non-existents has played from Meinong, through Russell, to the present day - an integral role in the development of modern analytical philosophy. By carefully distinguishing between the naive and foundational aspects, it should be possible to obtain a better perspective on this development and of the issues that separated Meinong and Russell. Finally, some of the problems that arise in formulating a satisfactory naive theory are ones that arise elsewhere, particularly the problems of stating identity criteria and of dealing with highly intensional contexts. The solutions to these problems should then carry over to these other areas.

The philosophers who have developed a naive theory of non-existents have usually been realists. It is therefore important to emphasize that I am not. In the last analysis, the whole theory is to be explained away. But by this I do not mean that any statement about non-existents is to be translated into a statement about existents alone. This may be possible, but the ontological claim does not require it. Roughly what the claim requires is *World Actualism*, the doctrine that distinct possible worlds cannot differ merely on non-existents, that any such difference must be consequent upon a difference among the existents. This is a claim whose plausibility is undisturbed by the usual difficulties in setting up an eliminative translation.

## **B.** Preliminaries

## B1. Contexts and Objects

Let us briefly indicate the subject-matter of this paper. Various objects, both existent and non-existent, occur or figure in such things as plays, stories, films, beliefs, imaginings, wishes, dreams and hallucinations. I shall use the technical term *context* for these things in which the objects occur.

My use of the term has little or nothing to do with its use in pragmatics. In particular, I do not count possible worlds as contexts. There is a metaphysical ground for this exclusion; for contexts, as I understand them, are in a world, not alternatives to a world. The nature of this distinction will later become clearer. But there is also a good formal reason for the exclusion; for one of the peculiarities of contexts is that the propositions true in them need not form either a consistent or a complete

set. The special difficulties that this and other peculiarities raise are not ones that arise for possible worlds.

Of the objects that occur in a context, some may be said in a natural sense to be *introduced* in that context. The context is, as it were, their source; and on an empiricist view, we would be prepared to say that the objects derive their being from that context. It is in this sense that the character Holmes was introduced in Conan Doyle's stories and a dream-object (previously unconceived) is introduced in a dream. I shall follow Parsons<sup>9</sup> in calling the objects introduced in a context native to that context and in calling the other objects that occur in the context *immigrant* to that context. I shall extend Parsons' terminology slightly by calling belief-objects, dream-objects, etc. the objects native to beliefs or dreams, respectively, and by calling the *home* context (s) of an object the context (s) to which it is native.

My concern in this paper is with objects of the sort that are introduced in contexts. I take it that all such objects are non-existent. There may, however, be non-existent objects not of this sort. Perhaps numbers do not, in the ordinary sense, exist; but there is no context in which they are introduced. Again, merely possible existents do not exist; yet given that possible worlds are not contexts, and given, as I shall later argue, that these objects are distinct from the other non-existents, there is likewise no context of introduction. Let us agree to use 'non-existent' in a special narrow sense so as to exclude these non-contextual cases. Thus on this usage, some objects that do not exist may not be non-existents.

One naturally supposes that all objects and all contexts are uniform, that what goes for the one goes for the other. However, occasionally it is helpful to distinguish objects and contexts of the mind (beliefs, fantasies, dreams, etc., and their native objects) from what may be called *public* objects and contexts (stories, plays, films, etc., and their native objects). Contexts of the mind, unlike public contexts, are identical to or constituted by certain mental states. Similarly, objects of the mind, unlike public objects, are essentially objects of some mental state.

It is tempting to suppose that all non-existent objects are objects of the mind. When an author writes a story about a character, for example, he first conceives of it in some way and so the object is a native of the conception and not the story. It is only in the relative sense of not being an immigrant of another story that we may say that the object is a native of the story itself.

However, this view overlooks the part convention plays in interpreting a story or context. <sup>10</sup> Following an example of Walton '73, let us consider a game of makebelieve in which globs of mud placed in an orange crate are taken to be pies cooking in a hot oven. Then given that a mud glob is left in the crate for a long time during the game, it will be true in the game as ordinarily construed that the mud pie is burning, even when no one is aware that it is. Now this point concerns propositions of which no one is aware. But a similar point

will also hold for objects. It may be part of the game, for example, that after an hour a pie left in the oven turns to cinders. Under the envisaged circumstances, there will then be an object of the game, viz. the cinders, of which no one is aware.

Of course I do not want to say that all objects native in the relative sense to a story are also native in the absolute sense. Often, perhaps typically, an author will write about an object of his imagination. My only point is that objects from public contexts are not necessarily fated to immigrant status.

The view that all non-existents are of the mind may partly arise from a misplaced anti-realism; for one way of getting rid of non-existents is to suppose that they are really mental entities. It may also be abetted by an ambiguity in the term 'imaginary', for this term may be used narrowly for an object of the imagination or broadly for any non-existent. In any case, the view is to be rejected.

Let us note that two of the previous divisions in view concerning non-existents can be extended to their contexts. One can be platonist or empiricist, holding that contexts either necessarily or contingently exist; and one can be internalist or externalist, holding that they can be individuated either in terms of their internal content (what is true in them) or in terms of their external features. It is natural to extend the uniformity among objects and among contexts to a uniformity between objects and contexts. But this view, though natural, is not necessary. One might, for example, be platonist about belief-objects but empiricist about beliefs, holding that the one had being necessarily while the other existed contingently.

# B2. Identity and Being

There are two problems with which a philosophical theory of non-existents, or any other objects, should deal. They might be called the problems of existence (or being) and identity. The first is the question of accounting for the objects that there can be; the second is the question of accounting for the identity of these objects. One says what there is, the other says what it is. These problems should not be confused with certain others. The problem of existence (or being) is not the previously mentioned ontological question of saying whether there really are certain objects. Rather it is the question of systematically accounting for which of these objects, in the ordinary sense, there are. As such, the answer to the question is compatible either with the claim that there really are or that there really are not any such objects.

The problem of identity, on the other hand, is not the epistemological question of saying how we can identify the object. It is a metaphysical question of what, in the real world, explains the identity of the object. Of course, the properties in terms of which its identity is explained may be epistemologically accessible to us, they may be ones in terms of which we can identify it; but that this be so is not itself part of the problem.

These accounts can be made a little more precise. Let us suppose that we are interested in objects of a certain sort, be they non-existents, sets, or what have you. Let us also suppose that we are given certain properties that, in an intuitive sense, define or help to explain the identity of the objects in question. For the moment, let us not ask what this means. It may help, though, to bear two examples in mind. In the first, the given objects are sets of individuals and the defining properties are to the effect that a given individual belongs to a set. In the second, the given objects are fictional ones and the defining properties are to the effect that an object has a given property in its home story, i.e. in the story in which it was introduced.

Now certain clusters of properties will be satisfied by an object, and others will not. A solution to the existence problem then requires that we say which clusters can consist of exactly those properties that are satisfied by some object. In the first example, this means that we say for which arrays of individuals there will be a set having exactly those individuals as members; and in the second example, it means that we say for which arrays of properties there will be a fictional object having exactly those properties in its home story.<sup>11</sup>

The existence problem has both a positive and negative aspect. On the one hand, we may say, of all the clusters of properties that are exactly satisfied, that they are exactly satisfied. This is the *positive* or *inclusive* aspect. On the other hand, we may say, of all the other clusters, that they are not exactly satisfied. This is the *negative* or *exclusive* aspect. Putting the two aspects together yields a complete account of which clusters are exactly satisfied.

The problem has been stated in somewhat platonic terms. In certain cases, it may be possible to give a more formalistic account. Suppose we have a language in which there are conditions that express the defining properties (these conditions may, of course, be independently identifiable).<sup>12</sup>

Then we require an account of which clusters of those conditions will be exactly satisfied in the intended interpretation and, in so far as our interests are axiomatic, we may aim for a theory whose interpretations will be like the intended interpretation in respect of which clusters are exactly satisfied.

Some of the subsequent discussion may similarly be defused of its platonic content. But I shall not consider, in any systematic way, the extent to which this can be done.

A solution to the existence problem presupposes a class of defining properties. A solution to the identity problem, on the other hand, requires that we find such a class. More exactly, it will consist of an assertion to the effect that the identity of the objects of the sort in question can be explained in terms of the given properties. In the set theoretic case, the assertion will be to the effect that the identity of sets can be explained in terms of their members; and in the fictional case, it will be to the

effect that the identity of fictional objects can be defined in terms of the properties they have in the stories in which they are introduced. Thus whereas in the solution to the one type of problem we claim that all objects can be defined, in the solution to the other type of problem we say which objects are so defined.

But what is it to define or explain the identity of objects of a certain sort? This is a large and difficult question. I shall here confine myself to a few rough and general remarks that will be particularly relevant to the topic at hand. There are many questions, concerning relative identity (explaining A's in terms of B's), the relation to the existence problem, subtleties of formulation, etc., that I shall not discuss.<sup>13</sup>

First, it is necessary to distinguish between explanations of *individuality* and of *identity proper*. (These are my terms; other philosophers may have used them differently). The individuation of an object merely explains the identity of the object *as it is;* an explanation of identity proper, on the other hand, explains the identity of the object *in itself*. As an example, consider how some philosophers have sought to explain the identity of a material thing in terms of its spatial location at a given time. Now certainly they may have thereby explained the identity of the thing as it in fact is (and with its spatio-temporal features, in particular). But they have not thereby explained, in the full and proper sense, what the thing is; they have not said what it is in and of itself.

To *individuate* the objects X, it is at least required that, in each possible world, there be a set P of properties for each actual object x of X such that:

*Uniqueness.* x is the sole object to have all of the properties in P;

*Non-modality.* None of the properties of P is modal; *Non-circularity.* None of the properties of P involves x or any other objects of X.

To give the *identity* of (or to *define*) the objects X, it is required that the Uniqueness condition be strengthened

Individual Essence. The set P is an individual essence of x in the sense that, in each world, an object has all of the properties of P iff it is actual and is identical to x. The non-modality requirement is made in order to exclude the consideration of what goes on in one world from the individuation of an object in another world. We would not want to say that we had individuated the object x in one world if the only difference between x and a distinct object y lay in the properties that they possibly possessed.

The non-circularity requirement is made in order to exclude trivial explanations of identity or individuality, such as 'being the sole object identical to x' or 'being the sole object to belong to {x}'. The sense in which I talk of a property involving an object should be clear from these examples. On a structural account of properties, we may say more generally that a property involves an object x iff x is a constituent of the property; and on other accounts of properties, including the standard one in terms of possible worlds, <sup>14</sup> it is possible to make

some sense of the notion. But even if no general definition is forthcoming, it still seems clear from case to case whether or not a proposed individuation is circular. I do not think that the first three conditions are sufficient for individuation or that all four conditions together are sufficient for explanations of identity proper, since the defining properties should also in some sense be pertinent to or constitutive of the identity of the object. The conditions do determine, however, a minimal or attenuated notion of identity or individuation that is of some independent interest and provides an important guide to the application of the notions in the full sense. For although a class of properties that minimally defines or individuates some objects may not actually define or individuate them, it will tend to show that they are definable or individuable; and often this will be as important as any more specific claim.

In applying the minimal notion itself, it is often helpful to use the concept of indiscernibility. Suppose we wish to explain the identity of the objects of X. Then we can say that one such object x is *indiscernible in* a world w from another such object y in the world v if any nonmodal property, not presupposing the objects of X, that is had by x in w is also had by y in v. The individuability of the objects of X then amounts to the claim that, in any world, any actual object of X is discernible from any other object of X. The definability of the objects of X, on the other hand, amounts to the claim that any actual object of X in one world is discernible from a distinct object of X in another (possibly identical) world. Thus what definability adds to individuability is the claim that an actual object of X in one world is discernible from distinct objects of X in distinct worlds.15 (The reader should be able to reconstruct for himself the proof that X's are definable iff for any objects x and y from X and worlds w and v, x in w is discernible from y in v whenever x is actual in w and y is distinct from x. The proof requires the assumption that the non-modal properties not involving the objects of X (a) include the property of being actual, (b) be closed under arbitrary conjunctions and negation, and (c) be the same from world to world. Condition (c) can be dropped at the cost of some complication to the formulation).

One advantage of the explanation of identity in terms of discernibility is that it enables us to break down the individuation or definition of an object into smaller steps. In the case of non-existents, two significant steps of this sort concern the problems of intra- and intercontextual individuation. The first is the question of distinguishing an object native to a given context from all of the other objects native to that context. The other is the question of distinguishing an object native to a given context from objects native to other contexts. Under reasonable assumptions, the general problem of individuation will reduce to these two special problems. For first, a given non-existent may be distinguished from all existents by the mere fact that it does not exist. In other words, the distinction between existent and non-existent objects may be taken as unproblematic. Now given an object native to a fixed context, that object may be distinguished from the other objects native to the same context by a solution to the intra-contextual problem and from the objects native to other contexts by a solution to the intercontextual problem. Under the assumption, then, that all non-existents are native to some context or another, any non-existent will thereby be distinguished from all other objects.

It is important to distinguish the inter-contextual problem of identification from the cross-contextual problem of re-identification. 16 The latter is the problem of identifying an object as it occurs in one context with that very same object as it occurs in another context. Thus it is essential to this latter problem, though not the former, that we conceive of the object as coming under different presentations (not necessarily in the phenomenological sense). The question, then, is: When are two presentations presentations of the same object? An analogy in terms of possible worlds should make the distinction clear. The inter-world problem is that of distinguishing an individual actual in one world from the distinct individuals that are actual in other worlds. If the same individuals are actual in each world, then this is just the general problem of individuation. The cross-world problem, on the other hand, is that of distinguishing an object, as given in one world, from other objects, as given in other worlds. This is merely the attenuated version of the problem of identity and is clearly significant even when the same individuals are actual in each world and the problem of individuation is presumed to be solved.

For the most part, I shall be concerned with problems of individuation, not re-identification. I do not wish to deny the interest of the latter problem; it merely lies beyond the natural reach of this paper. However, a certain connection between the two types of problem should be noted. Call a presentation of an object in a context of which it is native (immigrant) a native (resp. immigrant) presentation. Now often a solution to the individuation problem will be in terms of native presentations, and in that case it may incidentally enable one to determine when two native presentations are of the same object. Let us also suppose that it is determined when an immigrant presentation is of the same object as a native presentation. Then the general problem of re-identification will have been solved; for given two immigrant presentations, we may determine native presentations of the same object, and then compare these directly. It is for this reason that the problem of re-identification may be formulated as one of finding conditions for immigrancy.

Although I have only considered the case of non-existents, it is clear that similar distinctions will apply to other kinds of objects. In the case of material objects, for example, we may distinguish the problem of individuation (solved perhaps in terms of location at a time) from the problem of identity through time, which is a re-identification question concerning the «presentations» of an object at different times. Again, we may distinguish the individuation of persons (perhaps in

terms of their occupying a single body at a given time) from their re-identification from one experience to another. Or again, we may distinguish the individuation of propositions (solved perhaps in terms of their structure) from their re-identification from one sentence to the next.

Both problems of individuation and of re-identification must be distinguished, of course, from what I have called the problem of identity. Often *the* problem of identity for a given kind of object is taken to be a re-identification problem that is inspired by the attempt to reduce the object to its presentations. I think that this terminology invites confusion and it is not therefore one that I shall use.

## B3. The Identity of Non-existents

Can informative explanations of the identity or individuality of non-existents be given? It cannot in general be supposed that such explanations exist, even when taken in the attenuated sense of the previous section. However, the nature of certain objects may be such that their identity does admit of explanation. As an example, consider sets in the cumulative hierarchy. Each set can be individuated in terms of its members, those members, if sets, in terms of *their* members, and so on, until ultimately the set itself is individuated in terms of individuals. Thus it does follow, from the special nature of sets, that they admit of individuation; and a similar argument can be given, I think, to establish their identity.

When we turn to non-existent objects, they also seem to be individuable. The more obvious counter examples to this thesis fail. As a case in point, consider a story in which it is said that a certain crowd of people surged forward. 17 It might be argued that the members of the crowd are non-existent objects, even though indistinguishable. Yet if this is so, how many such objects are there? Any one answer, as opposed to another, seems quite arbitrary. Let us suppose, then, that the story states that ten people were in the crowd. Still, making the members of the crowd fictitious objects in their own right overlooks the intuitive distinction between a story in which the members have a specific identity and a story in which they do not. In the first case, the question of whether the members are the same objects as those appearing in another story seems to have no basis, whereas in the second case it does.

Still, such considerations are rather special, and it would be preferable to have a general argument for the individuation of non-existent objects, as in the case of sets. It is not that non-existent objects by their constitution are individuable, but something along general lines may be said. For it might be argued, first, that each non-existent can be the de re object of a mental state such as admiration, belief or thought, and second, that it is necessary that each object of a mental state be individuable. As it stands, the argument is not quite right, for in the possible world in which the object is

the object of a mental state, there may exist means of individuation not available in the given world. What is intended by the first premiss is that it should be possible that the object be the object of a mental state even when the means by which it is introduced remain the same. But since there are no other means by which the object can be individuated, it will be individuable in the other world only if it is already.

In favour of the second premiss, it may be argued that this is merely a weak requirement on the de re status of an object. If two objects are indiscernible, then it is impossible for a mental state to be of one object as opposed to the other, and so it is impossible for the state to be of either object.

Some instances of the first premiss are trivial, for the non-existent object may already be an object of a context of the mind, such as a belief, or a dream, or an imagining. However, other objects may be native to public contexts, such as stories or games of makebelieve, and so not be the objects of any mental state. As we have seen, this is because the general conventions for interpreting these contexts may determine a content regardless of whether or not that content is grasped. But the contents thus ascribed are not something that exist independently of all human activity or thought; the whole point of the convention is that it should show us how to interpret the context. Thus no convention, it may be argued, will count as an interpretative one unless it is possible, by applying it, to adopt the appropriate mental attitude towards the content of the context; and this means then that the objects of the context must be able to serve, as they stand, as objects of that attitude.

Note that this argument makes it plausible that non-existent objects should be identifiable in the epistemological sense. Indeed, this conclusion would straightforwardly follow if it were assumed that (necessarily) objects of mental states were identifiable in this further sense. However, this argument from metaphysical to epistemological identifiability is very special to the case at hand and does not presuppose any general conclusion to that effect.

Even if non-existents can be individuated, can an informative explanation of their identity be given? It is not possible, in general, to go from one to the other. It can consistently be maintained, for example, that parcels of matter are individuable in terms of their spatial location at a given time, and yet denied that there is a significant explanation of their identity.

However, there is a special circumstance in which the transition from individuality to identity can be made. For suppose that the objects of X are individuable and that, moreover, two distinct worlds cannot merely differ in the identities of the objects in X. Then the objects of X must have an identity explanation. For take any two distinct objects x and y of X and any two worlds w and v. If w and v are the same, then x and y will be discernible in that world by the individuality condition. But if w and v are distinct, then x and y will be discernible in their respective worlds, for otherwise the two worlds will differ only on the identities of the objects in X.

Now in the case of non-existents, the additional condition holds in a strong from; for worlds that merely differ on the identities of non-existents will agree on existents and hence, by World Actualism, will be the same. Thus, in this special case, the objects will be both individuable and definable.

However, even granted that non-existents are individuable or definable, it is still left open how they are to be individuated or defined. As we have noted, there are two main views on how this can be done:

*Internalism.* All non-existents can be individuated in terms of their internal properties;

Externalism. All non-existents can be individuated in terms of their external properties. 18

But even if not all non-existents are individuable, we shall still need to say how they are to be individuated or distinguished in cases when this can be done. Here we may distinguish two weaker theses:

Qualified Internalism. If two non-existents are distinguishable at all, then they are distinguished by an internal property;

Qualified Externalism. If two non-existents are distinguishable at all, then they are distinguished by an external property.

Given:

The Individuation Thesis. All non-existent objects are individuable;

then the qualified versions of internalism and externalism will be equivalent to their respective unqualified versions. But without the individuation thesis, the qualified theses will have independent interest.

Among the various options for individuating non-existents, there is a great deal to be said for internalism. Often a non-existent may be picked out in terms of a name or other external mark. But given that general conventions may determine the objects of a context quite apart from our conception of them, it may be doubted that there must always be some mark of the object. In such a case, there might then be only internal means of individuating the object.

But there are other reasons for espousing internalism, even granted that the identity of non-existents can always be given in external terms. One such reason concerns what one might call the ultimate explanation of identity. Given that the character Holmes is introduced in a certain way, it may be that no other object could be introduced in that way. But the means of introduction, it may be argued, do not provide the ultimate explanation of the identity of the object, for it is only because these means also introduce a certain content that they serve to pick out the object at all. It is the content that directly explains the identity of the object; the means of introduction only explain the identity indirectly, through the content.

A related reason concerns the briefly mentioned condition of pertinence on explanations of identity. It is natural to suppose that this requires, in part, that the defining properties give a stable or rigid feature of the object. That is not simply to say that the properties should be essential; for this can be true even though the

features in virtue of which the object possesses the properties vary from world to world. Rather, the possession of the property should itself require a constant feature of the object.

Now it is plausible to suppose that the external properties do not give stable features of the object in this sense. After all, could not an author have used a different name for the same character (especially if it is no part of the story that the character has that name)? On the other hand, it seems clear that the internal properties do provide stable features of the object and so this provides an additional reason for espousing the internalist position.

A final reason is that, under a natural platonic stance, non-existent objects are merely constructs from the properties they have in stories. But such a view immediately suggests an internalist position.

Internalism, then, is an attractive doctrine and, for this reason, I shall push it as far as it will go. However in the end, it will turn out that such a theory is inadequate and that the arguments for both internalism and the individuation thesis will have to be rejected. We will then be led to give a completely different account of the conditions under which non-existent objects can be individuated, one that leads not to internalism but to a qualified form of externalism.

# C. An internalist theory

## C1. The Rudiments

In the next two sections I shall present a preliminary version of a naive theory of non-existent objects. In the subsequent sections I shall show how the theory is to be modified in the light of various objections. It might be thought perverse that an imperfect theory should be presented at the start; but it is only as a response to criticism that the final theory is best appreciated.

Three kinds of theory for non-existents may be distinguished; for one may deal with the objects from a particular kind of context, such as beliefs, dreams or stories, or with the objects from all contexts or, finally, with the relationship between objects from different kinds of contexts. It is natural to treat the theory of a single kind of context as representative of the general case, and so the theories under the first two heads would collapse to essentially one case. I think there are dangers in treating all contexts and their objects on a par, for even when the principles are the same the grounds for them may be different. However, since it would be awkward to deal separately with each kind of theory, I shall concentrate on the case of stories and their contexts, while indicating, on the side, the important disanalogies and relationships to the other cases.

