Studies in Bradley's metaphysics

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STUDIES IN BRADLEY'S METAPHYSICS

A thesis submitted in fulfilment of the requirements for the award of the degree of

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This work is a critical study of some of the fundamental themes of F.H. Bradley's *Appearance and Reality*. For the most part, the discussion is confined to the subjects discussed in the crucial early chapters of the first Book.

It is my contention that the conclusions reached in the earlier chapters of Bradley's work - in particular, Chapters II and III - cannot be sustained by the arguments which Bradley employs in their favour. To the extent which the conclusions of the later chapters do rest upon the soundness of these arguments, they are, I suggest, of questionable merit.

But the purpose of this work is not entirely critical. Where possible, I have argued for certain views which, I believe, avoid those aspects of Bradley's critical argumentation which are sound. Among the positive conclusions reached are the following: that reality and existence are co-extensive; that a distinction between reality and appearance can be effected which does not involve the assumption that there are real or existent appearances; that an ontological distinction between substances, qualities, and relations is defensible; that substances, qualities, and relations are real and existent; and, that substances, qualities, and relations are particular, rather than universal entities. This last conclusion, in conjunction with the theory of substance which I defend, leads to a doctrine of universal
determinism, similar to that held by McTaggart. An application of Bradley's infinite regress argument, with respect to relations, provides the basis for a refutation of classical, or Cartesian, materialism.
Studies in Bradley's Metaphysics
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Introduction

1. This work is a critical study of what I consider to be some of the fundamental themes of F.H. Bradley's Appearance and Reality. For the most part I have confined my attention to the subjects discussed in the earlier chapters of the first Book. Such a limitation is not entirely without justification. Bradley himself, at the end of the third chapter of the book remarks that if the reader has understood and accepted the arguments in that chapter, he need spend little time with those that succeed it - the cogency of the arguments in the latter chapters being largely dependent upon the soundness of those which precede them. A considered assessment of the merits of the arguments found in the earlier chapters, such as I have attempted here, would seem, then, to be if not a sufficient, at least a necessary propaedeutic to those found in the later chapters.

It is my contention, however, that the conclusions reached in the earlier chapters of Appearance and Reality - in particular, Chapters II and III - cannot be sustained by the arguments which Bradley employs in their favour. To the extent which the conclusions of the later chapters do rest upon the soundness of these arguments, they are, I suggest, of questionable merit.

But the purpose of this work is not entirely critical. Where possible, I have put forward certain views which, I believe, avoid those aspects of Bradley's critical argumentation which are sound.

2. I begin with a chapter on the distinction, drawn by some philosophers, between reality and existence. The rele-
vance of such a discussion to Bradley's work might not be immediately apparent. But I think it will become evident in later discussion that the viability of Bradley's views on the distinction between appearance and reality is largely determined by the extent to which, if at all, a distinction between reality and existence can be defended. It also provides an opportunity to discuss a number of issues which are not, perhaps, adequately discussed by Bradley himself; and yet whose relevance, both to his own metaphysic and to contemporary metaphysics, is undeniable.

3. Among the positive conclusions reached in this work are the following: that reality and existence are co-extensive; that a distinction between reality and appearance can be effected which does not involve the assumption that there are real or existent appearances; that an ontological distinction between substances, qualities, and relations is defensible; that substances, qualities, and relations are real and existent; and, that substances, qualities, and relations are particular, rather than universal, entities. This last conclusion, in conjunction with the theory of substance which I defend, leads to a doctrine of universal determinism, similar to that held by McTaggart. An application of Bradley's infinite regress argument, with respect to relations, provides the basis of a refutation of classical, or Cartesian, materialism.

Each of the above conclusions is reached largely as the result of, and in some cases a reaction against, Bradley's views. The theory of substance, for example, owes much to Bradley; although my conviction that his conclusions about the nature and status of relations are false, has led to the view that pluralism - the theory that there is more than one
existent substance - is a consistent view to take.

4. Some explanation should be made, at this stage, of some technical terms to be found in the discussion.

By entity, I mean any being, regardless of its ontological status or kind. Qualities, relations, facts, and substances, for example, are all entities.

By implication, I mean what is sometimes known as entailment. I do not think that this relation can be defined; and it is to be distinguished from the contemporary notion of material implication.

By determination, I mean a relation between entities, corresponding to the relation of implication which exists between some propositions.

Other terms, when used in a technical sense, I have endeavoured to explain as they arise in the text.

5. References to Bradley's works are to the following editions, and will be abbreviated in the following way:


Collected Essays (CE) - Oxford University Press, 1935.

References to other works, and explanatory notes, will be found at the end of each chapter.
Chapter 1 - Reality and Existence

6. The purpose of this chapter is to determine to what extent reality can be identified with existence. The belief that there are existents, namely appearances, which are not ultimately real, is central to Bradley's metaphysic. Reality, according to Bradley, is not exhausted by the existent. In the following chapter I will discuss his theory of appearances, and the related doctrine of degrees of reality. But we must first attempt to decide the more general question of the extent to which, if at all, a distinction between reality and existence is justified.

7. I think it is fair to say that, among those who have not considered the question, there is a general presumption that reality and existence are coextensive - that there is nothing existent which is not real, and nothing real which is not existent. But this presumption has been challenged by a number of philosophers, Bradley included. Various reasons have been given for recognizing a distinction between the two realms. Perhaps the best known is that put forward, at one time, by Bertrand Russell.

The distinction is essential if we are ever to deny the existence of anything. For what does not exist must be something, or it would be meaningless to deny its existence; and hence we need the concept of being as that which belongs even to the non-existent. ¹

Although Russell himself later rejected this view, it is still accepted by some philosophers, particularly those
influenced by the theories of Plato and Meinong.

Another reason that has been given for introducing a distinction is that it is considered to be necessary for the accommodation of some cognitive objects which are not, for various reasons, considered to be existent. Among the types of entities that have been considered to be real, but not existent, are: characteristics (qualities and relations); possibilia; propositions; past and future entities; and fictional or imaginary entities.

Among those who have advocated the introduction of a distinction between reality and existence, most have taken the view that, whilst there are realities which do not exist, there are no existents which are not real. Few have consistently believed that reality and existence are mutually exclusive. And none, to my knowledge, apart from Bradley, have believed that there are existents which are real, without being ultimately real. That is to say, the doctrine of degrees of reality has been almost unanimously rejected. We might say, then, that among those who recognise a distinction, the most popular, and probably the most easily defended position, is that the existent is a species, or sub-class, of the real.

8. But what do we mean by the terms 'reality' and 'existence'? And are they co-extensive?

Following McTaggart\(^2\), we ought, I think, to conclude that these terms are indefinable; and that, in attempting to determine their meaning, we should start with their denotation, rather than their connotation. Attempts have been made to define these terms, but for the most part, these 'definitions' amount simply to statements of the conditions of existence.
Or else there is a tendency to confuse what are generally considered to be essential characteristics of existent entities, with existence itself. Bradley himself, in a number of places, identifies reality with experience, and existence with the series of spatially and temporally given phenomena. But it is clear that if such statements are true, they are synthetic truths. Reality does not mean experience, since there are philosophers who have claimed that there are realities which are neither experiences, nor parts of experiences; and such claims, whether they are true or false, are not self-contradictory. Likewise, existence does not mean the series of spatially and temporally given phenomena, since there are those who have argued that no existents can have spatial or temporal characteristics. And such claims, once again, are not self-contradictory. A similar line of argument can, I think, be used against most other attempts to define these terms.

But are the terms coextensive? I believe that they are, and that the presumption against non-existent realities is justified. We cannot, however, ignore those claims to the contrary. The rest of this chapter will accordingly be devoted to the discussion of some of the reasons that have been given for introducing a distinction between reality and existence.

9. The first argument to be considered is that put forward by Bertrand Russell in *The Principles of Mathematics*, and mentioned at the beginning of this chapter. The argument might be classified as a 'transcendental' argument, since it begins with the assumption of a proposition which is thought to be either self-evidently true, or universally accepted as
true, and then attempts to show that the truth of this proposition is dependent upon the truth of further propositions which are not self-evidently true, or universally accepted as true. The initial assumption, in Russell's case, is that there are true and meaningful judgements which deny the existence of certain entities. In order to account for this fact, so Russell argues, we must postulate a realm of non-existent entities which can function as the referents of such judgements. A sufficient condition for proving that a particular entity is or has being, is, he argues, simply that it should be mentioned.

"A is not" implies that there is a term A whose being is denied, and hence that A is. Thus unless "A is not" be an empty sound, it must be false - whatever A may be, it certainly is. Numbers, the Homeric gods, relations, chimeras and four dimensional spaces all have being, for if they were not entities of a kind, we could make no propositions about them. Thus being is a general attribute of everything, and to mention anything is to show that it is.  

Existence, on the other hand, is said to be "the prerogative of some only amongst beings".

10. There are a number of objections to this view. The first is that Russell, himself, undermined the soundness of the argument with the introduction of his theory of descriptions. Whether or not the theory, or some modified version of it, is true, is still a matter of debate. But the important point is that it does at least raise the question of the
truth of the claim that significant negative existential judgements presuppose the being or reality of that which is judged to be non-existent. And this is all that is required to provide a significant objection to the argument.

11. Secondly, even if Russell's theory of descriptions should prove to be untenable, we are still not committed to the reality of non-existent objects. Other philosophers, including Bradley, have offered alternative analyses of negative existential judgements which do not presuppose the being or reality of non-existent entities. For the most part, these analyses are based upon a distinction between the grammatical and the logical forms of judgements. Bradley expresses the distinction in the following way.

In existential judgement, as we saw before (Chap. II, §42), the apparent is not the actual subject. Let us take such a denial as "Chimeras are non-existent". "Chimeras" is here ostensibly the subject, but is really the predicate. It is the quality of harbouring chimeras which is denied of the nature of things. And we deny this because, if chimeras existed, we should have to alter our view of the world. (PL, p.120)

A similar approach to negative existential judgements was taken by C.D. Broad, in his book Scientific Thought.

Many English peasants, in the Middle Ages, must have made the judgements "Puck exists" or "Puck has turned the milk". And the latter of these, of course, implies the former. I will assume (in spite of Sir Arthur Conan
Doyle) that Puck does not in fact exist. What were these men referring to, in our sense of the word? To answer this we have simply to ask: What fact made their judgments false? The answer is that it is the negative fact that no part of the universe was characterised by the set of characteristics by which they described Puck to themselves. Their judgement boils down to the assertion that some part of the existent is characterised by this set of characteristics, and it is false because it discords with the negative fact that the set in question characterises no part of the universe. Naturally they did not know that this was what their judgement referred to, or they would not have made it. But, in our sense of reference, there is no reason why a person who makes a judgement should know what it refers to.

Now it would obviously be absurd to say that what these men were talking about was the negative fact that no part of the universe has the characteristics which they ascribe to Puck. Hence we see the need of distinguishing between what a judgement refers to and what the person who makes the judgement is talking about. What they were talking about was a certain set of characteristics, viz., those by which they described Puck to themselves. This may be called the logical subject of their judgement. Thus, although there is no such being as Puck, people who profess to be judging about him are not judging about nothing (for they are judging about a set of characteristics which is itself real, though it does not happen to characterise any particular existent). Nor are they referring to nothing (for they are referring
12. Upon this basis we can, I think, give an explanation as to why it has been thought to be necessary to postulate the reality of the subject of significant negative existential judgements. The error has, I think, arisen largely from a confusion between the need to posit the reality of the content (or, what Broad has called the "logical subject") of the judgement, and the reality of the object or referent. From the true premiss that the parts, or constituents, of what is real must, themselves, be real or existent; and from the further premiss that the judgement "Puck is non-existent" is real, the false conclusion is drawn that there is a real entity named Puck who is a constituent of the judgement, and that, since the parts of such judgements are real, Puck must be real. But as we have seen, the judgement "Puck is non-existent" does not have Puck as a constituent, though it can be said to have a set of characteristics or a description as a constituent. A description or set of characteristics is not, however, a substance; and the reality of a description does not imply that there is a real or existent substance which it describes. We can conclude, then, that the reality of judgements of the form "X is non-existent" does not imply that X is a constituent of the judgement, or that X is real.