For the particular case of stories, it will be convenient to adopt a special terminology for the objects under consideration. Those objects that occur in stories, whether as natives or immigrants, will be called *characters*, while those objects that are native to stories

will be called *fictional*. Thus all fictional objects will be characters, though not vice versa.

The theory of fictional objects will be divided into two parts, the *rudimentary* and the *extended*. Roughly speaking, the rudimentary part deals with the structural relations holding between stories and the objects native to them, quite independently of considerations of content; whereas the extended part also deals with questions of content. The nature of the distinction will become clearer once the two parts of the complete theory have been presented.

The rudimentary theory is based upon five primitive non-logical notions: first, the categories of objects and of stories; secondly, the property of existence; and lastly, the relations of an object occurring in and being native to a story. The three main axioms are:

N(ativity) O(ccurrence). Any object native to a story occurs in that story;

*C(ontext) U(niqueness).* Each object is native to at most one story;

N(on)-E(xistence). No existent object is native to a story.<sup>19</sup>

I take it that the axiom NE is unproblematic. Existent objects are not, in the relevant sense, introduced by stories; they are already there. If we were to supply a context for existents, it would be the actual world, and not a story. The truth of NE is particularly clear on the creationist view. For then the native objects are those that are created in the act of creating the story; and although existent objects may be created, it is not in this way.

Axiom CU is much more problematic. One difficulty, considered by Parsons, is of an object being native to both a story and its sequel. Given the intuitive notion of being native to or introduced in a story, it is often difficult to say, in the course of fiction concerning an object, when it is native and when it becomes an immigrant. Later I shall offer some modal advice on this question. But it does seem plausible that, in certain cases, an object will be native to the combined context of a story and its sequel and not merely to the narrower context of the original story. But then, in contradistinction to CU, the object will be native both to the original story and to the sequel.

This difficulty can be overcome by distinguishing between stories and their parts. A novel with several chapters is not a collection of short stories; each chapter tells part of the story told by the novel and not an entire story in its own right. The propositions true in stories do not present themselves to us as an undifferentiated mass. Rather, there are certain natural divisions that correspond to the entire stories. Any subdivisions then correspond to the story parts.

An author might present a given text both as a novel and as a collection of short stories. Such a double classification might have real aesthetic significance in terms of how the text was to be understood and judged (as well as providing a simple way of enlarging the author's corpus). But even here, we should distinguish between the short story, as told by part of a text, and

the story part, as told by the corresponding chapter. For it is essential to the story part, though not the short story, that it be part of the story as told by the whole text. In addition, the characters in the short story will be, in general, but attenuated versions of those in the story part.

Normally, the boundaries of a story are marked by the covers of a book.<sup>20</sup> But this is a convention that might be, and often is, overlooked. A novel may be issued in a serial form or several novels be bound in one volume. We can say, then, of our «story» and its sequel, that a single object will be native to them both only in case they constitute parts of a more comprehensive story. Thus despite appearances, there is only one story in the example.

Another difficulty for CU arises from the example, made notorious by Borges '56, of two authors independently telling stories with the same content. It might then be argued that the stories are different and yet the characters native to them are the same. However, I am inclined to believe that the counterexample is not convincing, either on a creationist or a platonist view.

On a creationist view, it is plausible to suppose that the objects native to the two stories are distinct. For both sets of objects are created by the different authors. Now suppose one story is created before the other. How then can one of the authors create his characters, given that they already have been created? Moreover, what each author creates does not seem to depend upon what the other author does, and so even in the cases in which the stories are simultaneously created, we should conclude that the characters are distinct.<sup>21</sup>

A platonist would not accept this argument. He would probably say that the authors just happened to hit upon the same characters. But he would probably contend, for similar reasons, that the stories were also the same. So depending upon whether we are creationist or platonist, we either get distinct characters or the same stories, but not the required combination of the same characters and distinct stories.

It must be admitted, though, that on certain views the required combination would arise. If, for example, one were platonist about non-existents but empiricist about contexts, or at least some contexts such as beliefs and dreams, then one might well say in such cases that the objects were the same but the contexts distinct. I am not myself attracted to such an intermediate position; but if one were, principle CU would have to go.

A somewhat similar case is that in which the same story is retold, perhaps with some slight variation in content; for then one might argue that the stories, the original and the retelling, are distinct and yet the characters the same. However, in this case it would be more plausible for either the creationist or platonist to contend that the stories are the same. This means, though, that the identity of the retold story will be fixed by the identity of the original story and not its own internal or external features.

A more serious case is the following. Suppose that an author concurrently writes two different stories about the same character, one who is not real or immigrant from another context. There would then seem to result a single object native to two distinct stories. This would be a problem as much for the platonist as the creationist, for since the stories may differ in content he would have no special reason to suppose them the same.

One possible objection to this example is that the author has, in reality, written two parts of a more comprehensive story. But although he may do this, he does not have to. This is especially clear in the case of an artist concurrently painting two pictures of the same object, for there is then no temptation to suppose that each picture must be part of a more comprehensive picture.

Another objection is that the objects of the two stories or two paintings are, in reality, distinct and that, in particular, the artist's intention to be painting or writing about the same object is not sufficient, in normal circumstances, to guarantee that the intention is fulfilled. I am inclined to think it is, at least when the intention is a primary one. But even if it is not sufficient, it is still plausible to suppose, whatever the criteria of identity are, be they public convention or something else, that they should not exclude the common identity of the objects in the sort of cases under consideration.

Even if it is granted that there is a single object, it might be argued that it must be immigrant to one or other of the contexts. This may not be clear in the case at hand; but again, given whatever it is that determines native status, we may suppose that the two contexts should be symmetric in this regard.

Nor need these questions of identity or native status be idle metaphysical ones. There may be real aesthetic point in making one decision rather than another. Two paintings of a single object may be used to illustrate difference of perspective, or of mood, or what have you. If, in addition, the single object is native to one work but not the other, then the second work is, in a certain sense, derivative from the first; unlike the first work, it cannot stand on its own but must be evaluated in the light of the other work. On the other hand, if the single object is native to both works, then they form a unity in which each work has equal status.

These aesthetic points, moreover, are reflected by the modal facts. Thus in case the single object is native to both works, each work cannot exist without the other. But if the object is native to one work and not the other, then it may well be possible that the one can exist without the other.

A final objection to the example is that even if there is a single object it will be an immigrant from some context of the mind. But we can imagine that there are general conventions governing the interpretation of 'studies in pairs' and the cases in which a single object will be native to both. Normally, the creator will be aware of the single native object; but in certain cases he may not. It is interesting to note in this regard that similar prob-

lems arise for contexts of the mind. Consider two children who mistakenly take a shadow to be of a monster who is going to attack them. Then certainly there is a non-existent monster that each child believes to exist; under normal circumstances, the monster will be the same for each child; and if the monster does not originate from a story-book or elsewhere, but from within the given situation, he will then be a native to each child's belief.

I think that these last examples work and that therefore CU must go, both for stories and for the other sorts of context. There is, however, a technical device for restoring its truth. Just as stories have parts, they may also be compounded to form story compounds. We may then say that x is native to s in the technical sense if s is the compound of all stories to which x is native in the intuitive sense. If story compounds are then also counted as stories in the technical sense, it will then be a matter of definition that an object is native to at most one story.

The other cases can be treated in the same way. Thus in the child-monster case, we may say that the monster is native to the belief of the children, though not the individual belief of each child (there is a natural use here for a compound belief), and in the double painting case, we may say that the object is native to the paintings, as a compound, though not to the individual painting.

There is some technical convenience in being able to talk of the unique context to which an object is native and, accordingly, CU will sometimes be retained under the technical construal. However, in the last analysis, the proper formulation of principles will be impossible under this construal, and it will then be important to formulate the principles directly in terms of stories or contexts in their ordinary sense.

Related to, but independent of, CU is the question of whether an object can be native to two different *sorts* of context. If it could not, then we could talk without ambiguity of the type of a non-existent, as its being an object of a dream, or fiction, or what have you, depending upon the sort of context to which it is native. However, I do not think the type of context need be unique. Consider the child who is afraid of a nonexistent monster. Then the child may also believe that the monster is going to attack him and that belief may, in a natural sense, be partly constitutive of the fear. It then seems plausible, in case the monster is native to the fear, that it is also native to the belief.

The nature of certain sorts of context may be such that they exclude a common native object. Perhaps the same object cannot be native to both a dream and a film or to a belief and an imagining. But this is not a question we shall discuss.

There is one other formal principle that might be laid down. The objects in different stories will exhibit certain patterns of nativity and immigrancy. Such a pattern is depicted below, with the native objects of each story being circled.







It may be wondered whether any formal constraint can be imposed upon the patterns that might in this way be exhibited. Now one natural constraint here is *Foundation*. Say that one story s *derives from* another t if some object immigrant to s is native to t. Then the foundation principle states:

There is no infinite sequence of stories  $s_1$ ,  $s_2$ ,  $s_3$ ,... (not necessarily all distinct) such that  $s_1$  derives from  $s_2$ ,  $s_2$  from  $s_3$ , and so on.

There are, however, two ways in which this principle can fail. <sup>22</sup> First, it may be that the object  $x_1$  is immigrant to  $s_1$  yet native to the earlier story  $s_2$ , that  $x_2$  is immigrant to  $s_2$  yet native to the earlier story  $s_3$ , and so on, ad infinitum. This example requires, under normal assumptions, that time stretch back indefinitely in the past, but would otherwise not appear to involve any difficulty in principle.

Second, recall the artist who concurrently paints two pictures of the same native object. We can now imagine that each picture is of two objects x and y, that he first paints x in picture 1 and y in picture 2, thereby making them native to their respective pictures, and that he then paints y in picture 1 and x in picture 2 not as natives but immigrants. Then each picture will derive from the other, giving a counterexample of the form s, t, s, t,... Similar examples may be constructed for the other public contexts and, with sufficient ingenuity, also for the contexts of the mind.

Although the foundation principle might appear to be of only recondite technical interest, its failure will later prove decisive in rejecting certain natural constructive conceptions of contexts and their objects.

I have so far only considered stories and their objects. But on a theory for other sorts of contexts, such as beliefs or dreams, analogous principle should be laid down. On a general theory, it should also be asserted that:

Each non-existent object is native to at least one context.

According to this principle then, there would be no non-existents that did not originate in some context or another. Nor is the truth of this an accident. For the rationale for having non-existent objects is to explain the de re content of stories, beliefs, and the like; apart from such contexts, they would have no use.

## C2. The Extended Theory

The language of the extended theory contains three additional primitive notions. One is the category of properties. The other two are relations of copula, the *literal* and *story-relative* copula. The first holds between an object and a property when the object has the property; the second holds between an object, property and story when the object has the property in the story. In formulating the theory for the other sorts of contexts, analogous primitives should be chosen. It is important, however, that these primitives be properly understood. Suppose I conceive of a wingless horse.

Then it may be argued that it is not thereby necessary that I conceive of the wingless horse that it is a wingless horse or, indeed, that it have any properties at all. Now in such a case, we may say that it is true in the context of the conception that the object is a winged horse. Thus that this proposition is true in (or of) the context will not require that I conceive it to be true. If, however, there are contexts that are not in even this weak sense propositional, then this will create difficulties for the internalist account (since there will be no content in terms of which to characterize the objects), though not for the externalist account that is later to be developed.

The axioms of the extended theory will fall into two groups, one dealing with objects and the other with properties. The axioms for objects are:

Object Abstraction (1). For any condition  $\phi$  on properties, there is an object and a story such that the object is native to the story and has exactly those properties in the story that satisfy the condition  $\phi$ ;

Object Identity (1) If objects x are native to the stories s and t respectively, then x = y iff x has exactly the same properties in s as y has in t.<sup>23</sup>

In the formulation of OA, I have talked rather loosely of a property *satisfying* the condition  $\phi$ . I intend of course that OA should be an axiom-scheme; and when later I talk of conditions, the axioms or principles in question are to be similarly understood. I shall also sometimes talk of classes (in the sense of NBG class theory) in place of conditions.

According to OA there is, for any condition on properties, a story in which exactly those properties satisfying the conditions are attributed to a native object; and according to OI, objects to which are attributed the same properties in their home stories are the same.

Both axioms may be re-formulated in terms of what I call the *fictional*, as opposed to the *literal*, copula. This holds between an object and a property when the object has the property in some home story. Given Context Uniqueness, this story must be unique and so OA and OI may be re-expressed by:

OA(1') For any condition  $\phi$  on properties, there is an object x such that x fictionally possesses a property iff that property satisfies the condition;

OI(1') The fictional objects x and y are identical iff x fictionally possesses exactly those properties fictionally possessed by y.

As introduced, the fictional copula is a defined term, explained in terms of the nativity relation and the story-relative copula. However, it may also be introduced as a primitive and then large parts of the theory can be formulated purely in terms of the literal and fictional copulas, without any aid from the nativity relation or the story-relative copula. Considerable interest attaches to such a formulation, both in itself and as a basis for comparison with other theories. I shall not systematically attempt such a formulation, but shall occasionally use the fictional copula when it is convenient. It is important to note, though, that on my theory, unlike others, there are not two forms of primitive predicational tie between objects and proper-

ties; there is but one copula, strictly so-called, and then various copula-like relations.

The abstraction and identity axioms for objects appear to solve, in the most direct and obvious manner, the problems of being and of individuation for fictional objects: for the first says what fictional objects there are; and the second says when they are identical. Moreover, these axioms naturally suggest an internalist and platonic theory according to which fictitious objects are actually constructed out of the properties they fictionally possess. On the most straightforward theory of this sort, the objects would be identical or, in some strong sense, identifiable with sets of these properties. However, as we shall later see, there are great difficulties both in the proposed solutions to the problems of identity and being, and in the conception of objects.

Let us now consider each axiom in turn. The identity axiom may be broken down into two other principles: OI(1)(i) If x and y are native to the same story s and have the same properties in s, then they are the same: OI(1)(ii) If x and y are native to different respective stories s and t and if x has in s the same properties that y has in t, then x and y are the same.

The first principle then provides a criterion of intrastory and the second of inter-story individuation.

From the second of these principles and Context Uniqueness can be derived the following criterion for the identity of stories:

The stories s and t are identical if there are objects x and y native to s and t respectively such that x has in s exactly the properties that y has in t.

For, either the stories s and t are identical or, under the stated condition, x and y will be the same by the principle, and so s and t will be identical after all by CU. However, axiom CU is essential to the proof for, as we have seen, it is otherwise possible to adopt radically different criteria of identity for stories and their objects. Also, the above criterion is not complete since some stories contain no native objects. We shall later consider more adequate criteria of identity for stories.

Turning to the abstraction axiom, we see that it is asserted for all conditions  $\phi$ . Now on a platonic conception, there is no immediate difficulty with this. But on an empirical conception, there is the problem that the empirical conditions for the existence of the appropriate story may not have been realized. In the second part, I shall consider how, under such a conception, the axiom for object abstraction is to be modified. But let us note that, even on an empirical view, there is some point in considering a more platonically oriented axiom. For one of the most pressing problems facing a theory of fictional objects is to show that a suitably strong form of object abstraction can be consistently maintained. But in showing this, the empirical character of contexts or their objects is hardly likely to play a significant role; and so the proof of consistency for the platonic system may help to give us the assurance we require of consistency for the 'empirical'

As they stand, the axioms say nothing about what prop-

erties there are and, indeed, are compatible with there being none at all. But without properties, there are no non-degenerate fictional objects that can be shown to «exist» with the help of object abstraction. It is this further need that the second part of the extended theory is designed to serve.

Now the question of how a theory of properties should go is very problematic and not one that we can properly hope to resolve within the confines of this paper. However, let us, for the moment, merely make the common assumption that:

Property Abstraction (1). For any condition on objects there is a property such that an object has the property iff it satisfies the condition.

I shall later discuss this axiom in more detail, but for the moment let us note a striking formal analogy between this abstraction principle and the one for objects. It is an analogy that proves to play a pervasive role in the general study of object theories. To make it precise, let us suppose that the theory is formulated in a language which comprises variables for fictional objects, variables for properties, and the fictional and literal copulas. Given a statement  $\phi$  of such a language, let its dual  $\phi'$  be the result of interchanging the variables for objects and properties and of replacing the literal copula with the converse of the fictional copula, and vice versa. Intuitively, the roles of objects and of properties will be reversed in the dual, with a corresponding change in the copula. In terms of this notion, we see that object abstraction is simply the dual of property abstraction.24

The concept of object-property duality has an interest that extends far beyond the present example. First, we may note that it applies in an illuminating way to other principles. Take, for example, the extensionality principle of identity for properties, viz.:

P = Q iff the objects possessed by P are exactly those possessed by Q.

Then its dual is simply the previous identity axiom for objects. More generally, the result of taking the duals of axioms of what is intuitively a theory of properties will always be an object theory in something like the sense of Meinong.

Second, ours is not the only concept of object-property duality. It is particularly appropriate to a contextualist theory of non-existents. But on a literalist theory, according to which an object literally has all or many of the properties that it fictionally has, it would be more appropriate to let the literal copula be replaced by its own converse in a dual. The dual of property abstraction would then be that, for any condition on properties, some object *literally* had all of the properties satisfying the condition, and the dual of the extensionality principle would be the Leibnizian principle that objects were the same iff they (literally) had the same properties.

This literalist concept of dual gives one of the most natural ways of obtaining a comprehensive object theory. For one may simply add to a theory of properties the duals of all its axioms. The resulting theories are then those that are self-dual in the sense that the duals of all theorems are also theorems.

Unfortunately, any reasonable theory of this sort is inconsistent, for many unproblematic sets of instances of property abstractions will be inconsistent with their duals. For example, if there is a null property (had by no objects) and if each object has some property, it then follows by duality that some object has the null property, which is a contradiction.<sup>25</sup>

From a formal point of view, the different theories of non-existent objects may naturally be viewed as an attempt to reconcile a reasonable theory of properties with its dual. One would like property abstraction to be compatible with a literalist version of object abstraction. But given that this cannot be so, one modifies one or the other or both so that no contradiction can arise, either by restricting the properties that define objects, or the objects over which the properties are defined, or by introducing two forms of the copula, or in some other way.

Finally, we may note the significance of the literalist concept of duality to questions concerning the comparative ontological status of properties and Meinongian objects. It is commonly supposed that properties or sets are unproblematic in a way that objects with arbitrary classes of properties are not. But we may note that a given theory will be consistent only if its dual is and so, in particular, this will apply to a theory of properties or sets and the dual theory of objects.

Now, as we have already seen, both theories cannot be consistently maintained. But from a purely formal point of view, there is no good reason for giving up one rather than another. On what grounds, then, should the theory of properties be preferred? A realist view of properties might provide such grounds. But if, as is commonly supposed, the theory of properties is something that needs to be made out on the basis of a more neutral theory, it is hard to see why the development should proceed in the direction of properties rather than of objects.

I do not wish to hold that there are no grounds for preferring the standard principles concerning properties to their duals, but merely that these grounds are more problematic than has been commonly recognized. In a recent paper, Parsons '79 has complained of an unfair bias in the history of philosophy towards sets as opposed to non-existents. If I am right this complaint has a sort of technical vindication, for the very bias towards sets was a bias against the dual theory.

#### D. Refinements

## D1. Implicit/Explicit Copula

The theory of the last section is a natural attempt at formalizing the principles of an internalist conception of objects. However, even from an internalist perspective, the theory is subject to a wide range of difficulties.

One concerns a subtle but critical ambiguity in the sense of the story-relative copula; another arises from diagonal arguments similar to those that plague the classical theories of properties and sets; and a final difficulty arises from objects, such as Watson and Holmes, that are characterized in terms of one another. We shall consider each difficulty in turn and show how, in the light of it, the theory is to be modified. Let us begin with the question of the ambiguity in the sense of the story-relative copula. It is here necessary to distinguish between what I shall call the implicit and explicit forms of that copula. This distinction, in its turn, is to be explained in terms of a corresponding distinction between internally and externally formed propositions. Given an object a and a property P, a proposition to the effect that the object has the property may be formed in either of two ways. In the first case, the proposition P(a) is formed by plugging up the property with the object: and in the second case, the proposition (Pa) is to the effect that the object has the property. In the one case, the copula is an internal feature of the proposition, whereas in the other case it is an external facet of how the proposition is formed. Suppose that the object is Holmes (a real object would do as well) and let the property be that of being a detective. Then the internally formed proposition is that Holmes is a detective, and the externally formed proposition is that Holmes has the property of being a detective. The former attributes the property of being a detective to Holmes; the latter attributes the copula to Holmes and the property of being a detective.

The distinction is even clearer in case the property is complex. Thus take the property to be that of not being married. Then the internally formed proposition is that Holmes is not married, whereas the externally formed proposition is that Holmes has the property of not being married. In this case, the first proposition is the negation of a subject-predicate proposition, while the second proposition is itself of subject-predicate form.

More generally, given a condition  $\phi(x)$ , let  $\lambda x \phi(x)$  be the property expressed by  $\phi(x)$ . Thus if  $\phi(x)$  is the condition 'x is not married' then  $\lambda x \phi(x)$  is the property of not being married. If P is the property  $\lambda x \phi(x)$  and a is a given object, then the internally formed proposition P(a) is expressed by the sentence ' $\phi(a)$ ' and the externally formed proposition (Pa) by 'a has  $\lambda x \phi(x)$ '. I have been careless over use-mention. The pedantic reader need not be disturbed; for my meaning will be clear, even when my expression is sloppy).

One can, of course, accept the distinction without accepting that the propositions are different. But on any reasonable structuralist view the propositions will be different, for the distinction is just one of structure. On other views of propositions, the question is not so clear. Given a possible worlds view, for example, it may be argued that the propositions are the same since they are true in the same worlds. However, even here there is room for a difference; for in order to solve problems of impredicativity, one might maintain that the externally formed proposition was bivalent even in

those cases in which the internally formed proposition was not.

For the most part, I shall adopt a structural view of propositions; and therefore the special difficulties that arise or disappear on other views will not be considered.

Given the internal/external distinction for propositions, its extension to the story-relative copula is readily explained. An object will have a property in the implicit (the explicit) sense if the internally (resp. externally) formed proposition is true in the story. Thus Holmes will implicitly not-be-married in the Conan Doyle stories if it is true in those stories that he is not married, and he will explicitly not-be-married in the stories if it is true in those stories that he has the property of not being married.

The distinction is of great relevance to the correctness and adequacy of the abstraction and identity axioms for objects. Under the explicit interpretation, the abstraction axiom is true (in all respects that are relevant here). It is, however, inadequate. For consider a novel in which the ingenious philosopher Gotman conclusively establishes that there are no properties. Let us suppose that this is a point emphasized throughout the story, so although it is stated, say, that the native character Plat does not have a sound mind, it is explicitly denied that there is a property, such as the property of not having a fine mind, that Plat has.

It then seems clear that there are no properties that Plat explicitly has in this story. However, a solution to the problem of being requires that it be provable that there is an object that is native to a story in which the object does not have a fine mind (as opposed to possessing the property of not having a fine mind). But under the explicit interpretation, this is something that object abstraction will not provide.

Stories of the above sort I call logico-philosophical fantasies, because in them commonly accepted logical or philosophical truths are denied or, at least, not accepted. Since I shall make frequent use of such examples, it is important to establish their legitimacy; and so I shall here consider two possible objections. One is that the examples are not actual or even like any actual literature and therefore need not fall within the scope of a theory of non-existents. But this objection misconstrues the scope of what is, after all, a philosophical or metaphysical theory. Such a theory is not concerned with what is actually true of all fiction and fictions, but with what must be true of all fiction and fictions. In so far, then, as it is possible that there is a logico-philosophical fantasy of the sort described, it is an example to which the theory should apply.

Another, more radical, objection is that more is true in the story than I have allowed. In particular, it is true in the story that Plat has the property of not possessing a sound mind, even though this is not directly stated. But this is most implausible. The world of the story is one without an ontology of properties and so what reason is there to suppose that statements presupposing that ontology are true in the story. We can perfectly well conceive of a story in which the atomic theory of

matter fails. Why, then, should the nominalistic theory be so much worse off in this regard?

If it is allowed that in the story Plat had the property of not possessing a sound mind, the story becomes inconsistent in the sense that for some proposition p, both p and not-p are true in it; for the story also explicitly denies that he has such a property. The inconsistency then runs the danger of spreading - not that all inconsistencies in stories spread, but only that they may. For suppose it is an important part of the story that it is an empirical proposition that Plat has the property in question, one consequence of which is that Mercury will deviate from a specified orbit. The deviation turns out not to occur, and it is on this basis that Gotman concludes that the proposition is false. If it were then true in the story that Plat had the property, it would then seem reasonable, in this particular case, to suppose that it was true in the story that the deviation occurred.

On the present suggestion, then, the story may be badly inconsistent. Yet surely it is not, or at least not for the reasons given. If a story is put forward as inconsistent or paradoxical, then no interpretative problems are raised by its inconsistencies; they can simply be regarded as integral to its content. But if the story is put forward as a consistent one, then interpretative problems will arise. Of course, the inconsistency may be apparent only. But if it is not, there is a conflict between requiring that the story be closed under reasonable consequences, on the one hand, and restricting the consequences of the inconsistent propositions, on the other. One natural resolution of this conflict is to interpret the story as two overlapping sub-stories, with the reasonable consequences of either sub-story holding in the whole story, but not the reasonable consequences of the whole story itself. But however the conflict is resolved, it seems clear that the nominalistic novel does not, or need not, give rise to interpretative problems of this sort.

If I am right, then, the example does point to an inadequacy in the abstraction axiom under the explicit interpretation. But what of the implicit interpretation? Here the axiom is not inadequate (at least in the same way), for Plat will in the implicit sense have the properties of not possessing a fine mind, etc. Unfortunately, under this interpretation the axiom is false. There are two basic problems, which we may consider in turn.

First, there is the problem of exactitude. Given that an object implicitly has certain properties in a story, it will follow that it implicitly has certain other properties in the story. For example, if the object a implicitly has the property  $\lambda x(x=x)$  of being identical to itself in the story s, then it also implicitly has the property  $\lambda x(x=a)$  of being identical to a in s, and vice versa. Now if the condition  $\phi$  holds of one of these properties but not the other, then it will not be true that there is an object that fictionally possesses *exactly* those properties which satisfy the condition.

Let us say that x has Q consequently upon x's having P if the proposition Q(x) that x has Q is the very same as the proposition P(x) that x has P. Then the general prob-

lem is that, in regard to a particular condition  $\phi$  on properties and a particular object x,  $\phi$  may not be closed under this special sense of consequence, i.e. x may have properties not in  $\phi$  that are consequent upon the properties it does have in  $\phi$ .

One solution to this problem is to require that  $\phi$  in the original axiom should be suitably closed. But a simpler and more natural solution is to leave  $\phi$  alone and to change the stated relation between it and the object. This gives:

Object Abstraction (2). For any condition  $\phi$  on properties, there is an object x and a story s such that:

(a) x is native to s;

(b) a proposition is true in s iff it is formed from a property satisfying the condition  $\phi$  by plugging in the object x.

Since it is no longer required that x only have the properties of  $\phi$  in s, it is clear that the problem of consequent properties no longer arises.

The second version of the axiom involves an important shift in emphasis; for instead of specifying the content of an object in a story directly, it has been specified in terms of the content of the story itself. In explaining the relationship between these two contents, it will be helpful, here and elsewhere, to have some more general terminology. Accordingly, let the (specific) record of a story be the set of sentences true in the story. Distinguish this from the text, which merely consists of the written (or spoken) sentences. As several philosophers have pointed out, what is true in a story will usually go beyond what is in the text and may sometimes not even include parts of the text. Let the (specific) content of a story be the set of propositions expressed by the sentences of the record or, more directly, the set of propositions true in the story. Now say that C is the (a) content of an object x in the story s if the content of the story consists of exactly those propositions of the form P(x) for P a member of C. Given a record of a story, the syntactic analogues of the contents of an object may be obtained by replacing any number of occurrences of names for the object with a single variable;27 the content of the object will then consist of the properties expressed by the resulting formulas.

With this terminology, the new version of abstraction can be simply expressed in the form:

OA (2) Any condition  $\phi$  on properties defines the content of a native object in some story.

The content of an object, unlike that of a story, need not be unique for, thinking syntactically, different occurrences of the name of the object in the record may be replaced by a variable. There is, however, a simplest and a most complex content that may naturally be associated with any object in a story. The most complex is the *maximal* content and consists of all properties had by the object in the story. The simplest is the *clean* or *pure* content and consists of those properties had by the object in the story that do not contain the object in question. Under the syntactic analogue, the pure content will correspond to formulas obtained by

replacing *all* occurrences of names for the object with the given variable.

That the maximal content is unique is trivial. That the pure content is unique may be proved under a reasonably strong structural account of propositions. I do not wish to work out exactly what is required to establish this result. But to see what is involved, let us give an intuitive demonstration that there is at most one pure content. So take any two pure contents C and C' of the object a in s and any property P in C. Then for some property P' in C', P(a) and P'(a) are the same proposition. Now normally the identity of P(a) and P'(a) does not require the identity of P and P'. However, their identity is required if neither P nor P' contain a; for then the properties P and P' must be obtained in exactly the same way by making argumentplaces of the «occurrences» of the object a in the proposition P(a) = P'(a). Therefore P' belongs to C', as

Although it can be proved that the pure content of an object is unique, it cannot be shown that any condition defines the pure content of an object. To appreciate the nature of the difficulty, consider a native object a in a story whose content consists solely of the property  $\lambda x$  xRx of bearing R to itself. Let us now ask whether there is a native object b in a story whose *pure* content consists solely of the property  $\lambda x$  xRa of bearing R to a. By OA(2), there is a native object x in a story whose *content* solely consists of the property  $\lambda x$  xRa. But that is compatible with the object x being a and so with  $\lambda x$  xRa not being the pure content of x.

To remedy this defect, we may strengthen OA(2) to: OA(2') Any condition  $\phi$  on properties defines the pure content of a native object in some story.

This formulation requires explicit use of the notion of an object occurring in a property and, on this ground, might be thought objectionable. But I see no way of formulating the principle without using this notion or an equivalent one.

These changes in the formulation of abstraction suggest an important change in the choice of primitives. Before, the primitive connection between objects and stories was given by the story-relative copula. We may now take as primitive that relation between a story and a proposition that holds when the proposition is true in the story. That relation is, of course, to be understood in a like implicit sense, so that what is required in regard to the proposition that Holmes is a detective, say, is that it be true in the story that Holmes is a detective, not that it be true in the story that the proposition is true.

In explaining the implicit sense of the story-relative copula, informal use was made of the notion of plugging an object into a property to form a proposition. It may now be supposed that this notion is itself part of the theory. To this end, it may either be taken as a primitive, along with suitable axioms, or, assuming that the account of relations and propositions is sufficiently far developed, as a defined notion for which the previous axioms may be derived.

Given that the notion of plugging is part of the theory,

the story-relative copula and the story-relative concept of propositional truth are inter-definable. For instead of saying that x has P in s we can say that the result of plugging x into P is true in s; and instead of saying that the proposition p is true in s, we can say that some object has the degenerate property associated with p in s. Before it was an advantage to have the story-relative copula as primitive, since then the notion of plugging was not required. But given that this notion is, in any case, required in a more expressive theory, it then seems more natural to take the story-relative concept of propositional truth as primitive; and this is what we shall henceforth do.

Given these new primitives, the explicit sense of the story-relative copula can be defined. For we may say that a explicitly has P in s iff a implicitly has the property  $\lambda x(x \text{ has P})$  of having P in s. Given suitable structural assumptions about properties, the original axiom, under the explicit interpretation of the copula, could then be derived. But note that such a form of the original axiom would not be valid on a non-structural account of propositions; for there would then be many different ways in which an object could fictionally possess properties consequent upon its fictional possession of properties in  $\phi$ . In that case, the revised version of the axiom would have to be adopted for both interpretations of the copula.

The other problem with the abstraction axiom under the implicit interpretation concerns occurrence. Let us distinguish between degenerate and non-degenerate properties. A degenerate property is one that results in the same proposition upon plugging in any object. In the  $\lambda$ -notation, it is denoted by an expression of the form  $\lambda x \phi$ , for  $\phi$  a sentence. A non-degenerate property is one that is not degenerate. On a reasonably strict structural account, a non-degenerate property will result in different propositions upon plugging in different objects.

The presence of degenerate properties results in many new consequent properties; for associated with any proposition true in the story will be a degenerate property implicitly possessed by any object. This is an old problem, though, and taken care of by our revised formulation. However, let us suppose that the condition  $\phi$  is only satisfied by degenerate properties. In this case, it would appear that the native object x has only degenerate properties in the story. But is this possible? It would appear that any object native to a story occurs in the story and that any object occurring in a story has some non-degenerate property in the story; and from this it follows that native objects must have some non-degenerate property in a story.

It is hard to see on what grounds either of these premisses might be denied. But another possibility is to limit the properties of the theory to non-degenerate ones. It need then only be required that the condition  $\phi$  be satisfied by some property. However, our theory should be able to prove that there are objects native to stories in which *some* propositions not containing the objects are true. Under the proposed revision, this could not be done. The axiom could be expanded so as

to make special provision for these propositions. But although the theory could be formulated in such a way without the use of degenerate properties, it will turn out to be much simpler, both here and elsewhere, to admit them.

What I propose then is that it be required that *one* of the properties satisfying the condition be non-degenerate. Combining this proposal with the earlier one, we obtain:

Object Abstraction (3)Any condition  $\phi$  satisfied by a non-degenerate property defines the content of some native object in a story.

With the notion of non-degenerate property, we may define what is for an object to occur in a story; for this will hold just in case the object has some non-degenerate property in that story. However, it is still necessary to retain the Nativity-Occurrence Axiom, for although all of the native objects produced by the new version of Abstraction provably occur in their stories, this is not provable for arbitrary native objects.

Let us now consider the consequences of the implicit/explicit distinction for the identity axiom. Under the explicit interpretation, this axiom is not so much inadequate as false. In the Gotman novel there may well be two distinct native characters who differ in the properties they implicitly have in the story. But because of the nominalist ontology, the characters will explicitly have the same properties in the story, viz. none, and so, under the explicit interpretation of the identity axiom, would be the same.

On an internalist view, the identity axiom under the implicit interpretation will be true. However, it will not by itself provide a satisfying solution to the problem of individuation. True, the properties fictionally possessed by a fictitious object will distinguish it from all others. But recall that individuation was required to be non-circular; so if the properties used already presuppose the object in question, the proposed method of individuation will not be satisfactory.

To bring out the nature of the difficulty more clearly, let us suppose the following two assumptions are made:

- (1) If x is native to the story s, then x has the property of being identical to x in s;
- (2) If x is native to s and distinct from y, then it is not the case that x has the property of being identical to y in s

I do not actually believe that either of these assumptions is true. I merely make them for the purposes of the argument and might equally well have supposed that our interest is *confined* to those objects that satisfy them.

Now given these assumptions, it follows that each fictional object x can be picked out in terms of the properties that it fictionally has. For by (1), x will fictionally possess the property of being identical to x; and by (2), no other object y will fictionally possess that property. But is this a satisfactory solution to the problem of individuation? We wish to individuate Holmes, let us say, and are told that he is the object that fictionally possesses the object of being identical to Holmes. In

our discussion of circular individuation, we gave the example of identity properties. The present individuation (in terms of the fictional possession of identity properties) is not as trivial, since its success depends upon assumptions such as (1) and (2) above. But it is equally unhelpful; the distinguishing properties still presuppose the object in question.

The view that the identity axiom provides a solution to the problem of individuation arises, I think, from a false analogy with set theory. There the extensionality axiom does provide a non-circular way of individuating sets. Because our identity axiom is of a common form and, indeed, is in a certain sense a dual, it is thought that it will likewise individuate the objects. But the success of the extensionality axiom in securing individuation depends upon sets being well-founded with respect to the constituent relation, which in this particular case is just the membership relation; chains of members of members of members etc. come to an end and in particular, the members of a set will not involve, either directly or indirectly, that very set. Without this assumption, there is no guarantee, even with extensionality, that the sets can be individuated. However, the corresponding assumption for objects fails. They may be picked out in terms of properties that presuppose, either directly or indirectly, those very same objects. It is just at this point that the supposed analogy breaks down.

To overcome this particular difficulty, the original version of the identity axiom for objects may be replaced by:

Object Identity (2) If the native object x has the same pure content in s as the native object y has in t, then the objects x and y are the same.

This formulation requires the notion of a pure content or of whatever in the theory of properties defines that notion. One might attempt to avoid the use of the notion by stating the identity axiom in the form:

If the native object x has in s a content had by y in t, then x and y are the same.

From this axiom, OI(2) follows. But this new axiom is false, since the distinct objects a and b might share the contents  $\{\lambda x \times Ra\}$  in their respective stories. Again, as far as I can see, the use of the concept of purity or its cognates is essential to the formulation of the axiom. I have so far talked only of object identity. But armed with the story-relative notion of propositional truth a more satisfactory criterion of story identity may be given.

SI(1) The stories s and t are identical iff the same propositions are true in each.

Given the other assumptions, the earlier criterion in section C2 may then be derived.

In discussing the problems of finding a proper formulation of the identity and abstraction axioms, I have discussed only two interpretations of the story-relative copula, the implicit and the explicit. T. Parsons has suggested to me another interpretation of the copula, one that naturally arises from the formalisation used in his book. It is that the result of plugging up a property with an object is neither the internally formed proposition, in which the property may get swallowed up, nor the externally formed proposition, which contains the copula explicitly, but a combination in which the object and property occur side by side, as it were. It is difficult to convey the right ontological picture without reference to language. But if  $\lambda x \phi(x)$  symbolizes the property and 'a' the object, then  $\phi(a)$  will express the internal proposition, and ' $[\lambda x \phi(x)]a$ ' the Parsonian or lateral proposition.

There may be doubts as to whether the notion of a lateral proposition is coherent, but let us put these on one side. Now say that a has P in a story in the lateral sense if the laterally formed proposition is true in the story. It may then be thought that appeal to the lateral copula will avoid the objections I have levelled against the explicit copula. Certainly, this may be true for the objections as stated. It might be argued, for example, that lateral propositions can be true in our nominalistic fantasy without thereby committing the story to an ontology of properties. However, similar objections will arise. Consider a story in which the inference from  $\phi(a)$ to  $[\lambda \phi(x)]$  is in general rejected (for whatever reasons, peculiar to the story, one cares to imagine). Then the proposition that Ham is wicked or Ham is stupid (WhvSh) may be true in the story, for Ham a native object. But Abstraction can only show that a proposition of the form 'Ham is wicked or stupid' ( $[\lambda x(WxvSx)]h$ ) is true in the story, which is not what we want. Again, the difference between two native objects may precisely consist in the story-relative truth of the former kind of propositions, as opposed to their lateral counterparts, and so the identity axiom will fail.

Further interpretations of the copula may, of course, be suggested. But it seems likely that they will be subject to similar objections. If the full range of possible contents for stories is properly to be accounted for, it should seem that something like the machinery of internal plugging would need to be used.

## D2. Diagonal Difficulties

The previous theory, even in its revised versions, is inconsistent; it is beset by paradoxes similar to the classical paradoxes of impredicativity. Since the difficulties are general ones to be faced by almost any theory of non-existent objects, I shall here state them in a general form. There are two main paradoxes to consider, one arising from the abstraction axiom for properties and the other from the abstraction axiom for objects. I shall consider the first paradox in this section, and the second paradox in the next.

Before presenting the first paradox, it will be helpful to state a general result on correlations between objects and properties. Let us assume the abstraction principle for properties, that is:

(1) For any condition  $\phi$ , there is a property P such that an object has P iff it satisfies the condition  $\phi$ .

I am now thinking in general terms, not merely within the context of a theory of objects. We may suppose that the language of the condition  $\phi$  is typed, with ob-

ject - and property - terms distinguished as the first and second arguments of predicational statements, so that the principle is impervious to the usual impredicative paradoxes.

În case P and  $\phi$  are connected by the equivalence in (1), I shall say that P *corresponds* to  $\phi$ .

From (1), it follows that:

(2) There is no function g taking some of the objects into properties and such that for each property P there is an object x for which g(x) = P.

The argument is a familiar one. Suppose there were a function g. Then there would be a function f taking *all* of the objects into *all* of the properties. For pick on any property P'. (There is at least one by property abstraction.) Now let f(x) be g(x) if g(x) is defined and otherwise let f(x) be P'.

By (1), there is a property Po such that:

(3) For all objects x, x has  $P_o$  iff x does not have f (x): Given the definition of f, there is an object  $x_o$  such that: (4)  $f(x_0) = P_o$ .

But then from (3) and (4), it follows that:

(5)  $x_o$  has  $f(x_o)$  iff  $x_o$  does not have  $f(x_o)$ .

A contradiction.

The first paradox arises from the fact that it is plausible to suppose on almost any theory of non-existents that there are correlations g of the sort denied by (2); for in any such theory there is likely to be a form of object abstraction which implies, for any property, P, that there is an object x that bears some kind of predicational tie to P alone. This was first seen by Romane Clark '78 in the context of a theory of Castañeda's ('72, '75,b); and Clark's insight was later extended by W. J. Rappaport ('78, '79) to other theories of the non-existent. The reader should consult those papers and Castañeda '79 for a discussion of the paradox within the context of those respective theories. Within the present theory, the paradox arises from the following consequence of object abstraction:

(6) For each property P there is an object that fictionally has P and P alone.

For we may then let g map each object which fictionally has a single property into that single property. Of all the applications, the present one is perhaps the most compelling. For the others depend on theoretical notions and principles that might well appear dubious to pre-philosophical intuition. But the application to the contextualist theory only requires ordinary notions (the literal and story-relative copulas) and seemingly unobjectionable principles concerning those notions.

In order to avoid irrelevant objections, it will help to give a tighter formulation of the paradox. Say that P is an *object-property* if some object fictionally possesses P and P alone. In the formulation of the paradox, we may replace reference to properties throughout by reference to object-properties. Assumption (6) then disappears, and (1) becomes:

(1)' For any condition  $\phi$ , there is an object-property P such that an object has P iff it satisfies the condition  $\phi$ . Let us note that, in the derivation of the paradox, assumption (6) yields a definite correlation  $g_0$ . Thus it suffices, for a contradiction, to show that  $g_0$ , in par-

ticular, does not give a correlation as described under (2). Examination of the proof of (2) then shows that this particular case of (2) follows from the single instance of (1) in which  $\phi$  is the condition of x's literally lacking the unique property which it fictionally possesses.

Let *Para* be this particular condition. Then combining the above point with the previous one, we see that a contradiction follows from the single assumption that: (7) There is an object-property P had by an object iff it satisfies the condition Para.

Assumption (7) posits two facts of the property P, one that it is an object-property, and the other that it corresponds to the condition Para. If it is supposed that Para expresses a property, call it *Paraprop*, and that Paraprop will satisfy (7) if anything does, then (7) may be broken down into the two assumptions that:

(7a) Paraprop corresponds to Para; and

(7b) Paraprop is an object-property.

Under this revision, the paradox may be stated in stark and dramatic form. For suppose that we actually write a story about the native object Paraob, whose sole sentence is:

Paraob literally lacks the unique property which it fictionally possesses.

By inspection, we see that Paraprop is the unique property which Paraob fictionally possesses. But it then follows that Paraob has Paraprop iff it lacks Paraprop. A contradiction.

In order to solve the paradox, let us consider some possible objections to the crucial assumption (7). The objections will first be centred on the object-theoretic aspect (7b) of (7), and only later on the property-theoretic aspect (7a) of (7).

First it may be objected that some consolidation in attributions is required to establish an object as native to a story. This appears to be the view of Parsons.<sup>28</sup> Consider a written story in which the sole sentence is «Humbold is a doctor». Then it might be argued that even if it is true in the story that someone is a doctor, there is no object of which it is true in the story that it is a doctor; the de re claim needs to be backed up by a sufficient body of attributions. Thus we have no reason to suppose that the property Paraprop is the sole property fictionally possessed by some object, and our own one-line story will be insufficient to establish this. I find this view most implausible. It is almost irresistible to say that of Humbold only one thing is stated in the story, that he is a doctor, and similarly for Paraob. There is perhaps a rich literary notion of character according to which a character should have character; but clearly this is not relevant to the question of when de re reference to *objects* can be made.