13. A third reason for rejecting the view that there must be a realm of non-existent realities if negative existential judgements are to be true or meaningful is that it leads to the unacceptable conclusion that, whenever the judgement "X is unreal" is made, it would imply the truth of the con-
tradictory proposition that X is real; unless, of course, a realm of entities distinct from either reality or existence (analogous, perhaps, to Meinong's realm of *Aussersein*) is posited. It is clear, however, that the introduction of such a realm is suspiciously *ad hoc*, and serves to generate an indefinite regress of distinct realms - each posited to provide truth-conditions for judgements which profess to exclude some entity from a particular realm.

14. Fourthly, and perhaps most importantly, the argument in question is circular. When I make the judgement "X does not exist", what reason do I have for concluding that 'X' is the name of a real entity apart from the fact that it performs a similar grammatical function to other words which I know to be names of real or existent entities? But a word is only a name in so far as it does name or denote some entity. A word which performs a similar grammatical function to a name is not a name unless it does denote an entity. Thus, when I argue from the existence of the judgement "X does not exist", to the conclusion that 'X' names a real entity, I can only do so by assuming that there is a real entity which 'X' names. But this assumption renders the argument circular.

15. We can conclude, then, on the basis of the above objections, that Russell's argument in favour of non-existent realities is inconclusive and, if the last point is correct, invalid. So that we have no reason, as yet, to suppose that there are non-existent realities. There are, however, some other arguments to be considered.

16. It has been suggested that the introduction of a distinction between reality and existence is needed to accommodate a number of types of cognitive objects which are
not generally considered to be existent. I will firstly consider the case for non-existent qualities and relations.

A number of arguments have been put forward in defence of non-existent qualities and relations. The first to be considered is perhaps the most fundamental. It is based upon a distinction between qualities and relations per se, such as whiteness and difference, and instances of qualities and relations, such as the whiteness of this sheet of paper, and the relation of difference which exists between my pen and this paper. Whilst the latter instances of qualities and relations are said to be particular and existent, the former are said to be universals which, although real, are non-existent. In support of this position, an appeal is sometimes made to the alleged fact that we may be aware of a quality per se or a relation per se, as distinct from particular instances of these qualities and relations. And, so the argument goes, since qualities can only exist as the qualities of existent entities, and since relations can only exist between existent entities, the fact that we are aware of qualities and relations per se, which are not qualities of, or relations between, existent entities, implies that these qualities and relations must be real, without being existent.

17. One way of replying to this argument is to simply deny that we are ever aware of qualities or relations per se. What we are in fact aware of, when we seem to be aware of a quality or a relation per se, is always a particular instance of that quality or relation.  

This reply is difficult to deal with, since it challenges the truth of one of the unargued premisses of the argument—a premiss which is assumed to be universally accepted as
true. At this point a stalemate may appear to have been reached. But the onus of proof does seem to lie with those who deny that we are ever aware of characteristics which are not characteristics of existent entities, since there are characteristics of which we seem to be aware - for example, the quality of perfect circularity - which do not directly characterise anything existent. I will return to this point in Section 19.

18. Another, perhaps more satisfactory, reply is to deny that a legitimate distinction can be effected between existent qualities and relations, and qualities and relations \textit{per se}. Some philosophers have claimed that all existent qualities and relations are universals; so that, whenever we are aware of any existent quality or relation we are, \textit{ipso facto}, aware of the quality or relation \textit{per se}. This view is sometimes known as Immanent Realism. If this view is correct, it would appear that we have no need to postulate non-existent qualities and relations to account for the fact that we are sometimes aware of qualities and relations \textit{per se}.

I think that this reply is adequate to account for those qualities and relations which are known to exist. But, as with the previous reply, a difficulty emerges when we consider those characteristics, such as perfect circularity or dragonhood, which do not seem to characterise any existents. How are we to deal with these examples?

19. The correct approach to this problem has, I believe, been suggested by McTaggart. It is true, he admits, that the quality of dragonhood, for example, does not directly qualify any existent entity. But this does not imply that the quality of dragonhood is not a constituent of some more
complex quality which does qualify at least one existent. And, as a matter of fact, the quality of dragonhood is a constituent of the complex negative quality, non-dragonhood, which, by an application of the principle of Excluded Middle, can be shown to be a quality of all existents. When combined with the view that the qualities and relations of existent entities are universals, we have a solution to our problem; since one is aware of the quality of dragonhood in virtue of the fact that one is aware of the complex quality, non-dragonhood, which is a quality of all existents.

We may use this principle to cover any conceivable quality or relation, since, according to the law of Excluded Middle, for any quality A, or any relation r, any substance must either be the bearer of this quality, or its corresponding negative quality non-A, of which A is a constituent. Similarly, the substance must either bear the relation r, or the relation non-r, to any other substance. In this way we can explain the awareness of qualities and relations which, prima facie, are not qualities of, or relations between, existent entities, without the need to postulate the reality of non-existent qualities and relations.

20. The admission of negative characteristics into an ontology has, however, been criticised. And, since the existence of negative characteristics is essential to our argument, we must, before continuing, consider some of these objections.

In his recent work, *Universals and Scientific Realism*, D.M. Armstrong raises the following objections to negative characteristics.
When '¬P' applies to a number of particulars it is implausible to suggest that the predicate applies because the particulars are identical in some respect. If particulars are identical in a respect, then they resemble each other. But it is surely implausible to suggest that not being P is a point in which a, b, c, etc. resemble each other.  

... the admission of negative properties leads to a conclusion... that every particular must have exactly the same number of properties.  

... properties should be such that it at least makes sense to attribute causal powers to objects in virtue of these properties. But how could a mere lack or absence endow anything with causal powers?  

I will consider each of these objections in turn.  

21. Firstly, it is not at all implausible to suggest that all particulars which have a common negative characteristic resemble each other. Armstrong, himself, has mentioned one example - the property of not accelerating through the speed of light - a property which is common to all material particulars, and a respect in which they are identical. Another example is the property of being non-spatial - a property which is considered by some philosophers to be an essential characteristic of mental, as distinct from material, particulars. And it is unreasonable to suggest that, if we accept this view, that mental particulars do not resemble each other, or that they are not identical, in this respect.
22. The second objection is even less convincing. There is nothing inherently absurd in the suggestion that every particular has the same number of properties. The suggestion may seem surprising, but the fact that it is surprising does not imply that it is false. Neither does the fact that it conflicts with belief that the number of properties belonging to an entity is to be determined by a posteriori methods show that it is false; since the belief that the number of properties belonging to an entity is to be determined by a posteriori methods is simply an unargued presumption.

Armstrong then mentions a further argument, which he attributes to Alan Musgrove.

... if everything has the same number of properties, it will become difficult to understand statements like 'a resembles & more than a resembles c' where a, & and c are particulars. It will not be possible to analyse such statements by saying that a and & have more common properties than & and c have.13

Unfortunately, the argument involves a non sequitur. Why can't statements such as "a resembles b more than a resembles c" be analysed in the proposed way? The fact that a, b and c have the same number of properties in common does not imply that they have the same number of common properties. But unless the latter, erroneous, assumption is made, the argument is irrelevant as an objection to the suggestion that all particulars have the same number of properties.

Another argument, this time suggested by Edward Khamara, is used by Armstrong to support his position. The suggestion
is that McTaggart's argument depends upon the assumption that, for each particular, and for each property, the only two alternatives are, that the particular has the property, or that it has the corresponding negative property. The objection to this assumption is that,

... there might be properties such that, if the particular falls in a certain "category", it neither has nor lacks that property. (Virtue is neither circular nor not circular).^14

Once again, the argument in question involves a non sequitur. McTaggart's actual argument is intended to show that all particulars, or substances, must, with respect to some quality, either have that quality or its corresponding negative quality. But the statement that virtue is neither circular nor non-circular is irrelevant as a counter-example, since virtue is a quality and not a particular, and McTaggart's argument is concerned only with particulars.

Furthermore, there is reason to believe that the example in question is false. Virtue is non-circular, since it is not a quality with a spatial dimension, and what is not spatially extended cannot be circular.^15

23. The third objection which Armstrong raises against the admission of negative characteristics is unsatisfactory for a number of reasons. In the first place, it is not true that negative characteristics do not have 'causal powers', if causation is analysed in terms of the necessary and sufficient conditions that are required for the occurrence of a particular event. To use an example mentioned by Armstrong - it is
a sufficient condition for the death of a man that his body lack water. That is to say, the negative quality of lacking water, which we might call 'non-W' is a possible cause of the death of a human being.

A similar response can be made to Armstrong's second example - "Lack of poison caused him to stay alive". This statement, according to Armstrong, seems ridiculous. But it is, I think, generally admitted that the absence of a lethal amount of poison in a man's body is a necessary condition for his continued survival. It is true that a necessary condition for a man's survival sounds unusual when expressed in the way expressed by Armstrong. But the fact that the expression sounds unusual is not an adequate reason for judging it to be false, or for denying that the condition it expresses is existent. The only justifiable reason for saying that it is false would be that it fails to correctly describe one of the necessary conditions, i.e. a cause, of a man's continued existence. But no-one would reasonably deny that the lack of water will cause a man's death, or that the absence of poison is a necessary condition for his survival. We have no reason, then, to believe that such negative qualities do not have 'causal powers'.

Secondly, Armstrong has, at this stage, given no analysis of what he means by saying that an entity has causal powers. And yet, if the appeal to such a notion is to have any real force in his argument, it is of the last importance that such an analysis be given.

Thirdly, the appeal to the doctrine that causal power is a mark of existence is, at best, somewhat questionable. At worst it is little better than an attempt to re-instate the
old, but fallacious belief that equates reality with power. The notion of a causal power is itself a rather vague, and perhaps incoherent notion. Many philosophers, including some who, like Armstrong, pride themselves on the supposed scientific basis of their theories, have either declared the notion to be unjustifiably anthropomorphic, or else unnecessary for adequate and complete scientific explanations. Others have concluded that the notion of a causal relation, though perhaps coherent, does not apply to any existents; so that it is neither self-contradictory, nor absurd, to suggest that no existent entities have any qualities which endow them with causal powers.

24. On the basis of the above discussion we can, I believe reasonably conclude that no serious objections have been raised against the admission of negative qualities and relations. And, since the basis for their introduction is logically sound, there seems to be no valid reason for rejecting them.

25. We have considered one line of argument in favour of the reality of non-existent qualities and relations, and found that it is inconclusive. From the assumption that we are aware of various characteristics which do not seem to be characteristics of any existents, we cannot conclude that these characteristics are real, although non-existent. On the contrary, by recognising the existence of negative characteristics, we have shown that, on the assumption that we are aware of some characteristic, it follows that this characteristic does exist - either as a positive characteristic of an existent, or as a constituent of a complex negative characteristic of an existent.
26. There is, however, a further argument which professes to show that there are non-existent characteristics. The argument has also been used to show that there are non-existent substances. It is based upon the assumption that existence should be attributed only to those real entities which have temporal characteristics, i.e. which are members of a temporally ordered series. Being or reality, on the other hand, is to include only those entities which do not have temporal characteristics, and hence are changeless and timeless. Among past philosophers, this doctrine has been attributed to Plato. In more recent times it has found a number of adherents. Bertrand Russell, at one time, adopted this view. He expressed the basis for the distinction in the following way.