Nor is it clear that any defensible distinction can be drawn between those collections of attributions that establish de re reference and those that do not. If one collection will do, then why should it be possible that the result of subtracting one of its members will not? Perhaps it would be argued that the conditions supporting de re reference are, to some extent, indeterminate. I do not see this. In certain cases, it may be unclear

what de re claims should be made; but this is because it is not clear what the stories say, not because of any unclarity in the notion of de re reference itself. Even if the notion is vague, theoretical purposes may demand that we make it precise; and then the only viable alternative is one that does away with restrictions.

There is also a strong positive argument in favour of there being de re reference in the one-sentence story. For it would appear to be a sufficient (though not necessary) condition for de re reference that a name be used in the story; and in our example a name is indeed used.

This principle concerning names may itself be based upon a more general principle of uniformity concerning the connection between fictional and ordinary discourse. This principle has been espoused by several philosophers and, as we shall see, is essential to a proper understanding of fictional objects. It is hard to state in precise terms, but it says, roughly, that fictional discourse is conceived in the image of ordinary discourse, that it will function, in the context of a pretence, much as ordinary discourse functions in real life. Now our understanding of ordinary discourse depends upon setting up a certain sort of correspondence between language and the real world; so, in our understanding of fictional discourse, we must suppose that there is a like correspondence between language and a pretend world. Indeed, unless something like this were true, it is hard to see how, on the basis of our understanding of ordinary discourse and our grasp of the general conventions governing story-telling, we could come to an understanding of fictional discourse at all.

If, then, we are interested in what proposition is expressed by a sentence of fiction, we should ask what proposition that sentence would have expressed as a part of ordinary discourse. It will then express, vis-à-vis the fictional world, the same sort of proposition it would have expressed vis-à-vis the real world.

Now in ordinary discourse names refer or 'rigidly designate'; they are used to express singular propositions. Therefore names have a similar role in fiction. A sentence containing a name will express in a story a singular proposition to the effect that the bearer of the name has a certain property. But that means that it will be true of the object that it has the property in the story; for it is just the truth of the singular proposition that secures the de re attribution. Successful reference in fictional discourse no more requires the consolidation of attributions than it does in ordinary discourse; the single use of a name will suffice.

Another objection to (7) is that even if we consider the texts of stories in which a given object is stated to have only one property, there still will be many unstated properties had by the object in the story. Certainly this is true for realistic fiction. But imagine a group of authors who object to the way in which critics read so much into what they write. In protest against this practice, they institute a new genre of *inert literature* which leaves no room for such interpretation; anything true in the work is stated to be true.

Considered as realistic fiction, the works of such a genre would be strange, but, in terms of what is said and unsaid, they might have their own peculiar charm and merit.

Within such a genre there is now no difficulty in supposing that a native object might have only one property in a given story. Of course, there is no actual genre of inert literature (and I hope my remarks do nothing to encourage one). But as I have pointed out, a theory of fictional objects should apply to all possible stories, and this embraces the possibility not only of new works within old genres but also of new works within new genres.

Even if the last two objections are maintained, it is unlikely that the consolidation of attributions required for de re reference or that the necessary interpretative licence of all stories will provide the right sort of theoretical constraint to block the paradox. Let us replace (6) by the weaker assumption that:

(8) For each property P, there is a finite set of properties X containing P and an object x such that X is the set of properties fictionally had by x.

Then as long as there are infinitely many properties, the paradox can still be derived.<sup>29</sup> However, it is hard to see how the last two objections can tell against (8), as opposed to (6).

A creationist might also object to (6) on the grounds that there may be no actual story in which an object has Paraprop as its sole fictional property. However, if one can derive a contradiction from the truth of certain premisses, then one can also derive a contradiction from their possible truth. The question, then, is whether the premiss (7) might be true even for stories and objects on the creationist conception. And the answer appears to be clearly yes; for all that is required is that the relevant piece of inert literature be created. The objection is removed with a few strokes of the pen. The paradox now strikes us with full force: the assumptions upon which it rests are individually reasonable; and yet, together, they are inconsistent. I think, however, that a closer examination shows that property abstraction is at fault. Suppose that no type restrictions are placed on the language of the scheme and that the object variables are taken to include properties in their range. Then, as is well known, the resulting scheme becomes inconsistent upon letting  $\phi$ be the condition that x does not possess x. Now the paradoxes have often been blamed on the absence of type-restrictions and, since our scheme of property abstraction is subject to such restrictions, it is tempting to think it unobjectionable. Not so. Although our scheme is self-consistent, it is implausible for reasons similar to those for which the unrestricted scheme is inconsistent. For, through the abstraction principle for objects, there will be some sort of correlation between objects and properties; and so even though properties cannot be directly attributed to themselves, the effect of such attributions can be gained by means of the correlation. Even if the specific correlation contemplated

in (6) is rejected, the mere possibility of some sort of correlation should make us suspicious of the scheme. The point can be reinforced by an analogy. Suppose that we reformulate the argument using sets of properties in place of objects and the converse of the membership relation in place of the fictional copula. Then (1) remains as an abstraction principle and (6) becomes the claim that for each property there is a singleton set of that property. In this case, it is clear that we should give up abstraction; for although properties are not directly attributed to themselves, they are, indirectly, as the members of sets. Now non-existents are not built up from properties in the way that sets are from their members, and so there is not the same stark impredicativity. But from a formal point of view this is irrelevant; as long as our conception of non-existents admits of analogous correlations with properties, the two cases should be treated in the same way.

Incidentally, this analogy also serves to show that the paradox is not peculiar to non-existents. It arises whenever properties are applied to entities, such as sets or propositions, that admit of a correlation with those properties. It would therefore be premature to conclude, simply on the basis of the paradox, that the very notion of a non-existent is incoherent.

But if abstraction is rejected, what should be put in its place? I should like to consider two solutions here; one classical (in the sense of bivalence) and the other not. The most natural classical solution is to restrict the ranges of properties defined by Abstraction to sets. Thus the axiom then becomes:

(9) For any condition  $\phi$  and any set of objects X, there is a property P such that for each object x in X, x has P iff it satisfies the condition.<sup>30</sup>

The restricted scheme will conform to a cumulative conception of non-existent objects. This conception extends the previous idea of non-existents as constructed or generated from properties they fictionally have, by supposing that those properties are themselves constructed or generated from the objects in their extension. Thus we may imagine that the objects and properties are generated at stages, with the objects (properties) of one stage being generated from the properties (resp. objects) of the previous stage. Under this conception, the restricted axiom-scheme will then be justified, since all of the objects in a set will have been generated by some stage; but the unrestricted scheme will not be justified, since at no stage will all of the objects have been defined.<sup>31</sup>

If it is granted that the existent objects form a set, then, as a special case of (9), we obtain:

(10) Given any condition  $\phi$ , there is a property P such that for each existent object x, x has P iff x satisfies the condition,

which is reminiscent of Parsons' abstraction principle for nuclear properties (to be discussed in the third part). On the other hand, the fact that the unrestricted scheme (1) is inconsistent will show that all objects do not form a set. Indeed, given any set X, the original

derivation of the paradox may be converted into a proof that an object  $x_o$  (determined relative to X) does not belong to X.

In one way, the schemes (9) and (10) are uninformative; for they do not tell us how the properties defined by a given condition  $\phi(x)$  and set X behave on objects outside of X. Although there are different possibilities here, the most plausible proposal within the classical context is that the properties are false of the objects outside of their specified range. Under this proposal, axiom (9) becomes:

(11) For any condition  $\phi$  and set X, there is a property P such that for any object x, x has P iff x belongs to X and satisfies the condition.

The new scheme is then reminiscent of the separation axiom in set theory.

Unfortunately, the extended axiom is not adequate to the purpose of object theory. For there are many properties whose extensions are not sets but which may be used to define objects. One example is non-existence; another, perhaps under suitable empirical conditions, is the property of being admirable.

To overcome this difficulty, the scheme (9) should be opened up, though not so far as to admit contradiction. The most natural solution I have thought of goes as follows. Say that a property is partially defined if, for some set, the property is false of all objects outside of the set, and that otherwise it is totally defined. Thus (9) only guarantees the existence of partially defined properties. Now supplement (9) with any instances of the abstraction scheme (1) in which all of the property quantifiers in  $\phi$  are restricted to the partially defined properties. Then the new scheme will give us many of the properties that we want. For example, since the definition of non-existence in terms of existence does not involve quantifiers, we may show that there is a property true of exactly the objects that do not exist. On the other hand, it will not be (directly) provable that there is a property corresponding to the paradoxical condition, since that condition requires property quantifiers for its formulation.<sup>32</sup>

Although this whole approach has its attractions, it is open to two fundamental objections, even when (9) is used without its supplements. One objection is that the approach is incompatible with the principle that provides for the general existence of properties.

(12) Property Existence. For any condition  $\phi(x)$  there is a property  $(\lambda x \phi(x))$  of  $\phi$ -ing.

For on a bivalent approach, the adoption of (12) immediately makes plausible the specific form of property abstraction:

(13) An object x has the property  $\lambda x \phi(x)$  of  $\phi$ -ing iff it satisfies the condition  $\phi$ ;

and so leads to contradiction.

There are, however, various reasons for insisting upon (12). One is that it has a plausibility that is quite independent of the truth of (13). Even if we cannot be sure that the extension of  $\lambda x \phi(x)$  works out in accordance with (13), we can be sure that there is such a property as  $\lambda x \phi(x)$ . It is necessary here to distinguish

sharply between the question of whether there is a property expressed by the condition  $\phi$  and whether there is a property corresponding to  $\phi$ . The former is the question of whether there is a property with a certain structure, the latter a question of whether there is a property with a certain extension. The one, I am suggesting, is problematic in a way that the other is not. For surely we can suppose that there is a property with the appropriate structure; for we may suppose that it is built up in something like the same manner as the condition itself. But who knows what hidden difficulities there are in assigning the appropriate extension to some property?

In addition to this intuitive argument, there are general reasons from property theory (which I shall not go into) and special reasons from object theory for upholding (12). The special reasons all arise from the requirement that statements of the form:

(a) Within the context c, the object a  $\phi$ 's; should be equivalent to statements of the form:

(b) The object a has the property P in c.

For the equivalence of (a) to (b) would seem to require that P be the property of  $\phi$ -ing and hence that (12) generally holds.

But there are now various reasons, from within object theory, for insisting upon the equivalence:

(14) The object x has the property  $\lambda x \phi(x)$  in context c iff x  $\phi$ 's in c.

One is that many things cannot be said without presupposing it. We may wish to say that two objects differ in content within their respective contexts, without mentioning the specific points of difference. But if the only differences turned on conditions not expressive of properties, then this could not be put in terms of the objects having different properties in those contexts. One might try to use quantification over conditions instead; but this would face familiar difficulties.

Secondly, we may note that for internalism there is a special need to uphold (14). For if some conditions were not expressive of properties, then the only difference in the content of two objects might rest on such conditions; and so internalism would be unable to distinguish the objects.

Finally, the usual arguments against (12) really tell against (13) rather than (14). It is only because (12) is thought to entail (13) and (14) entails (12), that the arguments are also thought to tell against (14). But once the connection between (13) and (12) is broken, it is possible to retain (14) and yet reject (13). Indeed, despite their superficial similarity, (13) and (14) relate to two completely different roles of properties; one as the determiner of extension, the other as the determiner of content. It is only the second role that is directly relevant to object theory; for what is required is the general means of determining the content of objects, and to this end the extension of the properties is irrelevant. It therefore seems excessively hard on object theory that the failure of properties to perform their one role should be made to impugn their other role.

But can the connection between (12) and (13) be so easily severed? Surely, any property  $\lambda x \phi(x)$  that exists

should satisfy (13)? Certainly some sort of connection should hold between the structure of the property  $\phi$ , as given by the condition  $\phi$ , and the conditions for its application. Although such a connection is not required by the immediate needs of object theory, we cannot suppose that the connection is completely freewheeling; for the structure of the property is essentially the means by which its applications are determined.<sup>33</sup> But we need not suppose, as far as I can see, that the connection is given by the classical principle of  $\lambda$ -abstraction, according to which the property  $\lambda x \phi$  is true of all objects that satisfy  $\phi$  and false of all the others. It may be that the semantics for the underlying language of the conditions obliges us to concede that a condition may be neither true nor false of a given object. (It may even be the existence of properties  $\lambda x \phi(x)$ that obliges us to make the concession.) The intuitive connection between structure and application will then be unbroken if we can say that  $\lambda x \phi$  is true of the objects that satisfy  $\phi$ , false of the objects that 'dissatisfy'  $\phi$ , and neither true nor false of the others. So it does seem open to us, after all, to maintain (12) and (14) in the face of the paradoxical (13).

The other objection to the classical solution is that it is incompatible with a structuralist criterion of identity for properties. According to such a criterion, two properties will be the same only if they have the same structure. The concept of structure here is, of course, not straightforward, and there are various ways in which it can be made out. On a very strict conception, the properties of  $\phi$ -ing and of  $\psi$ -ing will be the same only if  $\phi$  and  $\psi$  are the same conditions. On a weaker and more plausible conception, alphabetic variance in the bound variables of the conditions is allowed; and probably further weakenings should be allowed and even divergences from the structure of the condition.<sup>34</sup> However, the question of getting the criteria exactly right need not concern us; for most of our positive and negative points will be independent of which particular criteria, within a broadly structuralist framework, are adopted.

Now given such a criterion, the axiom (9) will lead to contradiction. For on the basis of (9), a concept of truth for propositions can be defined; and on the basis of a structuralist criterion, something along the lines of Tarski's theorem on truth may be used to show that there is no such concept. (A modest amount of set theory is required, but not object abstraction).

But why accept a structuralist criterion? Philosophers often talk as if one had a *choice* of criteria here. But it seems to me that our concept of properties is such that some sort of structuralist criterion just is correct. Although non-structuralist accounts have been proposed, they all seem to lead to counter-intuitive results. There are also special reasons from the theory of non-existents for adopting a structuralist criterion; for if objects satisfying different conditions in a story are properly to be distinguished, then a faithful account of their different contents seems to require a close connec-

tion between the identity of the properties and the structure of the conditions.

We see then that there are two quite distinct problems with the classical solution, both arising from demands within the theory of properties. One is that it is incompatible with a general principle of property existence, and the other is that it is incompatible with a structuralist criterion of identity for properties.

How then should these demands be met? I should like to suggest a theory along the lines of Kripke's '75 theory of truth or Feferman's '75 theory of sets. The application of a property is determined in accordance with a well-founded verification of the object either having or lacking the property; if there is no such verification then the property is neither true nor false of the object. Thus the paradoxical arguments will now show, not that there is no paradoxical property, but that it does not apply truly or falsely to certain objects. Such a theory allows one to give a uniform solution to many difficulties. First, it is compatible with a structuralist criterion for properties and with the general existence principle for properties. Secondly, it allows us to lift the arbitrary type-theoretical restriction on the application of properties to objects, as opposed to other properties. Finally, the account seems to allow the kind of totally defined properties that initially raised difficulties for the classical solution. Consider, for example, the property of non-existence. It would seem reasonable to postulate a primitive existence property that applied bivalently to all objects; but then the property of non-existence will likewise be universally bivalent.

Of course, the account as presented is only a sketch. A great deal more needs to be done. One question is peculiar to object theory. For on a structuralist criterion, there will be simple properties and so it needs to be said how they apply to non-existents. There are two main solutions here; one is that they are false and the other is that they are neither true nor false of non-existents (with perhaps a few exceptions aside). I am inclined to adopt the former solution; but this is a matter I shall discuss more thoroughly in part III of the paper.

However, most of the further details concern the theory of properties as such. It must be decided what structure properties are to have, what primitive logical notions are to be used, how the theory is axiomatized, and so on. Such matters lie beyond the scope of this paper. It must be supposed that a satisfactory theory of properties has somehow been worked out and that the rest of the theory of objects is then grafted onto it. In one way, this is undesirable. For we no longer have a definite theory and so metamathematical questions, such as consistency, no longer have a definite answer. But I make no apologies for this lacuna in my presentation. The theory of properties is highly undeveloped and highly problematic, and it is hardly to be expected that much progress can be made in a paper devoted to another topic. It should be borne in mind that the theory of properties cannot be tailor-made to suit the subject at hand. The properties that figure in the theory

of objects are the properties that figure elsewhere. The only satisfactory account of properties in object theory is one that is generally satisfactory.

## D3. Dual Diagonal Difficulties

The second difficulty arises from the following abstraction principle for objects:

(1) For any condition  $\phi$  on properties, there is an object x such that x fictionally has a property P iff P satisfies the condition.

This principle is a straightforward consequence of the axioms of Object Abstraction (1) and of Context Uniqueness and should even be assumed when Context Uniqueness is dropped.

From (1), it follows that:

(2) There is no function G taking some of the properties into objects and such that for each object x there is a property P such that G(P) = x.

The proof is formally analogous to the derivation in the previous section of (2) from (1).

It now seems reasonable to suppose that:

(3) For each object x there is a property P such that P is literally had by x and by no other object.

But this conflicts with (2), since we may let G map each property literally had by a single object into that object. Let us note that the two paradoxes are dual in the sense of section C2; the one may be obtained from the other by interchanging the object- and property-variables and by interchanging the fictional copula with the converse of the literal copula. As we have seen, there is a straightforward conflict between the principle of property abstraction and its literalist dual: for by property abstraction there is a property had by no objects; and by its literalist dual, there is an object that has the property. One naturally supposes that the conflict can be avoided by using different forms of the copula in the two abstraction principles, for the more obvious sources of conflict are thereby insulated from one another. It is therefore something of a surprise that this is not so.

The difficulties arise in two ways. On the one hand, we may assume property abstraction in full generality; from this it follows that there is no correlation between some of the objects and all of the properties, which is in conflict with a modest use of object abstraction. This is the first paradox. On the other hand, we may assume object abstraction in full generality; from this it follows that there is no correlation between some of the properties and all of the objects, which is in conflict with a modest use of property abstraction. This is the second paradox.

In the present case, which of the assumptions (1) and (3) of the paradox should be rejected? There can be little question about (3). For the dual assumption (6) of the previous section and, more particularly, for (7b), certain doubts were entertained. But the analogous doubts seem quite out of place here. Surely, given any object x, there is a property, viz. that of being identical to x, that is possessed by x and x alone. Nor do the

earlier general doubts over property abstraction have any relevance here. The property of being identical to x applies well-foundedly to any object; and even if properties are only to be defined over sets, as in axiom (9) of the previous section, it can still be shown, by letting the set contain x, that some property will truly apply to x and to x alone.

It is interesting to note that the correlation G can be obtained through a modest use of the structural criterion of identity for properties and without the use of property abstraction. For let it be supposed that:

(4) For any object x, there is the property of being identical to x; and

(4) For distinct objects x and y, the properties of being identical to x and of being identical to y are distinct. Then G may be defined by letting it map the property of being identical to x into x.35 Thus even if we follow the previously mentioned policy of detaching the theory of the application of properties from the theory of non-existents, the paradox will still arise.

If the culprit is (1), then how is it wrong? As with the previous paradox, only a single instance of (1) is required, and examination shows that it is the one in which  $\phi$  is the condition of P's not being fictionally had by the unique object that literally possesses P. Putting this condition for  $\phi$  in (1) yields:

(1)' There is an object  $x_0$  such that  $x_0$  fictionally has a property P iff P is not fictionally had by the sole object that literally possesses P.

Letting P be a property had by  $x_0$  alone then immediately gives a contradiction.

So the question, more particularly, is: What is wrong with the instance (1)' of (1)? As already noted, (1) or (1)' are not quite correct on the implicit interpretation of the fictional copula; for first, it should be required that a non-degenerate property satisfy  $\phi$ ; and second,  $\phi$ may not give exactly the properties fictionally possessed by the object. But both difficulties may easily be removed by insisting that the fictional copula bear the explicit interpretation. Although the implicit interpretation is required for an adequate formulation of object abstraction, there is no harm in sometimes adopting the explicit interpretation, and this turns out to be more convenient for the formulation of the paradox. Another response is the empiricist one that (1) is not true for actual stories and their objects. But as before, the question is not whether (1)' is true, but whether it could be true. (I assume that (3) holds as a matter of necessity.) Now we do not have the same dramatic means as before of removing this difficulty. To write a story in which an object has all those properties not fictionally had by the sole object that literally possesses them would seem to require not merely a few strokes of the pen, but a handsome volume; and one may well admit to empirical doubts as to whether such handsomeness is to be found in the real world. But to admit to such doubts is not to justify them; and some explanation of the impossibility, beyond the mere assertion of its existence, does seem to be required.

A third response to the paradox is that certain proper-

ties are intrinsically incapable of figuring in stories. Call a property that is capable of figuring in a story a story-property. Then on this view, we are only justified in maintaining that the object x fictionally has those story properties that satisfy the condition. But this response is not impervious to reformulation. For let us suppose that all of the properties, throughout the argument, are restricted to the story ones. Assumption (1) then becomes an unobjectionable form of object abstraction, and (3) becomes the claim that each object x is singly had by some story property. Thus it must now be denied that the property of being identical to x is a story property. But this is not at all plausible. Surely each object x can occur in a story in which it has the property of being identical to itself.

Yet another response is that although there are no constraints on which individual properties figure in stories, there are holistic constraints on which conditions of properties can be exactly realized by an object in a story. There are two main constraints of this sort, the coherence and closure ones. According to the first, certain classes of properties just do not cohere and so there can be no story in which an object has all the properties in the class. According to the second sort of constraint, some classes of properties are 'unclosed', their possession in a story implies the possession in the story of properties outside of the class, and so there can be no story in which an object has exactly the properties in the class. If both constraints are combined, then it should only be required of conditions that define a coherent and closed class that there is an object that fictionally possesses all of the properties in the class.

An example of a coherence constraint is that it should be possible (in some sense) that some object literally possess all of the properties in the class. An example of a closure constraint, previously given, is that the properties in the class should be consolidated. Another example, related to the previous coherence constraint, is that the class should contain any property whose possession is implied by the possession of the properties in the class. I do not wish to suggest that these constraints are correct; but they do illustrate the idea.

I have already argued against the consolidation constraint in section 2, and others have argued against the logical constraints (e.g., Parsons in section 7.1 of his book). However, I am opposed to any constraint of the envisaged sort. For although there may be meaningful constraints on actual literature, there are none that apply to all possible stories. Thus the case of inert literature already rules out the closure constraints and the case of logical fantasy may be used to rule out the coherence constraints. The previous example of a logical fantasy was fairly realistic, but we can imagine a genre of literature which delights in more and more flagrant violations of accepted law. Perhaps arithmetic is inconsistent, contradictions true, and objects selfdistinct. There seems to be no difficulty in imagining a genre of literature which contains stories of this sort. Indeed, some of the more peripheral work in logic and philosophy is probably best regarded in this light.

Even if these arguments were resisted, it is not clear

that the proposed constraints are of the right sort, theoretically, to block the paradox. In the derivation of the paradox, as actually given, the instance of (1) used was the one in which  $\phi$  defined the class of properties P not fictionally had by the unique object that literally has P. Now it does indeed seem reasonable to suppose that such a condition will not satisfy the proposed constraints. But other, more satisfactory, conditions can be used in its place. Let it be supposed, for example, that for any object there is a property which only that object lacks. Then  $\phi$  can be taken to define the class of properties P not fictionally possessed by the sole object that literally lacks them. This seems to be a more satisfactory condition. In a similar way, a certain amount of closure can be tolerated; and so on. It thus begins to look clear that if the constraints are to be introduced, it must be for reasons independent of the paradoxes.

My own response to the paradox is that it should be required that the condition  $\phi$  define a *set*. The abstraction axiom would then become:

(4) For any set  $\triangle$  of properties, there is an object x such that x fictionally has a property P iff P belongs to the set;

or if the previous modifications are made, the axiom would take the form:

OA(4) Any set of properties containing a non-degenerate property is the pure content of some native object in a story.

The transition from (4) to (1) would now depend upon the illegitimate assumption that the paradoxical condition defined a set of properties; and, indeed, the derivation of the paradox could be used to show that that assumption was false.

It also seems to me, although this is not required as a solution to the paradox, that we should have a sort of converse to (4):

Story Closure. The propositions true in any story form a set.

Such an axiom helps to solve the exclusive aspect of the problem of being; for we not only say, through abstraction, that sets of properties define objects, but also that only sets will define such objects.

T. Parsons has raised an interesting objection to this axiom and, implicitly, to our solution of the paradox. Suppose a logical fantasy were written about a universal Meinongian object with *all* properties. Then it would seem reasonable to conclude that, for each property, the object had that property in the story. But then, for each property, the distinct proposition that the object had that property would be true in the story; and since there is a proper class of properties, there would be a proper class of propositions true in the story, in contradistinction to the axiom of Story Closure.

Now what is directly true in the story is that the object has all properties; and from the fact that a universal proposition is true in a story, it does not automatically follow that all of its instances are also true. But often many of the instances are true without being directly stated, and so what reason do we have to suppose that all of them are not true in the present case?

Consider, by way of analogy, a novel in which it is stated that all men are mean. Suppose that Holmes is not a character of the novel. Then we would not conclude that it is true in the story that Holmes (if a man) is mean, for otherwise a singular proposition about Holmes would be true in the story and Holmes would thereby become a character of the novel. The instancing of universal propositions within a story should not result in new characters.

Now the universal proposition in our logical fantasy concerns properties, not objects. But the properties may themselves contain objects as constituents and therefore we must be careful, when instancing the universal proposition, that those constituent objects already be characters of the novel. But then we cannot conclude of all properties, but only of those whose constituents are characters of the novel, that the universal object has such a property in the story. If, as now seems reasonable, the class of such properties forms a set, <sup>36</sup> there will be no obstacle to maintaining Story Closure.

To this response, T. Parsons has asked why writers should not set up a convention whereby all instances of a universal proposition true in a story are also true in the story. After all, I have admitted the conventions of logico-philosophical fantasy and of inert literature, so why not this further convention? My answer is that conventions concerning the interpretation of literature cannot alter the metaphysical facts. Let us suppose, for example, that literalism were false. Then novelists could not make it true by stipulating that in their works the objects were literally to have the properties attributed to them in the story. Similarly, I would say, no legitimate convention can force a story to be about a proper class of objects.

It must be admitted, though, that this reply creates a methodological worry. I have argued against certain views on the grounds that they do not allow for new conventions of interpretation, as in logical fantasy or inert literature. But the proponents of these views may reply, as I have done, that these conventions fly in the face of the metaphysical facts. To this reply, I can say two things. First, there seems to be a real intuitive difference between the convention for inert literature and the convention for applying Specification unrestrictedly within a story. The former really does seem to be unproblematic where the latter is not; for surely we should be suspicious of a convention that creates objects of a story out of thin air. We do not suppose that our beliefs could be about all objects by means of such a simple interpretative device; so why should it be any different for stories? Secondly there are general grounds, rooted in the nature of fictional discourse, for favouring the intuitive distinction. This is a matter I hope to discuss further in Part II, along with the more general question of permissible bounds on interpretative licence.

If the axioms are accepted, then they will conform to the cumulative conception of objects and of properties outlined in the previous section. It will be recalled that, under such a conception, the objects and properties are generated at stages, with the objects (or properties) at one stage being generated from the properties (resp. objects) of the previous stages. Certain properties constitute a set only if they have all been formed at some stage, and so it is only of sets of properties that we can say that they determine an object. It would be nice if all objects or all properties could be generated at some stage. There could then be a universal fiction, fictionally possessing all properties. But as with the universal set, the paradoxes teach us that such things are not to be had.

Formally, our requirement that  $\phi$  define a set is analogous to a coherence constraint; for it is to the effect that no object can have all of the properties in a proper class. But our requirement is a coherence one in form only, not spirit. For the reason a proper class determines no object is not because of any incoherence, in some intuitive sense, among its members but merely because those members form an illegitimate totality. In the classical solution to the original paradox, it was required that the properties only be defined over sets of objects. Thus we see that the present solution is analogous to the earlier one or, to put it more formally, (4) is the dual of (9). It was objected to the earlier solution that it disallowed totally defined properties and was incompatible with the universal existence of properties and with a structural criterion for their identity. The analogous objections have no force in the present case. There is no need for objects determined by a class rather than a set and there is no intensional structure relevant to the way in which objects are to be formed from properties. The relevant intensional structure is already given in the properties.

It might be thought strange that the present solution should be disanalogous to the one ultimately adopted to the first paradox. But dual problems need not have dual solutions. There is, in fact, a perfectly clear rationale for our differential treatment of objects and properties. As already pointed out, we have a cumulative conception of both; the objects are generated from the properties, and the properties from the objects. However, whereas the objects are generated from the properties that they fictionally have, the properties are not generated from the objects that they literally have but from the objects that figure in their constitutive structure. It is only once the whole hierarchy of objects and properties is given that we work out, as best we can, what the extensions of the properties are. The differential treatment, then, depends upon this contrast between the generating relations and the different copulas. Thus we see that this treatment is not merely a clever piece of engineering designed to avert catastrophe, but is rooted in compelling intuitions about the respective natures of objects and properties.

Let us say that two objects are *R-correlates* if they are native to a story in which one (implicitly) bears the relation R to the other, and that the objects are *correlates* if they are R-correlates for some R. Watson and Holmes, for example, are correlates; for in the Conan Doyle stories, to which they are native, Watson bears the relation of admiration to Holmes.

In almost all stories there are correlates; for in most stories there are native objects and, when there are, they will usually have some relation in the story. Indeed, even when no relationship is directly asserted, there will usually be some properties P and Q such that it is true in the story that the one object has P and the other Q; so in the story the objects will stand in the complex relation of x having P and y having Q.

Given the prevalence of correlates, it is of interest that our theory, as so far developed, is incapable of dealing with them, both in regard to the problems of being and of identity.<sup>37</sup> Let us begin with the first problem. There are two main difficulties, which may both be illustrated with the previous example of Holmes and Watson. Under the demands of the problem of being, we should like our theory to explain how there can be the objects, Holmes and Watson, with the story-relative properties that they have. To some extent, this can already be done. For example, given constants for the properties of being a detective and being a doctor, it can be shown on the basis of object abstraction that there is an object that fictionally possesses the one property and an object that fictionally possesses the other. However, it cannot be shown that there is a single story of which Holmes and Watson are natives and in which they have the respective properties of being a detective and a doctor. By treating the proposition that Watson is a doctor as a degenerate property of Holmes, it can be shown that there is a story of which Holmes is a native and in which Holmes is a detective and Watson a doctor. But it cannot be shown that Watson is native to this story. Indeed, it cannot be shown of any story that it has two native characters.

The obvious way of meeting this difficulty is to formulate objects abstraction so as to allow for the multiple occurrence of native objects. This gives:

OA(5) For any sets  $\triangle_1, \triangle_2,...\triangle_n$  of properties containing at least one non-degenerate property each, there is a story s and distinct objects  $x_1, x_2,...x_n$  such that

(i)  $x_1, x_2,... x_n$  are native to s; and

(ii) the propositions of the form  $P(x_i)$  for P in  $\triangle_i$ , i = 1, 2, ..., n, comprise the content of s.

This axiom might even be formulated for infinitely many native objects and the first clause might be strengthened to:

(i)'  $x_1, x_2,..., x_n$  are exactly the native objects of s; to rule out the possibility that the properties in the sets  $\triangle_1, \triangle_2,... \triangle_n$  contain other native objects of s.

However, there is a more fundamental difficulty with correlates that cannot be met in this way. In the story Watson admires Holmes. So we should like to be able to prove that there are distinct objects native to a story in which one admires the other. But within the theory as originally formulated, this claim cannot even be expressed since it is properties, not relations, that are attributed to objects in stories. This short-coming might be treated as a saving grace, since then the absence of the principle from the theory would not result in incompleteness. But if, as seems desirable, the attribution of relations to objects in a story is to be expressible, then the given claim should be provable within the theory.

There are various ways in which a notation for such attributes might be introduced into the theory. One possibility is to set up a special primitive notation for them, in analogy to the story-relative copula. However, it is possible, within something like the resources of the present theory, to define such attributions. We may say that x bears R to y in s if the proposition R(x,y) obtained by (internally) plugging up R with x and y, respectively, is true in the story s. Alternatively, we may follow the lead of Parsons' and let [yR] be the result of plugging up the first argument-place and [Ry] the result of plugging up the second argument-place of R with y. The object x will then bear R to y in s if x (implicitly) has [Ry] in s or, equivalently, if y (implicitly) has [xR] in s.

But even though relational attributions can now be expressed, the existence of R-correlates for any R, or even for some R, still cannot be proved. Within the new notation what must be shown is that there is a relation R and distinct objects x and y native to a story in which x has the property [Ry]. 38 But how is this to be done? If I secure y as an object native to a story s, I have no guarantee that the story in which the native object x has [Ry] is s. Nor does the extension OA(5) help. This enables the distinct native objects of a story to be independently determined. But what is here required is that they be simultaneously determined. 39

The obvious way of removing this difficulty is to modify the abstraction axiom for objects. But there may be some reluctance to do this. One reason is that the analogy with Extensionality and the more general considerations of duality suggest the adequacy of the abstraction axiom; and another reason is that the axiom appears to be adequate to the highly attractive cumulative model of D2. I do not think these reasons stand up; but still it may be worth considering what can be done without modifying the axiom.

One possibility is to attribute the inadequacies to the use of the implicit, as opposed to the explicit, story-relative copula. I have already argued that the explicit copula is inadequate to express the content of an object in a story. But even if it is used, correlates will still give rise to difficulties, though in a different form. First, it will not even be possible to express that x implicitly or explicitly bears R to y in s in the form of an explicit attribution of a property to x (or to y) in s. The best we can do is to say that x explicitly has [Ry] in the story or that y explicitly has [xR] in the story. But these conditions individually are not necessary and collectively are

not sufficient. For in regard to the first case, imagine a logical fantasy in which it does not follow from xRy or from x bearing R to y that x has [Ry] or that y has [xR] (perhaps because there are no relational properties); and in regard to the second case, imagine a logical fantasy in which x having [Rx] and y having [xR] does not imply that xRy or that x bears R to y (perhaps because only statements in the form of property attributions are true). But if relational attributions cannot be formulated in these terms, there will be no way of extracting them from the standard applications of the abstraction axiom under the explicit interpretation. We see then another expressive defect in the external copula.

But setting this point aside, there still will arise a difficulty analogous to our original problem with correlates. Let us now say that x and y are correlates if they are both native to a story in which, for some relation R, x explicitly has [Ry]. Then, under this definition, it remains unprovable that there are correlates. Indeed, note that in this case the correlates x and y may be the same. In the other case, identical correlates raise no problem for we may say that the single object x implicitly has the property of bearing R to itself in a story. But in the present case, to say that x explicitly has this property in the story is not to say that it explicitly has the property [Rx].

Another conservative diagnosis is that the underivability arises from the restriction of the condition  $\phi$  in the axiom for object abstraction to those that define sets. Let it be granted that the paradox can somehow be solved without such restriction on the abstraction axiom. Then rather surprisingly, it can be shown that there are distinct R-correlates for any R, at least if the modification OA(5) is used. For we may suppose that x and y are distinct objects native to a story in which x has all properties; it will then follow, in particular, that x has [Ry] in the story.

But although I have concentrated on this result, the problem of correlates is of much broader scope. For we want to show not merely that x and y are R-correlates for some special R, but also that certain sets of correlative properties constitute exactly those properties possessed by x and y in a story. For example, we may wish to show that there are distinct objects x and y native to a story s such that [Ry] is the sole property of x in s and [xR] the sole property of y in s. But in regard to this more general problem, the unrestricted abstraction axiom is of very little help.

One final conservative diagnosis of the underivability is that it arises, at least in part, from our adoption of a structural identity criterion for properties. Thus perhaps it could be shown that there were distinct R-correlates if it were not presupposed, as on the structuralist conception, that the properties [xR] and [Ry] were distinct. To meet this point, let us adopt an extensional criterion of identity. Then for certain relations R it will be provable that there are distinct R-correlates. If, for example, R is the null relation, [Ry] may be defined independently of y, and so OA(5) may be used to establish the existence of R-correlates. But this can-

not in general be done. Suppose R were distinctness. Then it must be shown that there is a story s and distinct objects x and y native to s such that x has in s the property lacked solely by y. But again, it is not clear how this property, even up to extension, can be characterized independently of the object y.

If I am right, the most satisfactory solution to the problem of correlates is the most obvious one, viz. that the axiom for object abstraction be supplemented. How should this be done? Roughly, by substituting relations for properties in the original axiom.

To be more exact, let us define  $R(x_1, x_n)$ , for any n-place relation  $R^{40}$  and objects  $x_1, x_2, ..., x_n$ , to be the proposition formed by plugging the objects  $x_1, x_2, ..., x_n$  into the relation R. Then we may say that  $x_1, x_2, ..., x_n$  have R in the story s if the proposition  $R(x_1, x_2, ..., x_n)$  is (in the implicit sense) true in s. (The explicit relational copula may be defined in an analogous way). If now a relational version of object abstraction is formulated in strict analogy to the original version OA(1), we obtain:

For any condition  $\phi$  on n-place relations,  $n \ge 0$ , there are n distinct objects  $x_1, x_2,..., x_n$  and a story s such that:

- (a)  $x_1$ ,  $x_2$ ,...,  $x_n$  are native to s;
- (b) the n-place relations satisfying  $\phi$  are exactly the ones relating  $x_1, x_2, ..., x_n$  in s.

However, this version is subject to the same sort of defects as the earlier one and must be modified in the same sort of way. First,  $x_1$ ,  $x_2$ ,...,  $x_n$  will have certain consequent relations in s. So let us say that C is the (a) content of the objects  $x_1$ ,  $x_2$ ,...,  $x_n$  in s if the propositions true in s are exactly those of the form  $R(x_1, x_2,..., x_n)$ , obtained from an n-place relation R by plugging in the objects  $x_1$ ,  $x_2$ ,...,  $x_n$ . Then in place of clause (b), we should have:

 $\phi$  defines a content of the objects  $x_1, x_2, ..., x_n$  in s. Second, all of the relations satisfying  $\phi$  may be degenerate. In this case, we have to ensure that *all* of the objects  $x_1, x_2, ..., x_n$  occur in the story s. Accordingly, let us say that the n-place relation R is *degenerate in its i-th argument place* if, for any given  $x_1, ..., x_{i-1}, x_{i+1}, ..., x_n$ , the proposition  $R(x_1, ..., x_{i-1}, x_{i+1}, ..., x_n)$  is the same for all values of  $x_i$ ; and let us say that a *class* C of n-place relations is *non-degenerate* if, for each i=1,2,...,n, at least one of the relations in C is non-degenerate in its i-th argument-place. Then it should be required of  $\phi$  that it define a non-degenerate class of n-place relations. Third, in view of the diagonal-type paradoxes, the class defined by  $\phi$  should be replaced by a set.

The new version of object abstraction may also be strengthened in the manner of OA(5); for instead of merely requiring that  $x_1, x_2,..., x_n$  be native to s, it can also be required that they be the only native objects of s.<sup>41</sup> Combining these changes then gives:

OA(6) For any non-degenerate set C of n-place relations,  $n \ge 0$ , there are distinct objects  $x_1, x_2, ..., x_n$  and a story s such that

(a)  $x_1, x_2, ..., x_n$  are the native objects of s;

(b) C is the content of  $x_1, x_2, ..., x_n$  in s.

Finally, considerations of purity may be introduced. Say that C is a *pure content of*  $x_1, x_2,..., x_n$  in s if (i) C is a content of  $x_1, x_2,..., x_n$  in s and (ii) no relation of C contains any of  $x_1, x_2,..., x_n$ . As before, it should be possible to show that the pure content is unique, though only under the assumption that  $x_1, x_2,..., x_n$  are all distinct. For suppose the content of a story is  $\{P(a)\}$ . Then both  $\lambda xy Px$  and  $\lambda xy Py$  are the pure content of a,a. There will, however, be a unique *maximal* or *full* pure content of  $x_1, x_2,..., x_n$  whether the objects are distinct or not.

Now as with the non-relational form of object abstraction, OA(2), it is still not provable that any suitable set of relations is the pure content of the objects  $x_1, x_2, ..., x_n$ . So to this end, we may replace (b) by the clause that C is the pure content of  $x_1, x_2, ..., x_n$  in s.

With all of these changes, it becomes possible to give a simple formulation of the axiom. Let us say that C is the (an) abstract content of the story s if C is the pure content of the distinct objects  $x_1, x_2, ..., x_n$  in s, where  $x_1, x_2, ..., x_n$  are all the native objects of s. In syntactic terms, the relations of the abstract content are expressed by formulas obtained from sentences of the record by replacing all occurrences of names for  $x_1, x_2, ..., x_n$  by distinct variables. Intuitively, the abstract content of a story is its propositional content divorced from the particularity of its native objects. In these terms, the extended abstraction axiom then becomes:

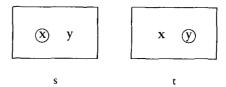
OA(7) Any non-degenerate set of n-place relations, n  $\ge$  0, is the abstract content of some story.

Two subtleties in the formulation of the axiom should be noted. First, it is essential to its proper application that *degenerate* argument-places in the relations of C be allowed. If we wish to show, for example, that Watson is a doctor in the Conan Doyle stories, then we must interpret this as the native characters bearing in the story a relation that is degenerate in all but one argument-place. This may strike the reader as artificial. But we need only attempt to state the axiom exclusively in terms of completely non-degenerate relations to see that the artificiality is a small price to pay for ease of general formulation.

Secondly, it is not merely required that there be the objects  $x_1, x_2, ..., x_n$ , but also that they be distinct. Suppose we wished to show that there were distinct objects  $x_1$  and  $x_2$  that were native to a story in which  $x_1$  was a doctor,  $x_2$  a detective, and  $x_1$  admired  $x_2$ . Then without the qualification, the axiom would be compatible with its always being the same object that was a doctor and a detective, and admired itself. Nor would it do to add distinctness to the relations in C, since the single object  $x_1 = x_2$  might, in the story, be an impossible object that was distinct from itself. Therefore we must explicitly require that the objects  $x_1, x_2, ..., x_n$  be distinct.

If Context Uniqueness and Foundation are assumed, then the above principle strikes me as an adequate formulation of object abstraction<sup>42</sup>. However, if either of these assumptions is denied, additional problems arise. Let me illustrate. Suppose that there are objects x and y and stories s and t such that x is native to s and im-

migrant to t while y is immigrant to s and native to t. The situation is diagrammed below:



Then to characterize x in s we need y and to characterize y in t we need x. This difficulty is, at the level of stories, the same as our previous difficulty at the level of correlative objects; and it may be met in the same way, viz. by simultaneously characterizing several stories. However, I shall not go into details<sup>43</sup>.

Let us now turn to the bearing of correlates on the identity axiom for objects. It will be recalled that the identity axiom as originally formulated was not sufficient for the individuation of all fictitious objects; for it allowed among the distinguishing properties those that presupposed the object in question. It was therefore proposed that objects with the same pure content in their respective stories should be the same (axiom OI(2)). But in the presence of correlates, even this amended axiom is not sufficient for individuation; for the pure content of one correlate x will involve the other correlate y, whose pure content will then involve the original object x. Consider, for example, a story with native objects Watson and Holmes whose sole proposition is that Watson admires Holmes (nothing turns on the artificiality of this example). By the amended axiom, Watson is the sole native object in s to have the content of admiring Holmes and Holmes is the sole native object in s to have the content of being admired by Watson. However neither content suffices to individuate its object, since each leads back, through the other content, to that object.

Now on an internalist view it should be possible to individuate the objects in terms of the properties they have in the story; and since this is not possible for the objects taken singly, it must presumably be possible for the objects taken together, so that both can be determined simultaneously as the ones with certain correlative properties in the story. This means that it should be provable that there is only one pair of objects x and y native to a story in which the content of x is admiring y (and the content of y being admired by x). But on the basis of the present axiom, this and similar results cannot be proved.

As with the earlier difficulty, one solution here is to locate the inadequacy in the other axioms. The suggestion that the implicit copula be replaced by the explicit form is subject to the same difficulties as were raised in section D1. A more interesting suggestion is that the basis for the individuation of fictional objects should be changed. Call a property *pure* if it involves no fictional objects, and otherwise call it *impure*. Now the present difficulties arise from our use of the impure properties fictionally possessed by an object in its individuation. It

might therefore be proposed that all of the objects be individuated exclusively in terms of the pure properties that they fictionally possess.