We shall find it convenient only to speak of things existing when they are in time, that is to say, when we can point to some time at which they exist (not excluding the possibility of their existing at all times). Thus thoughts and feelings, minds and physical objects exist. But universals do not exist in this sense; we shall say that they subsist or have being, where 'being' is opposed to 'existence' as being timeless. The world of universals, therefore, may also be described as the world of being. 16

27. There are a number of difficulties with this view. Firstly, it is based upon the premiss that there is a world of universals. In Chapter IV it will be argued that there cannot be such a realm, and that everything which is real is
particular. The need to introduce a distinction between reality and existence, merely to accommodate timeless, universal entities, would, in this case, be avoided.

Secondly, such a view would imply that being is a characteristic which is not attributable to existents. Similarly, it would imply that no existent can be timeless. Neither of these objections is sufficient to refute the doctrine. But they do, I think, make it appear extremely implausible and somewhat *ad hoc*. For example, some philosophers, such as McTaggart, who have recognized a *prima facie* distinction between reality and existence, have also argued that nothing existent can have temporal characteristics. All existents, according to McTaggart, are timeless. Now, if Russell's criterion for the distinction between reality and existence is taken to be definitive, then McTaggart's conclusions could be dismissed as self-evidently false - which they are not. There appears to be no sound reason, then, for denying existence to atemporal entities.

With this last point we have, I believe, removed the basis for one of the most common objections to the view that reality and existence are coextensive. Universals, numbers, the Homeric gods, are all, if real, existent. The fact that they cannot be directly positioned in the series of temporally ordered entities is not a valid reason to deny that they exist. Whether or not they exist must be decided according to some other criterion.

28. What other reasons are there for believing that there are non-existent realities? And what other types of entities have been considered to be real, but not existent?

Arguments have been put forward to suggest that there are
real, but non-existent *possibilia*. The term 'possibilia' is
used to refer to various kinds of entities, but it is gen-
erally understood to refer to those entities which are not
existent, but whose posited existence does not imply the
truth of contradictory propositions. Possibilia are disting-
ished from *impossibilia* in so far as the posited existence
of the latter does imply the truth of contradictory propos-
itions. This is the way in which the terms are used in the
following discussion.

29. Are possibilia real? The question is, I think, some-
what ambiguous. And a good deal of the ambiguity involved,
and the subsequent confusion about possible worlds, can
probably be traced to their sources in the diverse and
sometimes questionable analyses of statements concerning
possibilities. The question might be more satisfactorily
put by asking whether we need to assume the reality of
possibilia in order to account for the truth-conditions of
judgements concerning possibilities.

I believe that such an assumption is unnecessary, and
that the truth of such judgements can be explained with
reference solely to existent entities. Consider, firstly,
judgements of the form, "It is possible that X is the case",
or "X is possible" - where 'X' stands for a description of
some fact. The truth of such statements does not necessarily
imply that there is a real possibilia, X, to which we refer
when making the judgement. The judgement is to be understood,
rather, as either a statement about the state of knowledge
of the person who makes the judgement - in which case it
should be understood to mean something like, "I do not know
whether there is anything existent described by 'X', but I
know of no reason why there should not be"). Or else, it is to be understood as being a statement about implication relations between characteristics - in which case it should be understood to mean something like, "The nature of the existent does not imply the absence of any of the characteristics which are ascribed to X". According to both interpretations, the initial judgement, which ostensibly refers to a real, though perhaps non-existent, possibilium, is shown to involve, in actuality, reference only to existent entities. According to the first interpretation, it involves reference to the actual state of knowledge of the person who makes the judgement; according to the second, it involves reference to actual implication relations between characteristics.

Judgements of the form, "It is possible that X is a" may, as McTaggart demonstrates, be analysed in a similar fashion. When such judgements are not understood to be implicit assertions about the actual state of knowledge of the person who makes the judgement, they are to be understood as implicitly asserting that the nature of X does not imply the absence of a. In which case it is a judgement about implication relations between certain characteristics; and all characteristics, we have seen, are existent if they are real.

30. A different argument has recently been put forward in favour of the reality of certain possibilia. In his book, Counterfactuals, David Lewis has suggested that the truth-conditions for counterfactual conditional judgements can best be satisfied by an appeal to the reality of possible worlds. The notion of a possible world is explained in the following way.
I believe that there are possible worlds other than the one we happen to inhabit. If an argument be wanted it is this. It is uncontroversially true that things might be otherwise than they are. I believe, and so do you, that things could have been different in countless ways. But what does this mean? Ordinary language permits the paraphrase: there are many ways things could have been besides the way they actually are. On the face of it, this sentence is an existential quantification. It says that there exist many entities of a certain description, to wit, 'ways things could have been'. I believe things could have been different in countless ways; I believe permissible paraphrases of what I believe; taking the phrase at its face value, I therefore believe in the existence of entities that might be called 'ways things could have been'. I prefer to call them 'possible worlds'.

There are a number of difficulties with this argument. But it should firstly be pointed out that Lewis does not argue that his possible worlds are non-existent. If they are real, they exist. So the argument, in this form, cannot be used to support the view that there are non-existent realities. Furthermore, the intent of the argument is not entirely clear. Understood strictly, it proves only that Lewis believes there are possible worlds other than the one which he inhabits. The important question is, however, whether or not such possible worlds are real or existent. From the initial assumption that some people, perhaps mistakenly, believe that things might be other than they are, or might
have been other than they are, we can only legitimately conclude - given the acceptability of Lewis' paraphrase of such beliefs - that some people believe that possible worlds exist. But we cannot conclude, as was argued in Sections 11 and 12, that an entity is real or existent merely on the basis of the fact that someone believes or judges it to be real or existent.

31. Let us consider, then, the initial assumption of the argument - that things might be otherwise than they are. Since Lewis does not provide an argument in support of this premiss, we may infer that he considers it to be either self-evidently true, or else universally accepted as true. The claim that all of us believe that things could have been different in countless ways (ibid.) would seem to favour the latter interpretation.

Firstly, then, is it true that the proposition that things might be otherwise than they are is universally accepted as true? The answer to this question is clearly, no. McTaggart, for example, has claimed that the proposition is demonstrably false. So, the initial premiss of Lewis' argument in favour of the reality of possible worlds cannot be accorded the status of an ontological axiom, or that of a universally accepted principle. And, since no argument is offered in its favour, it remains, at best, controversial.

Granted that the premiss is controversial, are there any reasons to believe that it is false? I believe that there are, but before considering them, we should clarify exactly what it is that is being asserted in the proposition. Taken literally, the proposition asserts that things might have a different nature, i.e. a different set of characteristics,
than that which they have. In agreement with C.D. Broad\textsuperscript{21}, I consider this proposition to be self-evidently false. But we should distinguish between what is actually asserted, and what is meant to be asserted, by the proposition. And I think it is clear from his subsequent discussion, that what Lewis meant to assert was that things \textit{might have been otherwise} than they are; and that his argument, in fact, rests upon this, rather than the former, premiss.

32. The claim that things might have been other than they are is, however, evidently based upon the further assumption that things are, to some extent, if not completely, independent of their natures. (The term 'thing' I understand to mean what is sometimes called a 'substance' or 'particular'.) If a thing is not, to some extent, independent of its nature, then the assumption that a thing might have had a different nature to that which it does have (which is what I understand to be meant by saying that it might have been otherwise than it is) is obviously false. And whether or not this further assumption is true cannot be determined independently of a discussion of the notion of a thing or substance, and the consequent substance/quality distinction. In Chapter III it will be argued that the view that a substance is independent of its nature is untenable; and from this conclusion it follows that the assumption that things might have been otherwise than they are, is false. So, our reply to Lewis will ultimately have to be postponed until then. The important point to be made at this stage, however, is that, in so far as Lewis' argument for the reality of possible worlds does rest upon this tacit, and unargued, assumption, to that extent it is inconclusive.
33. We have seen that the assumption that things might have been other than they are, is, contrary to Lewis' claim, a controversial, and perhaps false, assumption. But even if we accept this assumption, is the rest of Lewis' argument strong enough to support the conclusion he wishes to draw from it?

There are a number of reasons for believing that it is not. But perhaps the most significant concerns the suggestion that the proposition that there are many ways things could have been besides the way they are, is equivalent to the proposition that there exist many possible worlds. This suggestion is, as a number of critics have pointed out, at best somewhat tenuous, especially in the light of Lewis' subsequent claim that these possible worlds are of the same ontological kind as our own, actual world. The tenuous nature of the equation is clearly shown by the fact that there are other, more plausible, and less ontologically extravagant, interpretations of the initial assumption.

One such interpretation of the proposition that there are many ways things might have been besides the way they are, which recommends itself as both ontologically economical and in accordance with ordinary language, is that it amounts to the claim that there are many characteristics, i.e. qualities and relations, which things might have had other than those which they do have. In this case there is no need to postulate the reality of entities other than certain qualities and relations; and all characteristics, we have seen, are existent if they are real.

So, even if we accept Lewis' initial assumption that things might have been otherwise than they are, we are still
not committed to the reality of possible worlds. We may conclude, then, that Lewis' overall argument for the reality of possibilia is unsatisfactory, and ought to be dismissed.

34. We have considered, and rejected the view that there are real, though non-existent possibilia. I will now consider the view that past and/or future entities are non-existent realities.

Existence, according to such theories, is existence now. The belief is fairly widespread, perhaps more widespread than some have been prepared to admit. There are also a number of variations of the basic theory. There are those, for example, who believe that the past and the future, though non-existent, are both real. There are others, like Broad\(^{23}\), who have believed that the past and the present are real and existent, but that the future is simply nothing at all. And there are others, again, who have believed that neither the past nor the future is existent or real. All are alike, however, in believing that the present exists, and most have believed that it is real.

Finally, there are those who believe that neither the past, the present, nor the future are existent, or real. Such qualities, it is suggested, are not objective qualities of the events which constitute the temporal series. The members of the time series are ordered by the relations, \textit{earlier than}, and \textit{later than}. But this view is not strictly relevant to the discussion in this chapter, since it is generally accepted by the proponents of such a view that the members of the time series, thus ordered, are both real and existent. In this chapter we will be concerned only with those theories which countenance a \textit{prima facie} ordering of
the temporal series into events with the characteristics *past, present, future*, and which then conclude that some of these characteristics do not belong to anything existent.

35. Although the various positions regarding the existence of the past and the future can be stated quite clearly, the reasons for denying that they exist are not always so easily stated, or so readily understood. And, for the most part, the reasons which have been given for regarding the past or the future as non-existent, are equally reasons for believing that they are not real. It has at times been suggested, for example, that we are not, and could not possibly be, directly aware of past or future events; and that this is a sufficient reason for believing that they do not exist. But if it is a sufficient reason for believing that they do not exist, it is also a sufficient reason for believing that they are not real.

36. What are the reasons for believing that past or future entities do not exist? There is, firstly, the argument just mentioned. The assumption that we are never directly aware of past or future entities is said to imply that they are non-existent. But the argument is clearly unsatisfactory. There would appear to be a great number of entities of which we are not directly aware, for example, the contents of other minds, but which we nevertheless consider to be both real and existent. The fact that we are not directly aware of such entities is not, accordingly, considered to be a sufficient reason, or even a good reason, for concluding that they are non-existent. It is, perhaps, a reason to be cautious about the judgements we make concerning these entities; and it might even be a reason to doubt their existence.
But it does not constitute a positive disproof of their existence. Similarly, the fact (if it is a fact) that we are not directly aware of past or future entities does not prove that they are non-existent, though it may provide grounds for doubting that they exist.

37. There are, however, more challenging arguments. Some of these have been recently emphasised by Richard Routley. In Chapter 2 of his work, *Exploring Meinong's Jungle and Beyond*, are to be found a number of arguments in favour of the thesis that existence is existence now. The first of these consists basically of an appeal to what is, I believe, a rather confused intuitive presumption.

Not all items that have existed or will exist currently exist: some like Aristotle and Queen Hatshepsut, have ceased to exist, others, like the greatest philosopher born in the 21st Century, do not yet exist. The fact that most of us really want to claim that purely past and purely future items do not exist, that Aristotle does not exist, is part of the case for the thesis

EO. existence is existence now.

For if an item does not exist now then either it never exists or it is purely past or purely future. But if it never exists it does not exist, and if it is purely past or purely future it does not, by the former points, exist. The converse of this, that what exists now does exist, is fairly unproblematical. For if any item exists now it satisfies whatever criterion of existence is adopted, and so exists. Again, if an item does exist
now then it is existent (transferring the now into the tense) so it exists. The converse, that only what exists now exists, can likewise be presented as a grammatical transformation; if an item exists then it is existent, so it exists now. The thesis reflects a rationally-based determination to use exists as a present-tensed verb, and not in some other way.24

The fact that some of us resolve to use 'exists' as a present-tensed verb is not, of course, an adequate reason to deny the existence of past and future entities. The important question is whether such a restricted use of the term is justified.

But before considering this question, we should firstly determine whether or not the assumption that existence is a present-tensed verb is actually incompatible with the belief that past and future entities exist. For if the assumption is not incompatible with this belief, then the suggested restriction of the domain of existence will not support the conclusion which Routley wishes to draw from it.

38. Does the assumption that existence is existence now imply that past and future entities do not exist? I do not believe that it does. Consider, for example, the past event of Aristotle's birth. According to some theories, to say that this event is past, is simply to say that it exists at a moment of past time. But such theories are based upon the premiss—that existence is to be understood as being tenseless. The claim that existence is a present-tensed verb would appear, then, to be incompatible with such a view. But the incompatibility is, I believe, only apparent. For, to say
that an entity exists at a moment of past time does not imply that it is not present - it is present at a moment of past time. Similarly, the characteristic of being present is not incompatible with being past, since every event is both present and past - a present event is past at a moment of future time. Future events are likewise present - at a moment of future time; as well as being future - at a moment of present time.

Although this reply might appear to be somewhat sophistical, it seems to me that there are only two ways in which it might be refuted. The first, which is open to Routley only if he is prepared to beg the question, is to deny that past and future entities exist. The second is to insist that the qualities past, present, future are mutually incompatible. To insist that these qualities are incompatible leads, however, as McTaggart has shown²⁵, to the conclusion that nothing existent can have any of these qualities - since, as we have just seen, any entity which has any one of these qualities, has at least one of the others; and this, of course, leads to the conclusion that the entity in question is impossible, i.e. its existence would imply the truth of contradictory propositions.

The use of 'exists' as a present-tensed verb does not, then, imply that past and future entities do not exist, unless it is assumed that the qualities past, present, future are mutually incompatible; in which case the conclusion to be drawn is that nothing can be past, present or future.

39. With this last point we have, I believe, provided an answer to our initial question. The restriction of 'exists' to cover only present entities is arbitrary, and ultimately
inconsistent. Furthermore, the argument used by Routley to show that, if anything exists, it exists now, is unsound. The argument is set out in the following way.

(1) If any item exists now, it satisfies whatever criterion of existence is adopted, and so exists.
(2) If an item does exist now it is existent, so it exists.
(3) Only what exists now exists.
(4) If an item exists, then it is existent, so it exists now.

The illegitimate conclusion (4) can be traced to an ambiguity in (3). From (1) and (2) we can conclude that only what exists, now exists. But this does not give us the conclusion that if an item exists, it exists now. The only way that this conclusion can be reached is by rephrasing (3) in the following way:

(3*) Only what exists now, exists.

But this proposition cannot be legitimately inferred from (1) and (2). So, the argument is unsound. We may emphasise the error involved by replacing 'now' with an equivalent expression, 'at this moment'. We then have two possible readings of (3):

(3') Only what exists at this moment, exists.
(3'') Only what exists, exists at this moment.
The first reading, \((3')\), cannot be derived from (1) and (2), although it supports (4). The second reading, \((3'')\), can be derived from the first two premisses (1) and (2), but it does not support the conclusion, (4). The thesis, EO., that existence is existence now, remains, then, as yet, an unjustified and controversial assumption.

40. There is, however, a second, and more important argument in favour of this thesis. In its basic form it has been used by a number of philosophers to prove that the future, unlike the present, or the past, cannot exist. Routley expresses it thus:

Purely past and purely future items are, like merely possible items, not (now) determinate in all extensional respects: hence... they do not exist. Compare the items Aristotle and Polonius, and remember Peirce's question as to how long before Polonius died had he had a haircut and Russell's as to the present king of France. Well, is Aristotle bald now? If he is, how long has he been bald? If not, how long since he had a haircut and how long is his hair? Since Aristotle has ceased to exist, it is false that Aristotle is now bald and false that he is not now bald, even on Russell's theory of descriptions naturally (i.e. temporally) construed. Thus Aristotle is indeterminate in respect of the extensional property of (present) baldness. Hence he does not exist now; hence he does not exist. Likewise the future sea-battle is indeterminate in various respects, so even if it will exist, it does not exist. Of course there are substantial differences between the various sorts of
non-entities alluded to, between Aristotle (a past object) who did exist, but does not now, the future sea-battle (a future object) which will exist but does not exist now, and Polonius (a possibilium) who never existed.

The first point that should be made in reply is that Routley himself, at a later stage, offers some very plausible reasons for believing that the principle of determinacy is not a satisfactory criterion of existence. There are, he suggests, many existent entities which are not fully determinate.

It is not necessary to go as far afield as quantum indeterminacy of micro-particles to find cases of indeterminacy. Natural objects such as clouds and waves and gases, forests and mountain ranges and waterfalls, are indeterminate in various respects, especially as regards their boundaries, lengths, and numbers of components. The indeterminacy features of quanta certainly appear to fit neatly within the framework of a theory - such as a noneism can be - which allows for and takes due account of indeterminacy. To see the existing world as completely determinate then goes against not only the facts of language but the apparent facts of physics.

The last sentence of the above passage, in particular, is difficult to reconcile with the statements made in Chapter 2 of his work, about past and future entities. I am inclined to
conclude, then, that the fact that past and future entities appear to be indeterminate with respect to some qualities is not a consistent reason for believing that they do not exist.

41. But is it true, in any case, that past and future entities are indeterminate with respect to certain qualities? Let us consider Routley's question about Aristotle: Is Aristotle bald now? The question is, I believe, ambiguous. It may mean: Is Aristotle now bald at some moment of past time?, in which case the answer is 'Yes' or 'No', according to the moment of past time stipulated. For example, if we ask: Is Aristotle bald in the year 364 B.C.?, then we may presume that, unless he is prematurely bald, the correct answer is 'No'. At any rate, there is a definite answer to this question - even though it may be difficult to verify it.

On the other hand, the question may mean: Is Aristotle now bald at a moment of present time?, in which case the answer is 'No', since Aristotle does not exist at a moment of present time; although he exists at a moment of past time, and is either bald or not bald at that moment.

On either reading we can give a definite answer to the initial question, although in the first case it may be difficult, in a purely practical sense concerning our accessibility to past entities, to determine the truth or falsity of our answer. But since we can, theoretically, give a true or false answer to either reading, we may conclude that Aristotle is determinate with respect to this, and any other characteristic.

42. At this point, an objection might be raised to this type of reply. I have assumed that past entities exist, and that the qualities past, present, and future are compatible.
But if we accept the widely-held presumption that these qualities are, in fact, mutually incompatible, is it still possible to defend the view that past and future entities are both completely determinate and existent?

I believe that it is possible to defend this conclusion. If we return to the question of Aristotle's baldness, then, we may reply simply that he is not now bald, but that he is bald at a number of moments of past time. He is not bald now because he does not exist now. But this does not entail that he does not exist - he exists through a period of past time. To suggest, as Routley seems to do, that, because Aristotle is existent at a moment of past time he must therefore exist now, i.e. at a moment of present time, is analogous to the false conclusion that, because an entity has a spatial position, it is therefore spatially ubiquitous. The question: Is Aristotle now bald? is, in this sense, analogous to the question: Is the Sydney Harbour Bridge grey here?. Both questions contain implicit assumptions, which, when made explicit, can be seen to be illegitimate. The first implies that Aristotle exists at this moment; the second implies that the Sydney Harbour Bridge exists at this place. But in the same way that the fact that Sydney Harbour Bridge does not exist at this place, i.e. here, does not imply either that it does not exist, or that it is not determinate with respect to the quality of greyness; the fact that Aristotle does not exist at this moment, i.e. now, does not imply either that he does not exist, or that he is not determinate with respect to the quality of baldness. In other words, in the same way that spatial position does not imply ubiquity, temporal position does not imply sempiternity.
43. The existence of past entities can be defended, then, in either of two ways: by denying that existence is existence now; or, by accepting the thesis that existence is existence now, but denying that this thesis is incompatible with the the existence of past entities. In both cases, we have relied upon a priori arguments in support of our views. But this is not to say that there is no empirical evidence to support our views.

One such piece of empirical evidence is to be found in the notion of the specious present. The adjective 'specious' is used to distinguish the experienced or felt present, from the strictly objective present. According to the 'objective' view of the present, it is a characteristic of events which are without any temporally divisible dimensions, and which are members of a series of entities which is ordered by relations which are both transitive and asymmetrical. To be present, the entity must be preceded by an entity which is past, and succeeded by an entity which is future. Such a series is also generally considered to be a discrete series, according to which any member of the series has both an immediate predecessor, and an immediate successor\(^{28}\). The immediate predecessor of any present entity is past. The immediate successor of any present entity is future.

There is no denying the scientific and practical utility of this view of the present, but it is, I believe, a construction from data which are more fundamental. If we turn to the experienced or specious present we find that, unlike the objective present, it does not preclude past or future entities. Nowness, as experienced, does not preclude the direct awareness of past events. If it did, it would be impossible
to be directly aware of change, since the direct awareness of change involves the co-existence, before the mind in a single state of awareness, of two events - one of which is the immediate predecessor to the other, and therefore past.

By appealing to the notion of the specious present we are able to give empirical support to the claim that the qualities past, present, are not incompatible - an event may be the object of a present state of awareness, and thereby present, even though it is objectively past. It also lends support to the claim that existence does not mean existence now, i.e. that existence is tenseless; since events which are objectively past are co-existent, in the specious present, with events that are objectively present. It would seem to be possible, then, as a matter of fact as well as a matter of principle, for a past event to be existent now. Although our specious present is limited in the range of past entities to which it provides access, I do not think that this is anything more than a contingent fact. It would seem to be logically possible for some being to be aware of the entire objective time series in a single specious present. Josiah Royce, in fact, did ascribe such an awareness to God.

44. We have argued that past entities are determinate, and may accordingly qualify as existent. We have also argued that past entities might be said to exist now. But what of future entities? The task is more difficult in the case of future entities, since even among those who are prepared to admit the existence and determinacy of past entities, there are some, such as Broad, who would deny the determinacy of future entities. Furthermore, it is not always admitted that the specious present includes the direct awareness of future
entities; so that future entities, unlike past entities, might not, in this sense, exist now.

45. Are future entities determinate with respect to all extensional qualities? We may reply to this question in much the same way that we replied to the question about the determinateness of past entities. Of any future entity we can always ask whether or not it is determinate at any of the moments of future time at which it exists. And there is always a definite answer to such questions, even though there may be practical difficulties in determining what that answer is.