Such a proposal may have advantages beyond the removal of the present difficulties. For first, it simplifies the formulation of the abstraction axiom and the solution to the problem of being, since only the fictional possession of pure properties need be considered. Second, it ties in with a fictional anti-realism, since the identity of the objects is immediately explained in terms of properties acceptable to the anti-realist. Lastly, it belongs to a more general philosophical outlook according to which all objects are to admit purist explanations of identity or all properties are to be identical or identifiable with purist ones.

How does the purist proposal work? Consider the properties of a native object in a story. Imagine now that the properties are conjoined and the fictional objects in the resulting conjunction are 'existentially generalised'. Thus the property of x's admiring and living with Holmes becomes the property of there being someone whom x admires and lives with. The resulting property may be called *the* (or a) Ramsey property of the given object. It may then be proposed that fictional objects be individuated in terms of their Ramsey properties.

There are, however, various problems here. First, the object may not have its Ramsey properties in a story; for the inferences of adjunction (from p,q to p&q) or of existential generalisation (from Fa to  $\forall xFx$ ) may not be licensed within the story. Perhaps the story is a case of inert literature, or perhaps it is a logical fantasy in which limitations on these rules have been discovered, or perhaps it is realistic work with an unintended inconsistency, which is prevented from spreading by not conjoining arbitrary propositions from the two distinct but consistent substories. In all such cases, then, there may not be enough purist properties to distinguish objects that are otherwise indistinguishable. But even when the Ramsey properties apply, they may not suffice to distinguish the objects. Suppose that the content of one story consists in one native object having a certain pure relation to another native object, while the content of another story consists in a native object having that pure relation to some object or another. Then the two objects will have the same pure properties in their respective stories (assuming we can Ramsify) even though they are distinct. Or again, suppose that the content of one story consists in a native object bearing a certain pure relation to one immigrant object, while the content of another story consists of a native object bearing the same pure relation to another immigrant object. Then again the objects will be indistinguishable in terms of their Ramsey properties. These counterexamples all concern objects from different stories, but they can be modified to fit the intrastory case by supposing that the two given stories are combined into a single story. Further difficulties with the purist proposal also arise from the Dum-Dee story of section E2.

Analogous points hold against the purist account of story content. Fictional anti-realists have often been

tempted to say that the propositions true in a story are just those obtainable by existentially generalising upon the fictional names that occur in the sentences of its record44. For the general reasons already given in section A2, the motivation for this view is misplaced. The truth of a sentence "in the story,  $\phi$ ", where  $\hat{\phi}$  contains a fictional name, is not to be explained in terms of a sentence of the form "in the story,  $\psi$ ", where  $\psi$  contains no fictional name, but in terms of a sentence or sentences of a different form altogether. It is the sentence as a whole, not its sub-sentence, that yields to analysis. But, in any case, the proposed elimination is not adequate to the facts. The examples of inert literature, logical fantasy or inconsistent stories show that the existential generalisation may not even be true in the story. Some of the other examples show that the singular propositions may not be true even when the generalization is. These considerations are also supported by the uniformity principle. For it must be acknowledged that there is a general distinction in ordinary discourse between a singular proposition and its existential generalization; the former requiring of a particular object that it have the given property, the latter only requiring that some object or another have the property. So by uniformity, there should be analogous distinction in fictional discourse, with the singular proposition requiring of a particular object in the pretend world that it have the property, and the existential proposition only requiring this of some object of another. The basis for the distinction is complicated somewhat by the fact that a story about a definite object may begin with the words "There was (is) a man called «Smith» who...". But this is analogous to the use of the same form of words in addressing someone who does not know the man in question; these words serve the pragmatic function of introducing a name. Once the name is introduced, it is used to express singular propositions.

Purity then is no virtue. As before, the most satisfactory solution is the most obvious one, viz. that the identity axiom for objects be supplemented. But how? Internalism leads, it seems to me, to the requirement that the native objects of a story should be individuable on the basis of its abstract content. For internalism at least requires that the objects be individuable on the basis of the full content. But the individuation should be non-circular, and so upon individuating all of the objects it should not be necessary to take cognizance of any of them. But once the particular identity of the objects is subtracted from the full content, all that remains is the abstract content.

What we should say then is:

OI(3). If the distinct native objects  $x_1, x_2,...,x_n$  have the same pure content in the story s as the distinct native objects  $y_1, y_2,...,y_n$  have in the story t, then the objects are the same, i.e.  $x_1 = y_1, x_2 = y_2,..., x_n = y_n$ .

Or using the notion of abstract content, we may say: OI(3') If s and t have a common abstract content, then their native objects are respectively the same. That is, the native objects of a story are recoverable

from its abstract content. Or stating the axiom directly in terms of relations, we may say;

OI(3'') If the distinct native objects  $x_1, x_2, ..., x_n$  (implicitly) have in s the same relations not involving  $x_1, x_2, ..., x_n$ ,  $y_1, y_2, ..., y_n$  as the distinct native objects  $y_1, y_2, ..., y_n$  have in t, then the respective objects are the same.

We see then a relationship between the relational identity and abstraction axioms, OI(3) and OA(7), comparable to the relationship between their non-relational counterparts, OI(2) and OA(2'). In either case, the «existence» of the objects is postulated in terms of the same conditions as its identity.

It is important to distinguish OI(3) from what one might regard as the natural relational analogue of our original identity axiom, OI(1), viz.:

(\*) If  $x_1, x_2, ..., x_n$  have the same relations in s as  $y_1, y_2, ..., y_n$  in t, then  $x_1 = y_1, x_2 = y_2, ..., x_n = y_n$ .

The antecedent of (\*), unlike that of OI(3), is very strong; it requires the common fictional possession of all relations, whether or not they involve the objects in question. Indeed, (\*) is simply equivalent to OI(1); for OI(1) is the special case of (\*) in which two single objects  $x_1$  and  $y_1$  are compared; and once degenerate relations are countenanced, the antecedent of (\*) will imply the antecedent of OI(1) for all of the pairs  $(x_1,y_1),(x_2,y_2),...,(x_n,y_n)$ .

It is also important to distinguish OI(3) from the principle in which the distinctness condition on the objects  $x_1, x_2,...,x_n$  and  $y_1, y_2,...,y_n$  is dropped:

(+) If the native objects  $x_1,x_2,...,x_n$  have a common pure content in s with the native objects  $y_1,y_2,...,y_n$  in t, then  $x_1 = y_1,...,x_n = y_n$ .

This principle is extremely strong and extremely implausible. Basically, it means that the properties of a single character in a story cannot be shared between characters. Consider, as an example, an actual story whose content is  $\{=(a,a),P(a),Q(b)\}$  for a distinct from b (and = (a,a)) the proposition that a is identical to a). Then the principle would exclude a story whose content was  $\{=(c,c),P(c),Q(c)\}$ , since a, b and c,c would share the content  $\{\lambda xyx = x,\lambda xyPx,\lambda xyPy\}$ .

There is, however, a more plausible version of object identity, that effects a compromise between OI(3) and (+):

OI(4). If the native objects  $x_1, x_2, ..., x_n$  in s have the same *maximal* pure content as the native objects  $y_1, y_2, ..., y_n$  in t, then  $x_1 = y_1, x_2 = y_2, ..., x_n = y_n$ .

In terms of the record, this principle means that if each occurrence of a name is of distinct type, then it should be possible to determine from the attributions made which of the names refer to the same object and which did not. However, and this is the crucial difference from (+), it must be supposed that the record contains all truths from the given language, even when they express the same proposition. Thus if the record contains «m = m» and m is co-referential with n, then the record must also contain m = n. It follows, in particular, that the previous example will not work against the present principle, since the content  $\{\lambda xyx = x, \lambda xyPx, \lambda xyPy\}$  would have to include  $\lambda x-yx = y$  in order to be full.

Interestingly and surprisingly, OI(4) follows from OI(3)<sup>45</sup>. First, note that OI(4) follows from OI(3) and the principle that the identity and distinctness of native objects can be recovered from their full content or, more exactly:

D(ifferentiation) P(rinciple). If the native objects  $x_1, x_2, ..., x_n$  of s and the native objects  $y_1, y_2, ..., y_n$  of t have the same full pure content in their respective stories, then  $x_i = x_j$  iff  $y_i = y_j$  for  $i, j \le 1, 2, ..., n$ .

For assume the antecedent of OI(4) (which is the same as the antecedent of DP). Then  $x_i = x_j$  iff  $y_i = y_j$  for  $i, j \le 1,2,...,n$ . Choose  $i_1,i_2,...,i_n$  so that  $x_{i_1},x_{i_2},...,x_{i_n}$  are pairwise distinct and  $\{x_{i_1},x_{i_2},...,x_{i_m}\} = \{x_1,x_2,...,x_n\}$ . (This may be called "weeding"). Then also  $y_{i_1},y_{i_2},...,y_{i_m}$  are pairwise distinct and  $\{y_{i_1},y_{i_2},...,y_{i_m}\} = \{y_1,y_2,...,y_n\}$ . Since  $x_1,x_2,...,x_m$  and  $y_1,y_2,...,y_m$  have the same full pure content in their respective stories,  $x_{i_1},x_{i_2},...,x_{i_m}$  and  $y_{i_1},y_{i_2},...,y_{i_m}$  have the same relations not involving these objects in the stories and so, by OI(3"),  $x_1 = y_1$ ,  $x_2 = y_2,...,x_n = y_n$ .

 $x_2 = y_2,...,x_n = y_n$ . It now suffices to show that DP follows from OI(3). In fact, a much stronger result can be established, viz. that DP is equivalent to the original identity axiom OI(1) for the case in which s and t are the same story. For, first, suppose that the distinct native objects x and y have the same properties in s. Then it is readily seen that, x,x,y and x,y,y have the same maximal pure content in s, contradicting DP. Now suppose that DP fails, so that the antecedent holds and the consequent fails. Without loss of generality, we may suppose that  $x_1 \neq x_2$  and  $y_1 = y_2$ . We may now show that  $x_1$  and  $x_2$ have the same properties in s. For suppose the proposition that  $\phi(x_1, x_1, x_2, x_3, ..., x_n)$  is true in s. It must be shown that the proposition that  $\phi$   $(x_2,x_1,x_2,x_3,...,x_n)$  is true in s. But looking at the relation  $\lambda x_1 \lambda x_2 ...$  $\lambda x_n \phi(x_1, x_1, x_2, x_3, \dots, x_n)$ , we see that the proposition that  $\phi(y_1,y_1,y_1,y_3,...,y_n)$  is true in t; and looking at the relation  $\lambda x_1 \lambda x_2 \dots \lambda x_n \phi(x_2, x_1, x_2, x_3, \dots, x_n)$ , we see that the proposition that  $\phi(x_2,x_1,x_2,x_3,...,x_n)$  is true in s, as required.

Note that it is OI(3), for s and t the same story, that implies OI(4). It would still be possible to accept OI(3) for distinct stories and yet reject OI(4).

Philosophically, OI(4) is an advance on OI(3). According to OI(3), the objects can be recovered from their full pure content, given that the objects are distinct (and that the content is maximally pure). But the distinctness of the objects is external, as it were, to their content, and so it might be thought that it should not be available on an internalist view. The principle OI(4), on the other hand, states that the objects can be recovered from their full content, quite apart from considerations of identity or distinctness, and so is not subject to this defect.

The advantage of OI(3), or more exactly OI(3'), is that the abstract content of given objects, is unique up to an ordering of the objects. Therefore OI(3) yields a canonical representation of the objects in terms of their content.

Later, I shall argue against these identity axioms. But for the present, we may note an internal difficulty in the theory; for the axioms, as stated, are incompatible with object abstraction. Consider an abstract content whose relations are of the form  $\lambda xy Px$  and  $\lambda xy Py$ . Thus the first relation holds of a pair of objects x,y when x has P and the second when y has P. By the abstraction axiom, there are distinct native objects x and y which have this pure content in some story. The story is one in which x and y have P but no other (non-degenerate) properties. Now x and y have the same pure properties in the story and so, by the identity axiom, are identical. A contradiction.

Clearly, what is wrong is the particular instance of the abstraction axiom. This gives two objects that are indiscernible within a story, in flat contradiction to internalist intuitions.

This difficulty may be met by appropriately restricting the possible contents of stories. Given any relation, a transformation of it may be induced by a transposition of its argument-places. For example, the converse of a relation may be obtained by switching the first and second argument-places. Similarly, given a set of n-place relations, this may be transformed, via a transposition of the n argument-places, into the set of correspondingly transformed relations. Now most sets of relations cannot be properly transformed into themselves; these we may call *normal*. However some, such as the one above, can be; and it is these that must be excluded from the reach of the abstraction axiom. Thus we may now say:

OA(7') Any normal non-degenerate set of n-place relations is the abstract content of some story.

As far as I can see, this new axiom then removes the difficulties in reconciling suitable versions of the abstraction and identity axioms.

From the extended identity axiom may be derived a new internalist criterion of identity for stories. What we may show is:

SI(2). Stories with the same abstract content are the same,

For suppose s and t have the same abstract content C, so that the distinct native objects  $x_1, x_2, ..., x_n$  have the pure content C in s and the distinct native objects  $y_1, y_2, ..., y_n$  have the pure content C in t. By object identity,  $x_1 = y_1, x_2 = y_2, ..., x_n = y_n$ . But then the same propositions are true in the two stories and so, by SI(1), they are the same.

However, we cannot assert, conversely, that identical stories have the same abstract contents. The problem is this. Suppose that the dyadic relations R and S constitute the abstract content of the story s. Let  $\overline{R}$  and  $\overline{S}$  be the respective converses of these relations. Then if the distinct objects  $x_1,x_2$  have  $\{R,S\}$  as their abstract content in s, the objects  $x_2,x_1$  will have  $\{R,S\}$  as theirs. Thus  $\{R,S\}$  will also be an abstract content of s, but it will, in general, be distinct from  $\{R,S\}$ .

To overcome this difficulty, let us say that two sets of n-place relations are *equivalent* if there is a permutation of the argument-places 1,2,...,n under which the

relations of the one set transform into the relations of the other. For example, interchanging the first and second arguments, transforms  $\{R,S\}$  into  $\{R,S\}$ . We may now show, on the basis of the other axioms, that: SI(2'). Stories are identical iff they have equivalent abstract contents.

I have so far dealt with the difficulties that correlates raise in finding a proper formulation of the identity and abstraction axioms for objects. But correlates also raise difficulties for the cumulative model of section C2. Recall that under this model, objects and properties are generated in stages; objects from properties, and properties from objects. But now consider Watson and Holmes. Watson must be generated with the help of the property of admiring Holmes, this property with the help of the object Holmes, that object with the help of the property of being admired by Watson, and finally that property with the help of the object Watson. But then Watson must be generated with the help of Watson, which is impossible. Thus we see that, in the presence of correlates, the cumulative model falls to the ground (or better: never gets off the ground).

Of course, this failing in the cumulative model is not unconnected to the inadequacy in our original axioms. For what we require of our axioms is that they should provide for a fair quota of correlates. But the cumulative model renders the original axioms true, and so the fact that the model contains no correlates shows that this requirement on the axioms cannot be met.

The standard internalist theories have been ones in which the objects have been generated, in some way or another, from properties. It is therefore of the greatest importance to see that, in the presence of correlates, such a simple picture of the objects can no longer be maintained. What, then, should be put in its place? One suggestion here is that the native objects of a story should be generated not from all of the properties they have in the story but only from those not involving the native objects of the story. But such a suggestion immediately runs into problems of individuation similar to those facing the earlier purist proposal; for different native objects may share their non-relational properties in a story and yet differ on their relational properties. Such an account also leads to an awkward asymmetry in the treatment of properties and relations; for it will be immediately clear from the construction of an object whether it has a (non-relational) property in its home story, but whether it bears a relation in the story to another native object will be completely problematic. It therefore seems better to take a more radical step and to follow the newly revised axioms in taking the abstract contents of the story as primary. Under the original model, the native objects and abstract content of a story were generated independently from the properties or relations not containing these objects:

native objects abstract content
properties (relations)

Under the new model, the abstract content will be

generated first, and then the objects from the abstract content.

native objects

†
abstract content
†
properties (relations)

Recall that the abstract content was a class of n-place relations (for n the number of native objects). We may now think of each native object as corresponding to one of the n argument-places of an abstract content; set-theoretically, we might identify it with the ordered pair  $\langle C,i \rangle$  for C the content and i=1,2,...,n the number of the argument-place. If before objects were identified with something like concepts, they are now identified with roles.

The differences between the two models is quite sharp. Whereas the original model constructed the native objects, one by one, from their respective defining properties, the new model constructs them, in one go, from a common abstract content. Whereas the original model cannot easily deal with relations among native objects in a story and cannot, in any case, treat relations on a par with (non-relational) properties, the new model deals easily with both properties and relations, for it will immediately be clear, from the underlying abstract content, what properties the native objects have and what relations they bear to one another in the story. Another difference concerns the nativity relation. On the concept model, it is not clear, in purely abstract terms, when an object is native or immigrant to a story; for the story will just correspond to a bundle of propositions and so there will be no way of telling, just from the objects that occur in those propositions, which are native and which are immigrant. However, on the role model, this will not be a problem. For the story will correspond to an abstract content and so it will be clear from the internal construction of the object or its counterpart what its home story will be. Non-existents, like snails, will carry their homes upon their backs.

These differences become further accentuated once Foundation or Context Uniqueness is dropped. For then instead of looking at the stories one at a time, we must construct the abstract contents and native objects of a whole class of stories, lest an object occurring in one of the stories be native to a story outside of the class. However, the basic idea behind the model will remain the same.

Even though objects are now generated from abstract contents or relational types, there is still no departure from the framework of section B2 in which objects are individuated in terms of properties. True, there need be no properties from within the story that serve to individuate the objects; but there will be properties from without the story. To illustrate this point, consider our contrived story with native characters Watson and Holmes, whose sole proposition is that Watson admires Holmes. Then in this story, Watson will be the unique object x such that, for some distinct object y

and story s, that x admires y is the abstract-content of s, and similarly for more complicated cases. The objects could, of course, be generated from these story-structural properties, just as any objects could be generated from properties which individuate them. But generating the non-existents from the abstract contents relates the construction most directly to the internalist position.

#### D5. Modal Matters

The theory, as so far developed, has been exclusively non-modal. Let me now deal briefly with the modal aspects of the theory. As before, the discussion will be confined to the internalist-platonic framework. I hope in the next part to give a more thorough, and less dependent, account of the matter.

The modal theory will fall naturally into three parts. First, we may assert that all of our previous axioms hold of necessity. Secondly, we may state certain rigidity assumptions for the relations of being native to and of occurring in, and for the story-relative copula. For the nativity relation, we should say that if x is ever native to s then necessarily, whenever x is and s exists, x should be native to s;46 and similarly for the other relations. Finally, we should lay down certain dependency assumptions, one for contents and stories and the other for contents and objects. The first says that if a story has a certain abstract content then necessarily the story exists iff the content does. The second says that if an object is native to a story then necessarily the object is iff the story exists. Thus stories are mutually dependent upon their contents and objects upon their stories.

From these axioms, it follows that the being and the identity of fictional objects and stories is entirely explained in terms of the appropriate abstract content. For given that the native objects  $x_1, x_2, ..., x_n$  have the abstract content C in the story s, it will follow that, necessarily, the story and each of the objects is if and only if the abstract content exists and that, necessarily, whenever the objects  $x_1, x_2, ..., x_n$  or the story s are, they will be uniquely fixed by the fact that the objects have the content C in the story. Thus the theory will give a complete solution to the modal problems of identity and of being.

Note that I have not assumed that contents necessarily exist. If one makes this assumption, then stories and their objects necessarily *are* and the theory becomes the trivial one in which the relevant structure of each world is the same. There is, however, a weaker or qualified form of platonism that allows for the contingent existence of some abstract entities. On this view, if one entity is constructed from others, then (necessarily) the constructed entity has being only if the others do. Now on a certain conception of properties, propositions and sets, these entities will be constructed from other entities and ultimately from individuals. If those individuals contingently exist, then so will the constructed entities. A modal theory of propositions of this

sort has been partially worked out in Fine '79. If such a theory is grafted onto the present one, then abstract contents will be subject to the vagaries of individual existence, as will the stories and their objects.

## E. Criticisms.

# E1. Against Platonism

The criticisms of the previous section were in a certain way technical. For they showed that certain formulations of the axioms were not adequate to the underlying conception of non-existent objects; some appropriate modification in the formulation was then able to meet each difficulty. The present criticisms will be more fundamental; for they will show, not that the particular formulations are wrong, but that the underlying conception is mistaken. What is required to meet these difficulties is not some modification in the existing axioms, but a totally new theory.

If the internalist part of the conception is retained, but not the platonic part, then one might be able to get by with something like the present theory. It is not exactly clear what the resulting conception would be like, but it might be one in which the identity of the contexts and objects was given in internalist terms, even though their existence or being required that the appropriate abstract content be empirically realized. In formulating this theory, the only changes from the existing theory that would be needed are first, that the contents in object abstraction be restricted to those that are empirically realized and, second, that in the dependency assumption for stories and contents, the existence of the story should require and be required by the empirical realization of the corresponding content.

However, empiricism and internalism are uneasy bedfellows; and once internalism is also dropped, it is unlikely that such a simple solution will still be available. We could, of course, just retain as much of the present theory as is true. But we require of a theory not just that it be true but that it solve various problems - in the present case, the problems of being and identity. But without internalism, it is highly unlikely that these problems could be solved within the resources of the present theory; for these only allow us to characterize the objects and contexts in terms of their content. Some new concepts and insights would seem to be required.

In criticizing the present conception, I shall try not to presuppose an alternative theory. Later, however, when an alternative theory is developed, these criticisms will assume a greater depth and it will become clear how radically mistaken is the present conception of non-existent objects. Of the three components in this conception, the first, platonism, will be discussed in this section, and the second, internalism, in the next. The third component, contextualism, is one that I endorse, and it is only in the third part that I shall argue against the rival opinions of the literalist school.

First, let us consider the issue of platonism for stories

and their objects. Do these entities have their being contingently (even when no immigrant objects are involved) or only necessarily? My own view is the extreme empirical one that stories and their objects are created not discovered (and this as a matter of necessity). They do not exist or have being independently of the appropriate activity of the author. Rather, they come into being as the result of that activity, in much the same way as a table comes into being as the result of the activity of a carpenter. The proposition that x is created is presumably a contingent one, it follows that stories and their objects have their being contingently.

I hold a similar view of operas, films, plays and the like. But what of the contexts and objects of dreams, beliefs, hallucinations, which are not ordinarily said to be created? Considerations of uniformity among the different contexts suggests an empirical view of these contexts and their objects as well. But this general point is also supported by a more particular consideration. For the creation of a story or a character, let us say, is merely the characteristic means by which that context or its object is introduced. It therefore seems reasonable that other contexts and their objects should be dependent upon their characteristic means of introduction, even when there is no single word, like "creation", to cover these cases. In this way, many of the other considerations concerning stories and their objects apply to all contexts and, for this reason, I shall often confine myself to stories, even though I have the general case in mind.

Against the creationist view, the platonist may argue that it is only in a metaphorical sense that we talk of an author creating a story or its characters. What really happens is that the author discovers or hits upon the story. However, when one considers this question independently of the theories in question, there appear to be no grounds for supposing the use of language to be metaphorical. We most naturally talk of creation. On the other hand, it just seems false to say that Shakespeare discovered or first represented Hamlet. By what strange perversion of language, then, does the literal truth appear false and the metaphorically false appear true?

All too often, philosophers have appealed to metaphorical or other non-literal usage when their theory will not fit the linguistic facts. But instead of maligning the data, they should question their theories. In this case, I suspect, what underlies the platonist's position is a certain ontological prejudice. He sees, correctly, that a story or character is not identical to a text or name or to any other existing concrete thing. But from this he concludes, incorrectly, that it is abstract and incapable of being created.

These philosophers operate within too limited a framework of ontological categories. They suppose that certain features should go together, so that the same entities will be material, will exist in space and time, will exist contingently, etc., and the same entities will be immaterial, not exist in space and time, be necessarily existent, etc. Now although the

paradigmatic cases of concrete and abstract objects may have exactly the features from one or other of these groups, it must be recognized that there are objects of intermediate status that share features from both.

This is not to deny, though, that even for a platonist all objects may ultimately reduce to objects of the paradigmatic sort. The category of intermediate objects is one that belongs at the level of naive ontology, of what in the ordinary sense is said to be. Its presence is therefore compatible with their being, at the ultimate level, only objects of the paradigmatic sorts.

The simple-minded dualism between the abstract and the concrete may have been fostered by the symbolism of modern quantificational logic. For it is natural to suppose that anything must be a value of an individual term and hence straightforwardly concrete or a value of a predicate term and hence straightforwardly abstract. But of course there is no reason why the symbolism need be interpreted in such a restricted way.

However, while conceding these general theoretical points, the platonist may doubt whether any specific account of stories and their object will accord with everything we want to say about them. In order to meet this point, let me suggest an account of stories, and other contexts, that will accord with our creationist intuitions. The account I give may not be quite right, but at the very least it will point to the possibility of a correct account of this sort. Given any object x (called the basis) and any property P possessed by x (called the description), I should like to say there is another object, x qua P or x under the description P. In a book under progress, I have developed the theory of qua objects in great detail. Now when an author creates a story, he will bear a certain relation, which we may call "indicating", to the abstract content of that story. We may then say that the story is the abstract content under the description of having being indicated, in the way that it was, by the author 48.

It may be wondered why we have picked out one qua object rather than another, given the enormous range of descriptions that might have been applied to its basis. This is essentially a matter of our interests. Thus the fact that authorship is built into the description is a reflection of our interest in the relationship between an author and his work. In a society with different interests, other qua objects might have been picked out, even though the underlying objects were the same.

A similar view can be developed for certain other contexts, such as plays and films, and also for certain noncontextual works of art, such as musical works. (These are non-contextual in the technical sense of not being habitats of the non-existent). Dreams and beliefs, statues and paintings, might also be treated as qua objects, though for different reasons and not in the same way.

This view of stories and other contexts as qua objects should help to make intelligible to the platonically inclined philosopher the peculiar nature of these entities. First of all, it explains their intermediate status. For in so far as the basis of the qua object (the content) is

abstract, the qua object itself will share in many of the properties of an abstract object. However, a qua object exists only if the basis satisfies the description. And so, in that the description is only contingently satisfied, the qua object will be like an empirical entity.

The theory also explains how stories, though not concrete, can be created. In my book I develop a general account of creation, according to which to create a qua object x qua P is to bring it about (in a certain way) that x has P. This account applies to ordinary acts of creation and, when applied to stories, gives the correct result that they are created only when their abstract content is appropriately indicated.

Finally, the view can be used to vindicate the platonist's claim that, at the most fundamental level, there is a simple dichotomy between the abstract and the concrete. For it may be argued that qua objects have no independent ontological status, but are reducible to their bases and descriptions. But then stories will be reducible to entities of a more orthodox kind and so will themselves provide no evidence against such a dichotomy.

In some such way, one might allay the platonist's qualms over an empiricist conception of contexts. Unfortunately, a similar account of non-existents will not work. The most promising line is to take a non-existent to be a certain abstract role under the description of being indicated in a certain way. But first, it will appear from the next section that certain non-existents cannot be distinguished, in this way, in terms of their basis and description. And second, such an account does not square with the peculiar status of these objects as *non-existents*.

In the second part, I shall develop a more satisfactory account of the nature of non-existents. But apart from this general point, there is a special doubt that the platonist may have over adopting a creationist view of objects as well as contexts. For to create an object, he will say, is to bring it about that it exists. How then can a *non-existent* be created? Or more generally, a contingent object is one that contingently *exists*. How then can a non-existent be contingent?

To dispose of this objection, it is necessary to distinguish between existence and being. Fictitious objects and the like do not, in the ordinary sense, exist. But there is a broader sense of being that they may possess; and it is their being in this sense that results from creative activity, not their existence.

But what is this broad sense of being which fictitious objects possess? Must it not be rather mysterious? I think that fictitious objects *are* merely in the sense of being actual. Not, though, in any or every sense of "actual". Some philosophers, myself included, have used the term interchangeably with "existent", and others have used it in a special narrow sense. However, in maintaining that fictitious objects are actual, I now wish to use the term as it is currently used in modal logic, and that is as a contrast to the merely possible. An actual object, then, is one that is not merely possible.

Now in this sense of the term, all existing objects are

actual, for no existent is a merely possible object. However, not all actual objects are existent, at least on a creationist view of fictitious objects. For on this view, fictitious objects acquire their being through the appropriate creative activity. Now this is a being they might not have possessed, for I assume that there would not have been the object if the appropriate activity had not taken place. Thus these objects have their being in contrast to merely possible fictions that might have had such being but, in fact, do not. These objects are actual ones.<sup>49</sup>

On my view, then, there is a tripartite division within the realm of objects. There is the usual division between the actuals and the merely possibles. But among the actuals, there is a subdivision into the existents, and the non-existents.<sup>50</sup>

Most philosophers now would maintain that there is but a single univocal concept of being. Such philosophers might accept our distinctions, but would deny they were *ontological* distinctions, distinctions of being. For them, to be an object is to exist. Therefore any divisions within the realm of objects would be of beings, not of being.

The reasons for this doctrine are not compelling and seem to depend upon mistaken views concerning the connection between the so-called existential quantifier and the concept of existence. Let us not go into these reasons here. But let us note that the contrary doctrine is a very intuitive one. Of some distinctions, e.g. between cats and dogs and perhaps even between abstract and concrete objects, we wish to say that they are distinctions in what the objects are and not in how they are. But of other distinctions e.g. between the actual and merely possible or between the existent and nonexistent, we are very much inclined to say that they are distinctions in how the objects are and not merely or not all in what they are. Admittedly, it is hard to say what this distinction between the "what" and the "how" of an object amounts to. But it is an intuitive one and not to be lightly dismissed<sup>51</sup>.

In fact, some of the things we ordinarily want to say depend upon distinguishing senses of being. Surely to create is not to endow new properties on an object already with being, but to bring a new object into being. Yet unless we distinguish between the being of actuals and of mere possibles, it is not possible to maintain this connection between creation and a sense of being.

Perhaps what is more important is that certain systematic metaphysical purposes may be served by distinguishing different senses of being. As an example, consider the picture of reality that is suggested by our own distinctions between the actual and possible and between the existent and non-existent. It is as if we start off with the actual world, endowed with various relations among existents. The actual world may then be expanded in either of two directions. Possible worlds may be introduced, corresponding to the possibilities of the actual world. Or, within each possible world, fictitious worlds may be introduced, cor-

responding to the stories and other contexts of that world. The possible objects will then be those that originate in the possible worlds, while the non-existent objects will be those that originate in the fictitious worlds. Thus we see that the difference in being between non-existents and mere possibles will reflect a fundamental difference in how these objects are to be introduced from the starting point of an ontology that accepts neither of them.

## E2. Against Internalism

In this section, I shall argue against internalism and even against the very possibility of individuating non-existent objects.

According to the internalist position, contexts and their objects can be individuated without circularity, on the basis of their internal features. As we have seen, this position requires the following two identity principles. *Story Identity*. Stories with the same abstract content are the same;

Object Identity. Native objects with the same abstract content in their respective stories s and t are the same. Let me deal, first of all, with the axiom of story identity and the axiom of object identity for the case in which the stories s and t are distinct (inter-story individuation). For these cases, it suffices to consider the earlier example of two authors independently creating stories with the same text (and in so far as it is relevant, within the same kind of culture). Without going into the meaning of independence, we may suppose that it is guaranteed by the authors working in societies that are causally isolated from one another.

It then seems clear that the abstract contents of the stories are the same, even though the stories themselves and their native objects are distinct. But there is no need to appeal to unadorned intuition here; for the position is also supported by the creationist view of stories and their objects. If this view, as previously argued for, is accepted, then it follows by the considerations of section C1 that the stories and their objects are distinct in such a case.

A similar argument does not apply of course to uncreated contexts and their objects. But there the intuition seems to be stronger that the contexts and their objects are distinct in cases of independence. Suppose that two men independently fantasize about a beautiful damsel who has in their respective fantasies the same pure properties (in the technical sense, that is). Then do we not want to say that the fantasy objects are distinct? This becomes even clearer if in their subsequent fantasy lives the objects are endowed with completely different properties, for there is then no danger of confusing the objects with their types.

Let us now turn to the axiom of object identity for the case in which the stories s and t are the same (intrastory individuation). For this case, it must be impossible that the native objects x and y of a story are symmetrically placed in the story, with the one object having the same sort of properties vis-à-vis the other as

that object has vis-à-vis it; for then x,y and y,x would have the same abstract content in the story s.

But surely there can be stories of this sort<sup>52</sup>. We can imagine that the story proceeds in the following manner:

Once upon a time there were two twins, Dum and Dee. They had much in common; Dum was rotund and so was Dee; Dum had a fear of heights and so did Dee;.... Then Dum and Dee are distinct yet indiscernible (i.e. symmetrically placed) within the story.

This example tends to give rise to certain misunderstandings; and in dealing with them, it will be helpful to consider an analogous example using pictures. Imagine then a painting of a symmetric universe. To be specific, we may suppose that the picture is realized on the surface of a sphere and is symmetric about its two hemispheres. Each object portrayed on the one hemisphere will then be distinct and yet indiscernible from its counterpart portrayed on the other hemisphere. Some philosophers think that a symmetric universe is impossible. But they would surely not argue against the possibility of portraying such a universe.

There are two sorts of objections against these examples, one against the indiscernibility claim and the other against the distinctness claim. Let us consider each sort in turn. First, it may be argued that Dum, say, is distinguished from Dee by having the property of being called «Dum» in the story. But following the lead of Parsons,53 we should distinguish here between what might be called internal and external names. An internal name of a character is one that it has in the story, an external name one that it does not have in the story. We of course may use an external name for a character, but so may the author in writing the story. He may make it clear, for example, that all of the people in the story communicate by high frequency radio waves. There is thus no possibility of their actually having in the story the names that the author uses for them. We may suppose then that our Dum and Dee story is of this sort.

The comparable point for the symmetric picture is particularly clear, for it is not even generally true that it is part of the content of the picture that the objects are being portrayed by whatever represents them in that picture.

Another objection against symmetry is that Dum and Dee are distinguished by the fact that they have different properties in the story. But there is an ambiguity here. It is, or may be, true in the story that they differ in their properties; but this is a respect in which they are symmetrically placed. On the other hand, there is no particular (pure) property on which they differ in the story.

Turning to the distinctness claim, one objection may concede that there are the characters Dum and Dee but contend that they are the same. But the story may explicitly state that Dum and Dee are distinct; and granted that the story is not a logical fantasy, it must then be true in the story that Dum is distinct from Dum, which is absurd. Even ignoring this difficulty, the view will not account for the intuitive distinction

between the present story and one that is about a single character with the properties attributed to Dum and Dee

In the case of the symmetric picture, it is particularly clear that the objects and their counterparts are distinct and that the content of the separate hemispheres needs to be distinguished from the content of the sphere as a whole.

A more radical objection to the distinctness claim is that the story is not about the putative characters Dum and Dee at all but about a pair of objects, which we may call Dum-Dee (this seems to be Parsons' view in his book). A peculiarity of the story is that although the pair Dum-Dee is an object of the story, no components of the pair are also objects of the story. In this respect it is like the familiar example of a crowd, with the crowd being an object of the story, but not its members.

Now I do not wish to deny in general that an object can figure in a story as a pair without any objects figuring in the story as members of that pair. But I do not think the present story is of this sort, for it differs significantly from the crowd example in that the names «Dum» and «Dee» are apparently used to refer to the different members of the pair.

We should then ask what, on the present view, the names refer to? It cannot be to the pair Dum-Dee, for then the story will attribute the wrong properties to that pair. It must therefore be concluded that the names do not refer at all. The different sentences that are apparently about Dum and Dee must be bundled together in pairs, as it were, and treated as claims about Dum-Dee.

But this seems absurd. Surely in determining the content of the story, the names must be treated as they would be in ordinary discourse, viz. to refer.

This general point is reinforced by more particular considerations. For it would be accepted, on the present view, that the names refer when some difference in property is attributed to their putative bearers. Now in ordinary discourse, the referential role of names is independent of what attributions are made. It is perfectly conceivable that the Dum-Dee script could be used in ordinary discourse to refer to two distinct objects, the agreement of attribution not withstanding. Why then should it make such a difference to the fictional case? Is it really conceivable that the whole linguistic role of the names and of the sentences in which they occur should change upon introducing the slightest discrepancy in the story between putative Dum and putative Dee? Again, these points become particularly clear in the pic-

Again, these points become particularly clear in the picture case. One is under no temptation to say that the picture portrays a symmetrical pair without portraying its members (imagine what such a painting would be like), and nor is the portrayal of a specific object on one hemisphere dependent upon a discrepancy in the other hemisphere.

I conclude then that the examples may stand. Indeed, I think that a far more radical counterexample to internalism may be given. It will be recalled that our original identity axiom, to the effect that native objects with the same properties in their stories be the same,

did not allow for the *non-circular* individuation of nonexistents. But even this very weak principle is false. This is not established by our earlier examples. For certain relational propositions may be true of Dum and Dee in the story. It may be true, for example, that Dum is Dee's brother. Now the final identity axiom only requires that it then be true in the story that Dee is Dum's brother. But the original identity axiom requires that it then be true in the story that Dum is Dum's brother, which is implausible. Even if no relational propositions of the usual kind concerning Dum and Dee are true in the story, it is still likely to be true in the story that Dum is identical to Dum and distinct from Dee. But then the original identity axiom requires it to be true in the story that Dee is identical to Dum and distinct from Dee, which again is implausible.

I think, however, that the original example can be modified so as to get round these difficulties. Suppose that the Dum-Dee story is now a logical fantasy in which it has been discovered that the world is monistic, with no simple<sup>54</sup> relations holding between objects. It then seems reasonable, though it does not strictly follow, that for no simple relation should any objects have that relation in the story. We may also suppose that various properties (not involving Dum or Dee) are attributed to Dum in the story and that exactly the same properties are attributed to Dee. Finally, we may suppose that it is clear from the author's intentions or from literary convention or what have you that the characters Dum and Dee are distinct. We would then seem to have a counterexample of the required sort, with Dum and Dee distinct and yet agreeing on all of their properties in the story.

As I have set up the story, it is not clear whether Dum and Dee have any relations in the story. There is no objection to this, however, as long as whenever Dum and Dee have a certain relation in the story, so do Dum and Dum, Dee and Dum, and Dee and Dee. In particular, we may allow that Dum and Dee have any complex relation in the story whose possession follows (within first-order logic without identity) from the original attributions. We may allow, for example, that Dum and Dee have the complex property of x's being rotund and y's being fearful of heights; for, as is easily seen, it will also be true in the story that Dum and Dum, Dum and Dee, and Dee and Dee have that relation in the story. There is some problem as to whether it should be true in the story that Dum is identical to Dum or that Dum is distinct from Dee. If the first holds, it should also be true in the story that Dum is identical to Dee; and if the second holds, it should also be true in the story that Dum is distinct from Dum. Since I wish to avoid these consequences, I shall assume that it is neither true in the story that Dum (or Dee) is self-identical nor that Dum is distinct from Dee.

It therefore follows that our story is an example of what I have called a logico-philosophical fantasy. It would be desirable to give a counterexample to the original identity axiom without appealing to such fantasies; but this is impossible. For let us suppose (a) that each native object is self-identical in its home story, and

(b) that distinct native objects are not identical in their home story. Then the intra-story version of the original axiom will hold; for within any story, each native object will be the unique one to have the property of being identical to that object. This means that in order to find a counterexample to the axiom, we must violate one or other of the assumptions (a) and (b), thereby generating a logical fantasy. Although I could have given an example in which either (or both) of the assumptions failed, I have preferred to drop (a) as being the least fanciful of the two alternatives.

As I have argued, a theory of non-existents should deal with the most outrageous of logico-philosophical fantasies. But for those who would demur, we might note that the present story is a very mild example of such a fantasy. On the philosophical side, we have a story that corresponds to what many philosophers have believed. On the logical side, we have a story compatible with first-order classical logic without identity. Indeed, relative to such a logic, the story may be both consistent and complete. Thus if we suppose that the properties used and the objects mentioned comprise the monistic ontology of the story, then the story would give, by its own lights, a complete account of reality. 55

Admittedly, it will not be true in the story that either Dum or Dee is self-identical. But that these identities not hold may appear quite reasonable from within the story. Perhaps it is held (as some philosophers have) that alleged claims of identity say nothing and are therefore to be eschewed; or perhaps it has been discovered, given an empirical view of logic, that dropping the Law of Identity is the only way to save the phenomena.

Still, it may be thought that the odd internal logic of our story raises special problems. For surely, it may be argued, if objects are distinct, they must be distinct in the story in which they occur. But, by my own admission, the characters Dum and Dee are not distinct within the story.

I think it may be shown, however, that these oddities are not peculiar to my own story, but also arise for realistic fiction. Certainly, it is not generally true, even in realistic fiction, that distinct native objects are distinct in their home story. For what if the identity of the two objects is left open in the story, so that it is neither true in the story that they are the same nor true that they are distinct? There are many stories in which the identity of two characters is left unresolved until the very end, and we may easily imagine stories in which the question of identity remains forever unresolved. In such a case, we should say that the characters are distinct. For if they are the same, then one of the characters, say x, will have the property of being identical to x in the story and so the other character will also have that property in the story, contrary to their identity being left open. But the characters are either the same or distinct; and since they are not the same, they are distinct 56. Say that native objects are internally identical (distinct) if they are identical (distinct) in their home story and that, by contrast, the objects are externally identical (distinct) if they are identical (distinct) simpliciter. Then the point may be put like this: in realistic fiction, objects which are internally neither the same nor distinct should externally be distinct.

We see, then, that the mere fact that Dum and Dee are not distinct in the story does not entitle us to conclude that they are in fact the same. Of course, the same argument as in the case of open identity cannot be used to conclude that Dum and Dee are distinct; since it was essential to that argument that each character be self-identical in the story and yet essential to our example that the characters not be. However, it seems to me that, even in realistic fiction, it may be external considerations, such as author's intentions, that determine the identity or distinctness of characters, and not considerations of content; and so it is not as if this difference in the fanciful element of the two examples should prevent us from maintaining the distinctness of Dum and Dee.

For consider a piece of realistic fiction about the two native characters Ham and Hum. How do we determine whether, in fact, Ham and Hum are the same? On the basis of the text and the general conventions for interpreting it, we can decide that various sentences containing «Ham» and «Hum» are true in the story. To put it in technical terms, we can determine a pure content for Ham and Hum. Perhaps these sentences, under the assumption that the story is realistic, will enable us to see that Hum and Ham are distinct. Perhaps it is said that Ham and Hum are distinct or that Ham has properties incompatible with those possessed by Hum. But what if these things are not said or cannot be gathered from what is said? How do we then decide whether Ham and Hum are in fact the same or are distinct characters whose identity is left open in the story?

It seems that here we must appeal to something like the intentions of the author. Perhaps he tells us, in an introduction to the story, that Ham and Hum are the same character who, for reasons of literary elegance, have been called different names throughout the text, or perhaps he tells us, instead, that Ham and Hum are characters whose identity is left open in the story, thereby implying that they are distinct. In any case, we must appeal to something that goes beyond what is directly given by the text or its interpretation.

It is important to note that this admission does not in itself conflict with the Differentiation Principle of section D4. For this principle says that the identity or distinctness of characters can be recovered from their full pure content. But this can be done in the present case. Suppose that in fact Ham and Hum are the same. Then it will be part of the full content that Ham and Hum are the same and so, since the fiction is realistic, we may conclude that they are the same. My point is that the full content may not itself be directly given. To then decide whether Ham and Hum are identical in the story we must first determine whether they are actually identical. We settle the question of internal identity on the basis of external identity, not the other way round.