With respect to the claim that the specious present does not include the awareness of future entities, there seems to be no sound reason, except for that which will be considered in the next section, to suppose that this anything but a contingent fact.

46. There remains one argument, however, which, if sound, would show that future entities are not fully determinate. The argument is based upon the assumption that the future, hence future entities, is nothing at all - it is neither existent nor real. Broad explains this view in the following way.

It will be observed that such a theory as this accepts the reality of the present and the past, but holds that the future is simply nothing at all. Nothing has happened to the present by becoming past except that fresh slices of existence have been added to the total history of the world. The past is thus as real as the present. On the other hand, the essence of a present
event is, not that it precedes future events, but that there is quite literally nothing to which it has the relation of precedence. The sum total of existence is always increasing, and it is this which gives the time-series a sense as well as an order. A moment $t$ is later than a moment $t'$ if the sum total of existence at $t$ includes the sum total of existence at $t'$ together with something more.\textsuperscript{31}

If true, this theory would undoubtedly show that we cannot be directly aware of future entities in a specious present. But this is not because the future is indeterminate, but because there simply are no future entities to be apprehended. As such, it would also show that future entities are non-existent. On the other hand, it is equally an objection to the view that future entities are, in any sense, real. According to Broad, there are no future entities - either existent or non-existent.

This last point brings us to the much wider question of the reality of time in general. But we are here only concerned to show that if past and future entities are real, then they are existent. And we have found no sound reason to doubt that this is the case.

47. Propositions are another type of entity which, for various reasons, have been thought to be non-existent, but real. Once again, the reasons for believing that they are non-existent, as opposed to the reasons for saying that there simply are no propositions, are often unclear. In what follows I will not attempt to argue that there are no propositions. I will, instead, argue that there are no sound reasons
for believing that they are non-existent realities.

48. What are propositions? This has been a notoriously difficult question to answer satisfactorily, and many who profess a belief in the reality of propositions have been prepared to leave the concept of a proposition unanalysed. This in itself might give good reason to doubt that there are any such entities. The additional fact that a number of theories have been put forward which claim to dispense with the need to postulate the reality of propositions gives further credence to the view that there are no such entities. But there are still those who claim that the reality of propositions is indispensable, and these views ought to be considered.

49. The introduction of propositions, as distinct from true or false beliefs, and from facts, has been thought to be necessary to account, firstly, for truths which are timelessly true; and, secondly, for those objects of belief which are common to a number of beliefs, but which are not facts. The reasons for believing that propositions are non-existent realities are, I think, closely related to the reasons for their initial introduction. It is often suggested, for example, that there are timeless truths; and, that since there are no timeless existents, there must be some real entities which are timeless and non-existent. These timelessly true entities are called 'propositions'.

But if it is true that there are timeless truths, and that the only timeless entities which can be true are propositions, does it follow that propositions are non-existent? I don't see that there is any reason for believing that propositions, thus characterised, should be thought to be non-existent -
apart from the presumption that there can be no timeless existents. And this presumption, we have seen (Sections 26-27), is unjustified. But if there may be timeless existents, then there may be timeless existent propositions. Furthermore, these timeless existent propositions can be understood to function as the common, or 'public' objects of beliefs which are, themselves, in time.

50. On the other hand, the notion of a timeless truth is, perhaps, somewhat obscure. It may be understood to mean, as we have so far understood it to mean, that there are timeless, true propositions. Or else, it may be understood to mean that there are timeless true beliefs, i.e. beliefs which are true whenever they exist. The belief that Mohammed was born in the 6th Century A.D., for example, is timeless true - it is true whenever it exists. But this does not mean that such beliefs are timeless or atemporal. It is the failure to make this distinction between timeless, true entities, and timelessly true entities, which is, I believe, responsible for the presumption that there are timeless, true propositions.

51. Another reason which has been given for believing that propositions are non-existent realities is that they are claimed to be neither mental, nor material entities; and, since, it is assumed, the only existent kinds of entities are mental or material, propositions cannot be existents. Similar reasons have been given for believing that such 'abstract' entities as numbers and classes are non-existent realities.

There are at least two replies which might be made to this argument. Firstly, it might be pointed out that even though
propositions are not obviously either mental, or material entities, this is not to say that they are not reducible to either material or mental entities. John Wisdom, for example, has given a very plausible demonstration of the way in which propositions can be reduced to sets of judgements which, in turn, are understood to be mental entities.\(^{33}\)

Secondly, it might be pointed out that the material and the mental do not necessarily exhaust the entire range of existent entities. There is no sound empirical basis for concluding that they do. And there do not seem to be any genuine a priori reasons - apart from those based upon the acceptance of certain metaphysical theories - for believing that they do. The most that might be said for the view that the material and the mental exhaust the realm of existent entities\(^{34}\), is that it is possibly true. But it is also possibly false; and any argument which incorporates a premiss that is possibly false cannot be considered to be conclusive.

52. None of the arguments, then, which we have considered in favour of the view that propositions are non-existent realities can be said to be conclusive. So, there appears to be no sound reason why propositions, if they are real, should not exist.

53. The final class of entities which we will consider, as real but not existent, are fictional or imaginary entities.

To the question whether fictional or imaginary entities are real or existent, there is, of course, the obvious reply that part of what we normally mean when we say that an entity is real or existent, is that it is not fictional or imaginary so that such entities ipso facto cannot be real or existent.

At first glance this reply is quite persuasive. But its
soundness has been questioned by some philosophers who have favoured the view that such fictional or imaginary entities are real, though not existent.

54. When I judge, correctly, that, in Thomas Hardy's novel *Jude the Obscure*, Jude Fawley died in Christminster, must I assume that, to account for the truth of this judgement, there must be a real, though non-existent entity named Jude Fawley, and a real, though non-existent town called Christminster, in which he died?

There are number of opinions on this topic. Some, such as William James and Bradley, have suggested that, rather than postulate real, but non-existent entities to explain the truth of such judgements, we ought, instead, to expand our notion of the limits of the existent world to cover the world of fiction, the world of dreams, of imagination, etc. Judgements, such as the judgement that Jude Fawley died in Christminster, though not true of the world of waking experience, are nevertheless true of the world of fiction - which incorporates such entities as Jude Fawley and Christminster. If I believe, for example, that a Mr Pumblechook lived in High Street, London, in the 19th Century, I would, by most standards, be said to have judged incorrectly. And if a register of the inhabitants of London in the 19th Century were consulted, it is quite certain that there would be no record of a Mr Pumblechook of High Street. But, according to the theory being considered, although my belief does not correspond to any fact in the world which is continuous with my body in waking experience, it is true of a world described by Dickens' *Great Expectations*. Likewise, the belief that Jude Fawley died in Christminster is true of the world
described by Hardy's novel.

There does seem to be something implausible about this theory. But the arguments against it do not seem to be very convincing; unless, of course, it is simply assumed that there are no fictional or imaginary entities. It is not true, for example, that the theory involves the relativisation of the concepts of truth and existence. When the belief that Mr Pumblechook lived in High Street is said to be true, this does not mean that it is true - relative to some particular sphere of reference. It means that it is true, *simpliciter*. In other words, the belief is said to correspond to some objective fact in the Universe. And when it is claimed that Jude Fawley exists, this does not mean that he exists to a lesser degree than other entities, or relative to some sphere of reference. It means that he exists *simpliciter*, in the world described by Hardy's novel; and, that this world is but one among the many existent worlds which make up the Universe.

It should be pointed out that the claim that the notions of truth and existence involved in reference to fictional and imaginary entities are not relative, does not imply that such entities have all or any of the qualities which the entities encountered in the world of waking experience have. A point which is often ignored by those who claim that such entities are neither existent nor fully determinate.

55. It might be suggested that the worlds of fiction and imagination are neither spatial nor temporal, and so cannot exist. But this criticism is based upon two unjustified assumptions. The first, which we have already considered and rejected, is that all existents must be spatially and/or
temporally positioned.

The second is that the worlds of fiction and imagination do not have spatial or temporal dimensions. But it is true, for example, that in Hardy's Wessex, Christminster is north of Stonehenge, and that Jude was born before he died. And so such worlds can, and do, have spatial and temporal dimensions. What is not true is that these spatial and temporal dimensions are directly continuous with those of waking experience. But, as Bradley and others have argued, the possibility of there being numerous distinct and discontinuous spatial and temporal dimensions cannot be arbitrarily ruled out. Just as the spatial and temporal dimensions of the worlds described by Dickens' and Hardy's fiction are discontinuous with each other, and with our own, so there may be an indefinite number of other worlds, discontinuous with our own, and with each other. It is clear that such a possibility cannot be ruled out on an a posteriori basis, and I know of no reason of an a priori nature - unless it be an argument which professes to show that there cannot be any existent spatial or temporal dimensions - which precludes this possibility.

There is, furthermore, an argument to show that the various worlds of dreaming, fiction, and imagination have at least a prima facie claim to existence. It is possible, as Descartes and others have suggested, that what I take to be a dream world, or a world of imagination, may, in fact, be real, and the world which I presently judge to be real or actual, may be a dream world. It may turn out that there are overwhelming reasons for believing that this is not the case. But these reasons are, in general, based upon considerations
of continuity and coherence, rather than any intrinsic qualities of either the experiences or their objects.

56. What other reasons are there for believing that such entities are non-existent realities? I think that we can conclude, at this stage, that any further arguments that might be produced to show that fictional or imaginary entities are non-existent, will equally show that they are not real. Such, for example, is the claim that judgements which profess to refer to certain fictional or imaginary entities are essentially hypothetical, and do not, in fact, involve reference to any entities, real or existent.

Similarly, the charge that fictional and imaginary entities are not fully determinate, and hence non-existent, would also, if sound, show that they are not real. At any rate, this charge does not seem to be justified. It is true of Jude Fawley, for example, that he is a stone-mason, and that he is less than eight feet high, and so on with respect to all the qualities which are either explicitly ascribed to him by the author, or which might be logically inferred from such qualities. To the question whether he is determinate with the respect to the quality of being ten-toed, we can reply that, since this quality is not explicitly ascribed to him by Hardy, and since it cannot be logically inferred from those qualities which he is explicitly ascribed, he has the quality of being non-ten-toed. This does not, of course, imply that he is, in any sense, a freak; since this epithet applies only to entities which profess to be human beings existent in the world co-extensive with our bodies in waking experience. Jude Fawley, being a fictional existent, cannot be judged by such criteria.
57. We have so far discovered no sound reasons for believing that there are non-existent realities. The initial presumption that reality and existence are co-extensive would appear, then, to be justified.

There remains, however, one class of entities to be considered. As I mentioned at the beginning of this chapter, it is Bradley's view that there are some existents, namely *appearances*, which are not ultimately real. Other philosophers have claimed that appearances are real, but not existent. In the next chapter we will discuss the question of the ontological status of appearances, with particular attention to Bradley's view that they are unreal existents.

Notes
3. See R. Routley, *Exploring Meinong's Jungle and Beyond*, Australian National University Monograph, 1980; for a discussion of some of these attempts.
6. On the importance of the distinction between object and content, see K. Twardowski, *On the Content and Object of*

7. See Bradley, ETR, pp.296-299. In Chapter VII it will be argued that all qualities and relations are particular, from which it follows that we can never, in fact, be aware of qualities or relations per se.


15. A.N. Prior has suggested that, far from being false, such statements are almost tautological. See Papers in Logic and Ethics, Duckworth, London, 1976, Chapter 2.


20. McTaggart, op.cit., Chapters XII & XIX.


25. McTaggart, *op.cit.*, Chapter 33.


29. For a discussion of the distinction between discrete and compact series, and of the notions of an immediate predecessor and an immediate successor, see Broad, *An Examination of McTaggart's Philosophy*, Vol.2, pp.362-363.