Indeed, it seems to me to be generally true that the questions as to the identity or distinctness of characters are decided on the basis of external considerations or, more precisely, that whatever the pure content of the native objects  $x_1, x_2, ..., x_n$ , it should be compatible with all of the relationships of identity and distinctness that may hold among those objects; in the different stories in which the native objects may have that pure content, some should have  $x_1, x_2, ..., x_n$  all the same, some  $x_1,x_2,...,x_n$  all distinct, some  $x_1,x_2$  the same and  $x_3, x_4, \dots, x_n$  distinct, and so on. It may be, for example, that a story with the same content as the Sherlock Holmes story should be about a single extraordinary individual with the combined properties of both Holmes and Watson, even to the point of being both identical and distinct from itself. If this is right then questions of internal and external identity are completely independent of one another; from the identity or distinctness of objects in a story or from the failure of such identity or distinctness, nothing follows as to the actual identity or distinctness of the objects, even granted as much further information about the content of the objects as one likes.

Now this general point depends upon accepting the most outrageous cases of logico-philosophical fantasy. Perhaps our critic is not prepared to go that far. But given that external considerations can determine distinctness in some cases of realistic fiction, surely he should be prepared to admit that like considerations should determine distinctness in our own but moderately fanciful story of Dum and Dee.

In all of the previous examples, the objects, though internally indiscernible have been externally discernible. It has been uniquely true of Dum that he is named by «Dum» and of Dee that he is named by «Dee». Thus the examples have gone against internalism, in either qualified or unqualified form, but have left the truth of externalism open.

It may now be wondered whether there are any examples of absolutely indiscernible non-existents, of non-existents discernible on neither internal nor external grounds. For some time I thought not and was inclined to accept the arguments of B3 for the universal individuation of non-existent objects. But I have now been led<sup>57</sup> to give up even this weaker thesis.

Let us not commit ourselves to how the word "they" is actually used, but let us imagine that it is used to make singular reference to several individuals. If the individuals are  $x_1,x_2$ , then the sentence "they  $\phi$ " will express the propositions (or the conjunction of the propositions) that  $x_1$   $\phi$ 's and that  $x_2$   $\phi$ 's. Let us now suppose that the word "they" is used in this sense to refer to two native characters in a story and that the same attributions are made to these characters, always with the use of the term. Then the story would seem to be about two distinct, yet absolutely indiscernible, objects.

It might, of course, be argued that the story is about a pair, but not about the members. But this would be in violation of the uniformity principle. If, in ordinary discourse, the term "they" is used to make singular

reference to several individuals, then we should make the same supposition about the use of the term in fictional discourse.

We thus see that the alleged role of non-existents in the argument of section B3 must be given up. It need not be possible for non-existents to serve as the de re objects of mental states. Their primary role is to provide a de re content for certain contexts. This will usually entail that they can be discriminated, but not always.

## E3. Other Theories.

Various objections have been levelled against the internalist theory of section C. Some of these were more in the nature of difficulties and merely called for a modification in the axioms. Others were more serious and called for a total revision in our approach to non-existents.

Both kinds of objection apply, in a related form, to other internalist theories, e.g. to those of Castañeda, Rappaport, Zalta and Parsons, or to the Fregean theory considered by Parsons [1982]. There is some difficulty in attributing internalism to these various authors (I am grateful to T. Parsons for pointing this out to me); for the authors, as far as I know, do not directly address the question, and the principles of their theories do not, in themselves, preclude other ways of individuating non-existents. However, it is natural to take these theories to be committed to at least a qualified form of internalism. For it is natural to suppose that it is a part of these theories, that any nonexistent, in so far as it can be individuated, can be individuated within the resources of the theory, even if not on the basis of the stated axioms. Without this supposition, the theories would be badly incomplete. But the only means of individuation allowed by these theories are internalist, and so it would follow that, in so far as an object could be individuated, it could be individuated by purely internalist means.

It is only in the third part that I shall give detailed consideration to these other theories. But for the moment, we may note that the previous difficulties arise for these theories in broadly two different ways. First of all the theories do not characterize the objects directly in terms of their properties in a context but in rather different terms. In Parsons' theory, for example, the objects are characterized in terms of their "nuclear" properties and, in the theories of Castañeda, Zalta and Rappaport, they are characterized in terms of bearing an internal predicative tie to various properties. But although the objects are not characterized directly in contextualist terms, it is necessary, for the application of the theory, that the theoretical terms in which an object is given be related to its contextualist properties, for otherwise it will be unclear how the theory applies to the non-existent objects, as they are ordinarily given. The desired connection may be effected by a bridging principle. For Parsons' theory, this might take the form:

Any native object has exactly those nuclear properties that it has in its home context;

and, for the theories of Castañeda, Zalta and Rappaport, it might take a related form. Given such a bridging principle, the basic theory will have consequences for the behavior of objects in contexts. It will follow from Parsons' theory, for example, that native objects with the same nuclear properties in their respective stories are the same. Thus even if the theory is not formulated directly in contextualist terms, it will have contextualist consequences. Usually, these consequences have not been explicitly recognized, since the bridging principle has been regarded, not as a part of the official theory itself, but as an adjunct to its application. But there is, of course, no reason why both aspects should not be incorporated under a broader, more comprehensive, theory.

Given this broader theory, the very same questions will arise as for our own internalist theory. We may judge, for example, that that part of the theory is false on the grounds that the standard axiom for object identity can be derived, or that it is inadequate on the grounds that a suitable correlative form of object abstraction cannot be derived. Indeed, Parsons' theory may be criticized on both these counts, since it permits the derivation of the standard identity axiom but not of a correlative form of the abstraction axiom.

The second way difficulties arise is that analogues of our earlier objections will apply directly to the official theory itself. For even though this theory will not characterize the objects in contextualist terms, it will presumably contain some form of the abstraction and identity axioms. In Parsons' theory, for example, Abstraction takes the form that for any class of nuclear properties there is an object with exactly those nuclear properties, and Identity takes the form that objects with the same nuclear properties are the same. It is then clear that the difficulties of section D may be presented in terms that are directly relevant to the new formulations. In Parsons' theory, for example, the problem of correlates takes the form of asking whether it can be proved that there are objects with correlative nuclear properties<sup>58</sup> and, in the theories of Castañeda, Zalta and Rappaport, it takes the form of asking whether objects can bear the internal predicative tie to correlative properties. As with our own theory, these problems may be overcome by some suitable modification to the axioms. However, the more fundamental objections of the present section will probably also apply. For the adequacy of the theory will depend upon some suitable form of bridging principle; and it is then likely that the identity and abstraction axioms of the official theory will stand or fall with their contextualist counterparts. Thus these objections are not to be avoided by any change to the terms in which the theory is formulated.

There is another way altogether in which our contextualist theory presents a problem for these other theories. For the contextualist theory contains no theoretical notions, but only such pre-philosophical notions as occurring in a context or being true in a con-

text. The other theories, however, do contain theoretical notions (or so I would say) and principles concerning them. Parsons' theory, for example, uses the distinction between nuclear and extra-nuclear properties, and the theories of Rappaport, Zalta and Castañeda use a form of internal predication.

It may be asked whether the theoretical component of these theories is necessary. Examination shows that the need for theoretical terms arises not from the demands of a theory of non-existents as such but from the desire for literalism. It is desired not only that the object should have a given property in a context but also that it should, in some sense, literally have a property. But the dangers of conflict with property abstraction then become much more immediate, since the abstraction axioms for properties and objects will both be formulated in terms of the literal copula, and in order that the more obvious sources of contradiction be removed. it is necessary to resort to a theoretical device, such as some restriction on the properties that an object might literally possess or some revision in the sense in which they are to be possessed. Now if, as I shall later argue, the doctrine of literalism is untenable, the theoretical component of these theories will be completely idle; the demands of a satisfactory theory will be met as well without it. Thus if one is going to adopt an internalist theory at all, it should be one along the lines of the theory that has been set out and developed in the body of this paper.

## Notes

(1) The internal/external distinction and the corresponding distinction between the internalist and externalist positions seem to be of general significance to problems of identity. In the case of material things, for example, we may think of the internal features of the object in terms of its matter and the external features in terms of its spatial and temporal relations to other objects; and again, in the case of persons, we may think of the internal features in terms of the individual's experience and the external features in terms of his body and its relation to the environment.

(2)In a book under preparation, entitled Objects Under A Description. I make no claim of originality for the distinction; it occurs in one form or another throughout the history of philosophy.
(3) They include Crittenden '73, Woods '74, Stine '78, Howell

'79, Parsons '80 and Routley '80.

(4) Adumbrated in various works, but principally Walton '78a, Walton'78b, and a book in preparation.

(5) For a somewhat similar defense of the use of non-existents in the semantics for natural language, see Rappaport '80.

(6) This does not solve the problem raised by names that purport but fail to refer to an existent. What I should like to say here is that in most of these cases the name refers to a non-existent object of belief. In the sentence 'Homer does not exist', the name 'Homer' refers to the object that is believed to have written the Odyssey, etc. It refers to a non-existent object if true and to an existent object if false. It is readily understandable how a name may refer to a nonexistent even when the speaker intends to refer to an existent. For suppose he intends to refer to the existent  $\phi$ -er. Then he believes of some (possibly non-existent) object that it  $\phi$ 's and exists, and so he also intends to refer to that object. Since ordinary discourse abhors empty reference, it is only natural in case there is no  $\phi$ -er that the reference should slip, as it were, from the grip of the one intention

I do not wish to suggest that all names refer. Suppose that an instructor writes down various sentences containing the name 'Mary'

as examples in a logic class, but without having any person in mind. Then each of those sentences had, in its original use, no truthvalue - even the sentence 'Mary does not exist'.

Many of the proposed solutions to the problem of 'empty reference' fail to respect or even explain the distinction between this case and the more orthodox ones. It is a great advantage of the present theory that it does. Thus our theory is not one of unbridled Meinongianism; it gives reference to many, though not all, of our

singular terms.

7) We have here the germ of a solution to the paradox of analysis. How can 'p = q' constitute an informative analysis given that p and q express the same proposition? The recent causal theory of names suggests one answer, that p and q can express the same proposition without our knowing that they do. But this solution is not applicable in all cases, and so I should like to suggest another. This is that the paradox rests upon a confusion between the analysis of a proposition (into constitutents, etc.) and a metaphysically significant analysis of its truth-conditions. The confusion arose because it was thought that the propositions themselves must be constructed from ontologically basic elements and would not therefore be the subjects of analysis in the second sense. If I give a metaphysically significant analysis q of the truth conditions of p, then I need not be claiming that p and q express the same proposition. Thus p and q may not be substitutable in all contexts salve veritate. For contexts such as 'x expresses the proposition that p', in which substitution fails, a separate account of the truth-conditions must then be given.
(\*) See Fine '77, or Hunter '79 for the particular application to

non-existents. The doctrine represents a way of formulating ontological claims that has far-reaching applications. I use 'actual' here as synonymous with 'existent'; later it is used in a broader

sense.

(°) See sect. 3.2 Parsons '80 and also pp. 43-44 of Woods '74. (1°) I shall use interpretation in a special narrow sense for the determination of what is true in a context. My point is closely

related to what Walton '73 says on p. 292 concerning the distinction between make-believe and imaginary truth.

(11) Strictly speaking, we should give a general account for each possible world of what objects there are. But in case the possibilities for existence are the same from world to world, this distinction will not be important.

(12) I also have in mind that the conditions or formulas may contain names of objects from the given interpretation. This will be my

usual usage.

(13) I say more on this question in Fine '81 and in the book Objects Under a Description. I hope to deal with it systematically elsewhere.

14) See sect. VII of Fine '77.

15) Let I be the modal structure relative to which the explanations of identity are given. Then a more formal characterization of the indiscernibility relation  $(w,x) \equiv (v,y)$  is that there is an isomorphism from  $\mathfrak{A}_{\mathbf{w}}$  onto  $\mathfrak{A}_{\mathbf{v}}$  that takes x into y and is an identity of the objects outside of X.

Consult Fine '81 for further details. But note that this account does not completely eliminate the notion of non-circularity, since it must be assumed that the underlying relations of  $\mathfrak A$  do not, in an intuitive

sense, presuppose the objects of X.

Further use of the indiscernibility relation is made in Rabinowicz

- (16) There is a related distinction between the intra-contextual problem of individuation and the problem of re-identifying an object through its occurrences in a single context. This latter problem, though, is not usually awarded the same interest as its crosscontextual counterpart.
- 7) A similar example has been considered in Walton '73, Howell '79, Lewis '78, and Parsons '79

(18) The properties in terms of which the objects are individuated

must also, of course, be non-modal and non-circular.

9) The theory may be presented within a many-sorted first-order language. There would be two styles of variables, x,y,z,... and s,t,u,..., ranging over objects and stories respectively; E could be used for existence, O for the occurrence relation, and N for the native-of relation. The three axioms are then:

 $NO \forall x \forall s (xNs \supset xOs)$ 

 $CU \forall x \forall s \forall t ((xNs \land xNt) \supset s = t)$ 

NE  $\forall x \forall s (xNs \supset -E_x)$ .

In presenting the various axioms I shall often have a formal theory in mind, although the details will usually be suppressed.

(20) Given the class of all propositions true in a story, one might wonder whether there is an internal or intrinsic way of determining which subclasses correspond to stories. If all stories and their parts satisfy the condition that they contain a conjuction iff they contain all conjuncts, then, conversely, all maximal subclasses satisfying the condition will correspond to stories or their story parts; conjunction will be the glue by which the propositions of stories are bound together. However, in the light of subsequent examples of logical fantasy, it is doubtful whether all stories need satisfy this condition; and, in general, the determination of the boundaries of a story would appear to be an external matter depending upon such factors as what the author intends or how his output is regarded. This question of boundaries should be sharply distinguished from the extremely interesting aesthetic question as to what constitutes the perceived unity of a story or, in general, of a work of art. In framing an answer to the latter question, the answer to the first is not required but presupposed.

(21) Similar considerations are advanced in Levinson '80.

(22) The principle is to be distinguished from a related principle with far greater plausibility. We may talk in an obvious sense of an object deriving its occurrence (or reference) in one story from its occurrence in another story. It may then be denied that a single object can derive its occurrence in s<sub>1</sub> from s<sub>2</sub>, its occurrence in s<sub>2</sub> from s<sub>3</sub>, and so on ad infinitum (and perhaps similarly for the other cases of derived reference). None of my arguments tells against this alternative form of the foundation principle.

 $(^{23})$  Let p,q,r,... range over properties, and let us use xLy for the literal and xHy,s for the story-relative copula. Then a formal

rendering of the axioms is:

 $OA \exists x \exists s (xNs \land \forall p(xHp,s \equiv \phi)),$ 

where  $\phi$  is a formula not containing free occurrences of x or s; OI  $\forall x \forall y \forall s \forall t ((xNs \land yNt) \supset x = y \equiv \forall p(xHp,s \equiv yHp,t))$ .

(24) From which it follows that property abstraction is the dual of object abstraction. These facts become clear from the formalizations:

 $\exists x \forall P(xFP \equiv \phi'(P));$ and  $\exists P \forall x(xLP \equiv \phi(x)),$ 

where F is used for the fictional and L for the literal copula.

(25) There are single instances of property abstraction that are inconsistent with their duals, e.g.  $\exists P \forall x (xLP \equiv \exists x \forall P - xLP)$ . It might be of interest to give some general characterization of which self-dual theories are consistent.

(26) Some subtle questions have been ignored. I have assumed that simple properties can be plugged up with objects. But it might be supposed that only the copula can be plugged up. In that case, the basis of the distinction for simple properties would have to move up a level; the internally formed proposition would be the result of plugging with an object and property and the externally formed proposition the result of plugging with the object, the property and the ordinary copula.

The distinction has a significance in metaphysics and the philosophy of language that I shall also ignore.

(27) To be exact, it must be allowed that several formulas can be

obtained from the same sentence in this way.

(28) See section 7.7 of the book. A similar question arises for objects immigrant to a story. In this case, only a single attribution may be explicitly made; but it might be argued that the object brings with it properties from its source. I do not think this need be so or even that any relationship of content need underlie immigrancy. But this is not a question we need discuss here.

(29) The derivation requires the set-theoretic result that if there is a function f from an infinite class X into the class of finite subsets of X such that  $x \in f(x)$  for all  $x \in X$ , then there is a one-one function from the range of f onto the domain of f. This result, in its turn, re-

quires the axiom of choice.

- (30) In the formal language of the theory we must then introduce set variables X,Y,Z,... and a symbol ε for membership. To be specific, we may suppose that the whole of the previous theory is embedded in ZFI, with the objects, properties, and stories as the urelements.
- (31) These, and similar, remarks should provide the basis for certain natural consistency proofs. I have not carried the formalization of the theories far enough through to make these proofs rigorous, but I do not foresee any essential difficulties.

(<sup>32</sup>) In working with this proposal, it may be helpful to think in terms of a model in which the non-existent objects are sets of properties (those that they fictionally have), the partially defined properties are sets of objects, and the totally defined properties are conditions, with parameters, subject to the quantifier restriction. Starting off with the existent objects, entities of each sort can be constructed at the ordinal stages. One then defines when an object literally has a totally defined property in terms of satisfaction of the condition. Given the quantifier restriction, it then turns out that the definition is well-founded. Such a model, and its variants, may be used to prove various consistency results.

(33) Indeed, it is in this external yet essential connection between structure and application conditions that the special nature of intensional entities is to be sought. No such peculiar duality is to be

found in extensional entities.

(34) There is some discussion of the options, though by no means an exhaustive one, in Church '51.

(35) In this form the paradox bears some resemblance to a paradox in Parsons' theory, which is raised in section 9.1 of his book and is further discussed in Fine '82.

(36) There may be other reasons for supposing that properties defined from a set of objects do not form a set. If so, Story Closure should be appropriately modified. The essential idea behind the ax-

iom is that the objects of a story should form a set.

(3') Correlates constitute an extreme case of the sort of difficulty I have in mind. If X is a set of native objects of s, let O, (X) be the set of native objects of s that figure in the properties had by any member of X. Then the general difficulty will arise whenever

 $\overline{O_sO_s}...O_s(\{x\})$  is non-empty for each n. Usually, however, the general difficulty will arise only when an extreme case does.

(11) In this formulation, essential use is made of the story-relative copula. If Foundation is assumed, the fictional copula may be used in its place; for we can then say that x fictionally has [Ry] and y fictionally has [xR]. As long as the relations have no degenerate argument-places, Foundation will imply that x and y are native to the same story.

(39) A parallel point for Parsons' theory is raised in section 7.6 of

his book and is further discussed in Fine '82.

(40) In a more satisfactory account it would be supposed that the relations R were of degree  $\alpha$ , for any ordinal  $\alpha$ . However, for simplicity, I shall suppose in the text that the relations are of finite degree.

 $\binom{41}{4}$  At this point, it is of particular importance in a general theory to allow infinitary relations; for otherwise the existence of stories with infinitely many native objects will be unprovable. In case n=0, C defines the content of a story without any native objects. This instance of the axiom is of no relevance to the theory of objects but is required in a satisfactory account of stories. As the axiom stands, I have allowed the empty story (in which no proposition is true). If it were desired, this could be excluded by requiring that C be non-empty.

(\*2) Let the rank of a story be the least ordinal greater than the rank of all of the immigrant objects; and let the rank of a fictitious object be the rank of the story to which it is native. With the help of the two assumptions, it follows that each story and object has a rank. Within the context of set theory, OA(7) then represents a natural attempt to characterize the stories and objects of each rank.

- (13) Let me merely sketch a solution. Call a class of stories *closed* if the story t is in the class whenever the story s is and some object both occurs in s and is native to t. (It should be assumed that each story belongs to a closed *set* of stories). To formulate the axiom, it should be supposed (a) that  $C_i,...,C_m$  are sets of n-place relations, (b) that to each  $C_i$  is associated a subset  $N_i$  of  $\{1,2,...,n\}$  with  $N_1 \cup N_2 \cup ... \cup N_m = \{1,2,...,n\}$  and (c) that for each i=1,2,...,n and each member j of  $N_i$ , one relation of  $C_i$  is non-degenerate in its j-th argument-place. Under this supposition, the axiom should then let us conclude that there is a closed set of distinct stories  $\{s_1, s_2, ..., s_m\}$  and distinct objects  $x_1, x_2, ..., x_n$  such that, for i=1,2,...,m,  $C_i$  is the content of  $x_1, x_2, ..., x_n$  in  $s_i$  and  $x_i$ , for  $i \in N_i$ , are the native objects of  $s_i$ . An infinitary version of the axiom might also be given.
- (\*1) The error here was briefly discussed in my review (Fine '76) of *The Nature of Necessity* (Plantinga '74).
- (45) The derivation is a little technical and may be omitted by the reader who is so inclined.
- (46) There are certain niceties of formulation, concerning the suppression of outermost quantifiers and modal operators, that are being overlooked here.

(47) That works of art are genuinely created is a point also stressed by Levinson '80.

48) The basis may include more than the abstract content, perhaps the style or other structural features. But this is not too important here. Levinson gives a similar account of musical works in his paper, though without the benefit of a general theory of qua objects. One small discrepancy is that he does not include the manner of indication into the description. This discrepancy, though small, is of some significance to the modal features of stories and the like. Incidentally, Levinson takes a performance to be an event that happens to have certain properties. Detailed considerations show that a performance should be taken to be a qua object, which includes those properties in its description.

(49) I briefly discuss the same view in section 1 of Fine '81.

(50) Indeed, I am inclined to think that a proper account of "being" requires a whole hierarchy of ontological categories, but

this broader view need not concern us here.

- 1) Alston '67 defends the doctrine of different modes of being and his defence is criticized by Hunter '79 (Chapter 2.2). However Alston's arguments for the doctrine are not ones that I myself would want to use.
- (52) The reader should consult section 7.5 of Parsons' book for an opposing view on this question.

(53) In section 7.5 of his book. (54) As will later become clear, nothing critical will turn on my

use of the term "simple" here.

(55) The world of such a story corresponds to a model for firstorder logic without identity. The indiscernibles, such as Dum and Dee, then correspond to the elements of the model that need to be identified in order to obtain a normal model of first-order logic with identity (as in the standard completeness proof).

(56) We may mention two objections to this argument. One is that \_ in the story" creates an inthe expression "being identical to \_ tensional context. The other, pointed out to me by Peter Railston, is that the disjunction x = y or  $x \neq y$  might be denied on quasiintuitionistic grounds. However, these objections stray so far from the logical framework of the present paper, that I shall not attempt to give them serious consideration.

7) This was through a conversation with Jose Bernadete at

Syracuse University.

(58) A more extended critique of Parsons' theory is given in Fine

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