34. I am not, here, assuming that the mental is not reducible to the material, or *vice versa*.


36. Except in the sense that *all* finite existents exist
relative to some sphere of reference.

37. See Bradley, AR, Chapter XVIII. Cf. Broad, An Examination of McTaggart's Philosophy, Vol.1, p.177.
Chapter 2 - Reality and Appearance

58. In the previous chapter we reached the conclusion that the presumption against non-existent realities is apparently justified. We will now consider one view which, if true, would oblige us to abandon this presumption. The view in question is that put forward by Bradley, that there are existent appearances which are not real, or which are only real to a certain degree. In this chapter I propose to do two things: firstly, to give a critical assessment of Bradley's theory of appearances; and, secondly, to provide an analysis of the distinction between appearance and reality which avoids the difficulties involved in Bradley's theory, and which upholds the validity of the distinction without positing the reality or existence of appearances.

59. It has been suggested that, rather than providing a positive theory of appearances, Bradley instead has simply provided a theory of reality - appearance being that which fails to satisfy the criterion of reality. I believe this objection to be substantially correct, although the extent to which it should be admitted as a point of valid criticism needs to be determined. It seems to be quite plausible, for example, to suggest that the notion of an appearance can only be understood in a negative way - as that which is either not real, or not ultimately real. To ascribe a positive and definite nature to appearances might even be thought to beg the question as to whether or not they have any sort of nature or reality at all. In this case, the above objection could not be accepted as a valid criticism of Bradley's views - although it may indicate a need for them to be
further clarified, and possibly restated.

Bearing this point in mind, it is, I think, nevertheless possible to isolate a number of positive features of Bradley's views on the distinction between reality and appearance which, when taken in conjunction, might be said to constitute a theory of appearances.

60. Firstly, an appearance is said to be anything which fails to satisfy the criterion of ultimate reality. Throughout the first Book of Appearance and Reality, this criterion is identified with that of coherence, or lack of contradiction. Any entity whose nature, upon analysis, proves to be internally inconsistent, or to have contradictory characteristics, or whose existence would imply the truth of contradictory propositions, is said to be an appearance. It should be pointed out that the term 'appearance', when used in this way, is to be understood to be a contrary term to 'reality' or 'real'. That is to say, the propositions "X is real", and "X is an appearance", cannot both be true.

Secondly, appearances are said to be existent, without being real, or ultimately real. In so far as they are taken to be appearances of the Absolute, they are accorded degrees of reality. To the extent that this position involves the introduction of the doctrine of degrees of reality, it is probably one of the more controversial features of Bradley's theory.

Thirdly, all appearances are said to involve a disjunction of, or a discrepancy between the that and the what. In a number of places, Bradley speaks of this as being the most fundamental, or definitive feature of appearances. But the precise meaning of these two terms remains somewhat obscure.
An analogy might be found in the more traditional distinction between form and matter.

Fourthly, it is not necessary, according to Bradley, that appearances appear to a mind. It is quite possible, on his theory, that space and time, for example, be classified as appearances solely on the basis of their having an inconsistent or self-contradictory nature. They may, in principle, exist as appearances, independently of any mind.

I will now consider each of these features of Bradley’s theory in turn. It will soon become evident, however, that each feature is, to some extent, dependent upon one or more of the others for its plausibility.

61. Let us begin with the claim that anything which fails to satisfy the criterion of reality is, in posse facto, an appearance.

This claim might be interpreted in either of two ways. It might be understood to mean that anything which does, in fact, fail to satisfy the criterion of reality is an appearance. Or, it might be understood to mean that anything which is correctly judged to fail the criterion is an appearance. Although distinct, the two interpretations are not entirely independent. For it would seem that we have no sound reason to suppose that anything does, in fact, fail the criterion, apart from the fact that it is judged to do so. This does not, of course, show that there is nothing, or could be nothing which fails to satisfy the criterion; and we will need to consider independent arguments to determine whether there are appearances in this sense. Firstly, however, we will attempt to determine whether there are appearances in the second sense.
62. When I make the judgement that something is not real, does this imply, assuming that the judgement is correct, that whatever I have judged to be unreal is an appearance? According to Bradley, it does. This conclusion cannot, however, claim the status of an evident truth, and it needs to be supported by arguments. It seems to me that there are two ways in which the conclusion might be supported. An appeal might be made to conventions established by ordinary discourse; or else, independent philosophical reasons might be adduced in its favour. Let us consider, firstly, the appeal to ordinary discourse.

63. When I make the judgement that round-squares are not real, or the judgement that griffins are not real, I am not generally understood, according to established conventions, to be thereby committed to the view that such entities are nonetheless existent or real in some phenomenal sense, or in some realm of mere appearances. I am understood to mean that there is nothing and, in the case of round-squares, could be nothing which satisfies either the complex description of being both round and square in the same respect, or the complex description of having the head and wings of an eagle, and the body of a lion, respectively. And that, as such, neither round-squares, nor griffins are real or existent in any sense, in any degree, or in any realm whatsoever. Nor am I understood to be thereby committed to the view that such non-entities are to be classified along with, say, mirages as sensory illusions; or with, say, the blueness of the sky as illusory or mere appearances of anything real or existent. And yet the latter are, I think, the only relevant contexts in which the notion of an appearance arises in ordinary
language.

The appeal to conventions established by ordinary discourse does not, then, appear to support Bradley's conclusion. But it is possible that ordinary language is either inconsistent or inadequate in this respect; and, if used as a criterion for determining the soundness or otherwise of philosophical theories about the status of appearances it might, therefore, be misleading. The alternative for Bradley is to base his conclusion upon distinct philosophical grounds.

64. What arguments does Bradley offer in support of his conclusion? There is, first of all, the type of argument we considered in the first chapter. In order that we may talk of entities such as round-squares, or griffins; or, that we may make significant and possibly true negative existential judgements about them, it was assumed that such entities must, in some sense, be real. Bradley's argument for this view is slightly different from Russell's, but it is, I think, similarly inconclusive. Consider, for example, the following quotation from *Essays on Truth and Reality*.

The self-contradictory, I suppose most of us would agree, is unreal. And yet, since we discuss it, it is clear that the self-contradictory in some sense exists.⁵

There is also the following passage from *Appearance and Reality*.

Everything so far, we have seen, has turned out to be appearance. It is that which, taken as it stands, proves inconsistent with itself, and for this reason cannot be
true of the real. But to deny its existence or to divorce it from reality is out of the question. For it has a positive character which is indubitable fact, and however much this fact may be pronounced appearance, it can have no place to live except reality. (AR p. 114)

The argument in the first passage professes to show that self-contradictory entities exist. The argument in the second, that whatever is judged to be self-contradictory, or to be inconsistent with itself, is an appearance. The conclusion drawn is that self-contradictory entities exist - as appearances.

65. There are, however, a number of difficulties with this argument. The first concerns the claim that self-contradictory entities exist. The argument which Bradley uses to establish this conclusion is essentially that used by Russell to show that there are non-existent beings. And this argument, as we have already seen, (Sections 10-12), is unsatisfactory. Unless we make the erroneous assumption that the object of a belief or judgement is a constituent of that belief or judgement, then the fact that something is believed to be self-contradictory, or even judged correctly to be self-contradictory, does not entail that there is any such entity - real or existent. But apart from this assumption, Bradley's argument, like Russell's, lacks any plausibility.

A second difficulty concerns the claim that, whatever is judged to be self-contradictory is, ipso facto, an appearance. We have seen that this conclusion is not supported by an appeal to the conventions of ordinary language. But apart from the tacit assumption that an entity which is judged to
be self-contradictory must "appear", in some sense, to the mind which makes the judgement, in virtue of its making that judgement, there do not appear to be any satisfactory philosophical reasons for accepting this conclusion. The viability of Bradley's position rests, then, upon the truth or falsity of this assumption. Unfortunately, there are convincing reasons for believing that it is false. When, for example, I make the judgement that round-squares are unreal, I am admittedly aware of the meaning of the terms "round" and "square". And, if we accept a purely extensional theory of meaning, according to which the meaning of a term is determined exclusively by its denotation, then it follows that I am thereby aware of the qualities round and square. So that we might say that these qualities "appear" to the mind when making the judgement. What does not follow from my making this judgement is that I am thereby aware of these qualities as the qualities of a single real or existent entity. There is not, in other words, a single entity bearing these incompatible qualities which "appears" before the mind in the act of judgement. The fact that I judge round-squares, or any other entity, to be unreal does not, then, entail either that such entities exist, or that they appear before the mind, i.e. that they are appearances.

66. We have seen that the fact that we discuss, or rather pass judgement upon self-contradictory entities does not imply that such entities "appear" to the person who makes the judgement; or, that such entities are real, or existent. In this respect, our argument has been mainly negative. But we can also show that, not only is there no need to posit the reality or existence of such entities, but that it is, in
fact, impossible for such entities either to exist, or to appear to the mind. As Bradley himself suggests, in the first of the quoted passages, that which is self-contradictory is unreal. But it is also, by his own definition, therefore impossible.

A thing is impossible absolutely when it contradicts the known nature of reality. (AR p.446)

But if an entity is judged to be impossible, because self-contradictory, then it is impossible for it to be real or existent as an appearance. That which is correctly judged to be unreal cannot, then, be an appearance.

It is possible, of course, that, if our judgement is erroneous, an entity which is judged to be unreal may exist as an appearance. But this is not what Bradley has argued. His argument is, that whatever does, in fact, have a self-contradictory nature, or whatever does, in fact, involve a contradiction, is therefore an appearance. And such a conclusion, it is clear, is unjustified.

67. The fact that an entity is judged to be self-contradictory, and to thereby fail to satisfy the criterion of reality, does not, then, determine that it is an appearance. On the contrary, the fact that something is judged to be self-contradictory is a sufficient condition for believing that it is not an appearance. The first feature of Bradley's theory of appearances is therefore unacceptable.

68. Thus far the notion of an appearance has been accepted as unproblematic. A number of points arising from the above discussion will oblige us, however, to consider the nature
and status of appearances in more detail. In what sense, for example, if at all, can appearances be said to exist? And in what way do illusory or mere appearances differ from veridical or actual appearances? Both questions are directly related to the second feature of Bradley's theory of appearances - the belief that appearances exist. We will begin by considering the distinction between mere, and actual, appearances.

69. The failure to distinguish between mere appearances, and actual appearances has, I believe, led to a serious equivocation in Bradley's argument concerning the existence of appearances. The basis for the distinction between actual and mere appearances can be traced to the distinction between two significantly different uses of the verb "to appear". There is, on the one hand, what H.H. Price has termed the absolute sense of the verb. When I say, for example, that my dog appeared at the door, I am using the verb "to appear" in the absolute sense. In this case, as Price points out, there is no distinction to be made between what appears at the door, and what actually exists. If the dog did, in fact, appear at the door, the possibility that the dog did not exist, at that time, is tacitly precluded. The propositions, "The dog appeared at the door at time t", and "The dog did not exist at time t", are thus said to involve a contradiction.

Now, if the dog did, in fact, appear at the door, then this event might legitimately be called the appearance of the dog at the door. And it is evident that if the dog exists at the time of its appearance, then the appearance (i.e. the event of its appearing at the door) exists. So, from the premiss that something appears in this sense, we can, by considering the event to be an appearance, legitimately conclude that
appearances exist. But to talk of appearances in this sense is not to talk of something distinct from, or independent of, the entity which appears. It is simply a part of the history or temporal dimension of that entity. And, if we consider the parts of the temporal dimension of an entity to be parts of that entity, then appearances are parts of the entities which appear. An appearance, thus understood, I shall call an actual appearance.

70. On the other hand, we have what Price calls the predicative, and the quasi-existential senses of the verb "to appear". The statement, "The cat at the door appears to be black", is an example of the predicative sense. The statement, "There appears to be a cat at the door", is an example of the quasi-existential sense. Both the predicative, and the quasi-existential senses, unlike the absolute sense, are understood to imply the possibility of there being a distinction between what appears, and what actually exists. The fact that the cat at the door appears to be black, does not, according to common-sense opinion, entail that the cat, or any other existent, is actually black. Similarly, the fact that there appears to be a cat at the door, does not, according to common-sense opinion, entail that there is a cat at the door, or anywhere else. In other words, the use of either the predicative or the quasi-existential senses of the verb "to appear", implies the possibility of error.

But the transition from the use of the verb "to appear" in either its predicative or its quasi-existential sense, to the introduction of a substantive appearance is not as straightforward, or as easily justified as it is in the case of its use in the absolute sense. Is the appearance to be identified,
for example, in the first case, with an entity *cat-as-black*, which is distinct from the actual cat; or, with either a quality of apparent blackness, or an apparent quality of blackness, neither of which, again, is an intrinsic quality of the actual cat? Apart from the difficulty of understanding the relationship between such 'appearances' and the actual cat, there is the intrinsic obscurity involved in the notion of a merely apparent quality. How, for example, can a merely apparent quality of blackness, or an actual quality of apparent blackness, be identified with an actual quality of blackness or a quality of actual blackness in case the cat is, in fact, black?

Similar problems arise in the case of the quasi-existential sense of *appear*. If I say that there appears to be a cat at the door, does this imply that there is an appearance - an apparent cat - at the door? If so, we are again faced with the problem of understanding the relationship between the mere appearance and, if there really is a cat at the door, the actual cat. How, for example, if there is a cat at the door, can an apparent cat be identical with an actual cat? And what is meant by a merely *apparent* cat, as distinct from an actual cat?

71. There seems to me to be only two obvious ways in which these problems might be overcome. Both, however, are incompatible with Bradley's views. We might deny that such *mere* appearances as the apparent quality of blackness, and the apparent cat at the door, are existent. Or, we might deny that the terms *real* and *apparent* are contrary.

If we deny that the terms *real* and *apparent* are contrary, then we will have avoided the problem of explaining how a
merely apparent entity can also be an actual entity. But this decision is incompatible with Bradley's view that, only upon the assumption that there terms are genuine contraries (Cf. Section 60), are we entitled to introduce any distinction in the ontological statuses of appearance and reality. And it is clear that, since such a distinction is unavoidable in metaphysics, the contrariety of these terms must be preserved.

If, on the other hand, we deny that mere appearances exist, then we may give a tentative definition of an appearance, based upon the predicative and the quasi-existential senses of the verb "to appear". An appearance is an entity which is perceived as existent. It is a mere appearance if it is perceived as existent, although it is not, in fact, existent - i.e. if it is misperceived as existent. It is a veridical appearance if it is perceived as existent, and if it is, in fact, existent. The quality of blackness, for example, when misperceived as existent - i.e. as the quality of the cat - is a mere appearance. It is a veridical appearance, hence existent, when it is correctly perceived as the quality of the cat. Similarly, the cat at the door is a mere appearance if it is misperceived as existent; and it is a veridical appearance if it actually exists.

72. We may summarise our results concerning the nature and status of appearances as follows. Among appearances, we may distinguish the following classes: actual appearances, which are events, and existent as parts of the temporal dimensions of existent entities; veridical appearances, which are existent as characteristics of existent entities, or entities in their own right; and mere appearances, which are not existent, either in their own right, or as characteristics or parts of
anything existent.

Now it is evident from this classification that the only class of appearances whose members might conceivably be said to differ in their ontological status from those entities which are ultimately real is the class of mere appearances. Both actual and veridical appearances are as real as the entities of which they are the appearances. So, when Bradley claims that appearances differ in their ontological status from real entities, and, that the terms reality and appearance are genuinely contrary, he can only be referring to the class of mere appearances. But mere appearances, we have seen, are not existent. To be consistent, then, Bradley must either abandon the claim that those appearances which differ in their ontological status from real entities are existent; or, abandon the claim that those appearances which are existent differ in their ontological status from real entities. The abandonment of either claim leads, however, to a fundamental inconsistency in his overall theory.

73. At this stage it might be pointed out that we have ignored an important qualification in Bradley's theory. It is true that the terms real and apparent are understood, by Bradley, to be contraries. But they are contraries only if by 'real' we mean 'ultimately real'. If, on the other hand, we introduce the notion of degrees of reality, then it would seem to be possible to consistently hold the view that mere appearances exist, and that they differ in their ontological status from real, i.e. ultimately real, entities. They differ in so far as they have a lesser degree of reality than ultimately real entities.

74. There are, however, two serious difficulties with this.
reply. The first concerns the claim that mere appearances exist. The second concerns the question of the intelligibility of the notion of degrees of reality.

When discussing the basis for the distinction between actual and mere appearances, we noted that the use of either the predicative or the quasi-existential senses of the verb "to appear" is not generally considered to involve a commitment to the existence of what appears to exist. In other words, there is an implicit allowance, in such uses, for the possibility of perceptual error. But if we are to take the view that mere appearances exist, then it will need to be shown that these presumptions are unjustified. What arguments does Bradley offer to show that these presumptions are unjustified, and that mere appearances exist? The main argument in favour of this thesis is found towards the end of Chapter XII of Appearance and Reality.

We shall hereafter have to inquire into the nature of appearances; but for the present we may keep a fast hold upon this, that appearances exist. That is absolutely certain, and to deny it is nonsense. And whatever exists must belong to reality. That is also quite certain, and its denial once more is self-contradictory. What appears, for that sole reason, most indubitably is; and there is no possibility of conjuring its being away from it. And the whole result of this Book may be summed up in a few words. Everything so far, which we have seen, has turned out to be appearance. It is that which, taken as it stands, proves inconsistent with itself, and for this reason cannot be true of the real. But to deny its
existence or to divorce it from reality is out of the question. For it has a positive character which is indubitable fact, and, however much this fact may be pronounced appearance, it can have no place to live except reality. (AR p.114)

75. There is, however, a clear equivocation in this argument. It is true, we have seen, that if something is an actual or a veridical appearance, then it exists. And Bradley's claim that whatever appears, hence its appearance, is both real and existent, is justified if, by an appearance, we mean either an actual or a veridical appearance. But if something is an actual or a veridical appearance, it is impossible that it should be delusive or self-contradictory.

This is not to say that I might not be wrong in what I believe to be an actual or a veridical appearance. My belief that my dog appeared (in the absolute sense) at the door five minutes ago might be mistaken. And the reason that I come to doubt the truth of the belief might be that it contradicts some further belief which I subsequently know to be true. Similarly, my belief that the cat which walked past the window two minutes ago is black might be shown to be mistaken by the fact that, when it now returns, it is clearly grey. But in both cases, the correct conclusion to be drawn is not that the supposed appearance of the dog at the door, or the supposed blackness of the cat, are unreal (i.e. not ultimately real) existents, but, in the first case, that the dog did not appear at the door at all; and, in the second case, that neither the cat, nor anything else existent, is black. The fact that, in the first example, the belief that
the dog did appear at the door five minutes ago, and, in the second example, the belief that the cat is black, would contradict further beliefs which are known to be true is, in other words, a sufficient condition for denying that there is either an actual appearance of the dog at the door, or a veridical appearance of blackness belonging to the cat.

It is evident, then, that Bradley cannot be talking of actual or veridical appearances when he says that an appearance is that which proves inconsistent with itself; since an appearance, if it is either an actual or a veridical appearance, cannot be internally inconsistent or self-contradictory. But if he is not talking of actual or veridical appearances, then it is difficult to justify his claim that appearances exist. The only appearances which might be said to involve error or inconsistency are mere appearances. But mere appearances, we have suggested, do not exist. And Bradley's argument certainly does not give us any reason to suppose that they do. It is difficult, for this reason, not to agree with at least one of Bradley's critics when it is suggested that Bradley's whole position with respect to the distinction between appearance and reality rests upon an equivocation in the use of the term appearance between actual or veridical appearances, on the one hand, and mere appearances on the other.

76. We have seen that Bradley's argument is unsatisfactory, but there is another argument which might be thought to support the claim that mere appearances exist. If the argument is sound, it would oblige us to either reject or revise our original definition of mere appearances, or to classify all appearances as either actual or veridical appearances.
The argument, in effect, amounts to a denial of the assumption that misperception is possible—all cognitive error is attributed to false beliefs or unsound inferences. Such a view was taken by Bertrand Russell in his book, Our Knowledge of the External World.

The first thing to realise is that there are no such things as "illusions of sense". Objects of sense, even when they occur in dreams, are the most indubitably real objects known to us. Objects of sense are called "real" when they have the kind of connection with other objects of sense which experience has led us to regard as normal; when they fail in this, they are called "illusions". But what is illusory is only the inferences to which they give rise.¹¹

The principle being asserted here might be called the principle of the self-evident correctness of perception or, more simply, the principle of the evidence of perception; and it might be stated in the following way: That which I perceive is as I perceive it to be, at the moment of time at which I perceive it¹². By perception is meant that species of awareness which is the direct awareness of a substance or particular, as distinct from that species of awareness which is ostensibly an awareness of characteristics per se, i.e. of characteristic-types, rather than characteristic-tokens. Perception, thus understood, should be distinguished from perceptual belief—by which I mean either a belief acquired as the result of perception, or a belief about what is perceived. This last distinction is important, since the principle of
the evidence of perception is not, as is sometimes believed, a claim about the correctness of perceptual beliefs.

77. The relevance of the principle of the evidence of perception to the argument that mere appearances exist is easily seen. If I perceive a substance as having certain characteristics, then, according to this principle, we must admit that whatever I did perceive existed, and had those characteristics which I perceived it as having at the time at which I perceived it. In which case it follows that, if a substance is perceived as having characteristics which are subsequently determined to be incompatible or contradictory, then that substance must be both existent and self-contradictory. And this is what Bradley means by an appearance. Now since, as we have seen, the only appearances which can be said to involve error or inconsistency are mere appearances, it would seem to follow from this argument that mere appearances exist.

78. Perhaps the most obvious reply to this argument is to deny the soundness of the principle upon which it is based. At most, we might suggest, perception guarantees the existence of that which is perceived. If I perceive a substance X as having the characteristic b, at a moment of time t, I might legitimately conclude that X exists at that moment of time. But perception does not necessarily guarantee that what I perceive has, at the moment of time at which I perceive it, those characteristics which I perceive it as having. Nor does it guarantee that the entity which I believe that I perceive is the entity which I do, in fact, perceive. So that I might believe that I am perceiving a silver coin on the ground when, in fact, I am actually perceiving a piece of aluminium foil.
And, if any support is wanted for this reply, we can appeal to the fact, mentioned earlier, that the use of either the predicative, or the quasi-existential senses of the verb "to appear" in ordinary discourse, is based upon the tacit assumption that perception might be erroneous - that things might, in fact, be other than they are perceived as being.

I think that this reply is adequate. But the adherent to the principle in question might fail to be satisfied. He might point out that what has been construed to be a case of misperception can just as plausibly be analysed in terms of a veridical perception accompanied by a false belief or an unsound inference. For example, if what I take to be a misperception of a substance X as having the quality c - which it does not, in fact, have - is understood, instead, to be a veridical perception of another substance Y which does have the quality c, accompanied by the false belief that it is X which is perceived, then the principle of the evidence of perception is saved.

Historically, a similar approach was, I believe, taken by those philosophers who wished to introduce the notion of a sense-datum into the analysis of perceptual situations. If, for example, I believe that the shining elliptical object which I perceive before me on the table is a twenty-cent coin, and if I subsequently conclude that there could not have been an elliptical twenty-cent coin in my perceptual field at that moment, the conclusion which has been drawn by some sense-datum theorists - upholding the principle of the evidence of perception - is not that I misperceived a circular coin as elliptical, but that I did not perceive a coin at all. What I in fact perceived, it is alleged, had, at
that moment, those characteristics which I perceived it as having, i.e. shining and elliptical. But it was not a coin, rather it is a substance called a sense-datum. The belief that I perceived a coin is false, but the evidence of perception is upheld, since the substance which I did, in fact, perceive, had those characteristics which I perceived it as having. If there is any error, or "illusion" involved in perception, the error, as Russell suggests, lies exclusively in my perceptual beliefs, and not in any erroneous perception as such.

79. At this stage, the decision as to whether we should admit the possibility of misperception, or, on the other hand, attribute all error associated with perception to mistaken perceptual beliefs is, perhaps, somewhat arbitrary. Any supposed instance of misperception might equally well be construed, so it would seem, as an instance of veridical perception accompanied by erroneous perceptual belief.¹³

There are, however, a number of considerations which, I believe, favour the acceptance of the possibility of misperception.

Firstly, there is the ambiguity involved in Russell's statement of the principle. The claim that the objects of sense are the most indubitably real objects known to us is not equivalent to, nor does it imply, the proposition that the objects of sense have precisely those characteristics which they are perceived as having. And it does not imply that all error involved in perception can be attributed to false beliefs or unsound inferences. So, we might be prepared to agree with Russell that the only substances which we directly perceive are sense-data, without thereby being
committed to the view that our awareness of these sense-data is invariably veridical. But this ambiguity is, I think, attributable more to Russell's somewhat loose characterisation of the principle, than to some intrinsic obscurity in the principle itself.

Secondly, and more importantly, it is doubtful whether any adherents to the principle of the evidence of perception would be willing to admit that it is possible to be aware of any entity which proves to be inconsistent or self-contradictory. If confronted with the fact that some entities are perceived as having characteristics which subsequently prove to be incompatible, I am sure that most would rather abandon the principle than be committed to the existence of impossible entities. So, even though many would be prepared to accept the principle under normal circumstances, I think that none, apart from Bradley, would be prepared to accept it if it could be shown to lead to a commitment to the existence of impossibilia.

Thirdly, and most importantly, there is one limitation which must be imposed upon the principle of the evidence of perception. According to the principle, if a substance X is perceived as b, at a moment of time t, then X is b at t. But the fact that X is perceived as b at t does not imply that X is b at t'. The proposition "X is perceived as b" does not, then, imply the proposition "X is b" unless there is a real time-series, of which t is a member, and at which both X and the perception of X exist. But we cannot be certain that there is such a time-series except by appealing to the principle in question; and this, of course, involves a vicious circle. The reality of the time-series is, in other words, a condition
for the truth of the principle of the evidence of perception. Now this condition might not prove to be a worry for those who accept the reality of the time-series. But it is a problem for Bradley who, in Chapter IV, argues against the reality of such a series. He cannot, then, appeal to this principle in support of his contention that mere appearances exist.

80. It is clear, then, that the principle of the evidence of perception is not, itself, a self-evident truth. It is valid only upon the assumption that there is a real time-series. And this assumption is neither self-evidently true, nor capable of being established by the principle in question. Bradley's rejection of this assumption consequently undermines the most plausible basis for his belief that mere appearances exist.

81. We have, I believe, established that the second feature of Bradley's theory of appearances - the claim that mere appearances exist - is not supported by any sound argument. We have also, I believe, put forward convincing reasons for believing that it is both false, and incompatible with other aspects of Bradley's metaphysic.

In Section 60 I mentioned that the belief that mere appearances exist is closely related to the further belief that they have varying degrees of reality. Does the conclusion that mere appearances do not exist preclude the possibility that they have some degree of reality? I think that it does. But in order to answer this question we must first determine whether or not the doctrine of the degrees of reality is intelligible; and, whether or not appearances can be real without existing. The latter question, although important, is not strictly relevant to the assessment of Bradley's theory, since he
believed that appearances do exist. I will return to this question in the next chapter. For the moment we will confine our attention to the question of degrees of reality.

82. The doctrine of degrees of reality is, perhaps justifiably, one of the more controversial aspects of Bradley's philosophy. Some critics have simply dismissed it as being self-evidently false. But many of those who have done so have, I think, confused reality with existence. The fact that the terms "reality" and "existence" are so often used as equivalents might seem to lend support to the view that, since it seems meaningless to speak of something having degrees of existence, it is therefore meaningless or false to speak of reality as having degrees. The fact that these two terms are often used interchangeably does not, however, imply that they are equivalent. And even though, as I have argued, they may be co-extensive, this does not imply that they have the same connotation. Thus, even if we cannot meaningfully speak of entities as having degrees of existence, this does not preclude us from saying that they can have degrees of reality.

Furthermore, if the doctrine of degrees of reality is false, as I believe it is, it cannot be shown to be false by an appeal to ordinary discourse. It is neither grammatically incorrect, nor even awkward, to speak of an entity as being more or less real than another. And although we may be mistaken in believing that such statements correspond to some fact about these entities, they are not self-evidently false or meaningless.

83. But what does Bradley mean when he says that reality has degrees? To be more or less real, he suggests,
.. is to be separated by an interval, smaller or greater, from all-inclusiveness or self-consistency. Of two given appearances the one more wide, or more harmonious, is more real. It approaches nearer to a single, all containing individuality. To remedy its imperfections, in other words, we should have to make a smaller alteration. The truth and the fact, which, to be converted into the Absolute, would require less re-arrangement and addition, is more real and truer. And this is what we mean by degrees of reality and truth. To possess more the character of reality, and to contain within oneself a greater amount of the real, are two expressions for the same thing. (AR pp.322-323)

Although this principle is referred to, and utilised, in a number of other arguments in his works, I don't think that Bradley has given any clearer statement either of the principle itself, or of the philosophical basis for its introduction. Unfortunately, even this passage is not without ambiguity. And, on the whole, as an argument for the acceptance of the doctrine of degrees of reality, it is, I think, unconvincing.

84. There is, firstly, a failure to distinguish between what might be called the doctrine of degrees of extensive magnitude of reality, and the doctrine of degrees of intensive magnitude of reality. To say that entities may have varying degrees of extensive magnitude of reality means that they may have or contain a greater or lesser amount of that which is real. To say that they may have varying degrees of intensive magnitude of reality means that they may have the quality of
reality or being real to a greater or lesser degree of intensity. Now, the doctrine of degrees of extensive magnitude of reality is not, I suggest, a controversial doctrine. It is quite acceptable, for example, to suggest that Australia is more real than New Zealand if it is meant that Australia has or contains more of that which is real—such as land mass or people. But this does not imply, and is not equivalent to, the claim that Australia has a greater degree of intensive magnitude of reality, i.e. that it has the quality of being real to a greater degree of intensity, than New Zealand. And it is also, I suggest, uncontroversially true that the Universe, or the Absolute, is more real than its finite parts or "appearances", in the sense that it contains more of that which is real than does any finite part or "appearance". What is controversial is the claim that the Universe has a greater degree of intensive magnitude of reality than its finite parts or "appearances". But this conclusion does not follow from the fact that the Universe has a greater degree of extensive magnitude than its parts; and yet it seems clear in the passage quoted above, that Bradley either considered the propositions to be equivalent, or believed that the former implies the latter.

85. Having clarified the distinction between the doctrine of the degrees of extensive magnitude of reality, and that of the degrees of intensive magnitude of reality; and, having noted that the former is uncontroversially true, we may conclude that when Bradley claims that appearances have greater or lesser degrees of reality, he means that they have greater or lesser degrees of intensive magnitude of reality. But is this an intelligible doctrine? There are, I think, a number
of reasons for believing that it is not.

According to Bradley, there is only one entity which is ultimately real - the Absolute. But if the doctrine of degrees of reality is to have any valid application, there must be a plurality of entities which admit of comparison in this respect. Given the truth of Bradley's monism, there are, I believe, only two options: that the entities which admit of degrees of reality are parts of the one real entity; or, that the entities which admit of degrees of reality are appearances of the one real entity. I will consider each of these options in turn.

86. Can the parts of a real entity be more or less real than each other, or less real than the entity itself? The answer to this question depends upon whether we are talking of degrees of intensive magnitude, or of degrees of extensive magnitude, of reality. If the latter, then the answer, as we saw in Section 84, is clearly that they can. If the former, then the answer is, I believe, that they cannot.

It is true, as Bradley suggests in the quoted passage, that one part of a whole might resemble the whole of which it is a part more than another part of that whole resembles the whole. And, again, one part, we have seen, might contain more of the content of the whole than another part. But neither of these facts determines that the part in question is more real, in an intensive sense, than any other part, or that it is less real than the whole. The principle that a part of a real entity is as real as any other part, or as real as the entity itself, is not, I believe, susceptible to proof. It is rather, a self-evident axiom. And it is a principle which is embodied in the logic of ordinary discourse, where we do not speak of a part
of a real entity as being less real than any other part, or less real than the entity itself. When I say, for example, that the leg of my table is a part of the table, I do not thereby mean that it is any less real than the table itself. Nor do I mean that the lower half of the leg is less real than the top of the table, except in an extensive sense, simply because it does not contain as much of the content of the table as the top does, or because it resembles the table less than the top does. To claim that the parts of a real entity may have degrees of reality would mean, then, that either one had confused the doctrine of degrees of extensive magnitude of reality with that of degrees of intensive magnitude of reality; or, that one did not clearly understand the meanings of the terms "real", "part" and "whole".

87. At any rate, appearances of the Absolute are not considered by Bradley (at least not explicitly) to be parts of the Absolute. And it is appearances, he maintains, that are the only entities which admit of degrees of reality. Is it possible, then, for an appearance of a real entity to be less real than the entity itself? And can one appearance be more or less real than another?

It is difficult to answer these questions without firstly determining the sense in which the term "appearance" is used. If we are talking about actual or veridical appearances, then appearances cannot be more or less real than each other, or less real than the entity which appears; since actual and veridical appearances, we have seen, are either parts of the temporal dimension of the entity which appears, or characteristics of the entity which appears, respectively. And neither the parts, nor the characteristics of a real entity admit of
88. If, on the other hand, we are talking about mere appearances, then we are faced with the difficulty of determining the basis for according these appearances a greater or lesser degree of reality.

A possible suggestion is that, since mere appearances, unlike veridical appearances, involve the reality of error, the degree of reality to be accorded to the appearance might be equated with the degree of error which it involves. But this suggestion must be rejected for the following reason. The error associated with a mere appearance is not an intrinsic quality of the appearance itself. It consists, rather, in the perception of a substance as having characteristics which it does not have, and hence is determined by a relation - which we might call a relation of misperception - between a mind, a substance, and a characteristic, or set of characteristics. A perception is more or less erroneous according as it perceives a substance as having more or less of those characteristics which it does not have. And, if error is to be a quality of any entity, it should be attributed to the mind which misperceives the substance in question, rather than to the characteristics which are subsequently classified as mere appearances. If there is to be any correlation between the degree of error involved in misperception and degrees of intensive magnitude of reality, then it ought to be between the degree of error, and the degree of reality to be attributed to the state of mind in misperception. There can, then, I suggest, be no sound basis for a positive correlation between the degree of reality which is accorded to a mere appearance, and the degree of error involved in a state of misperception.

89. Another possible suggestion is that the degree of
reality to be attributed to mere appearances is determined by
the degree to which they resemble the entities of which they
are appearances; or, by the degree to which they contain the
content of the entities. But this suggestion, although perhaps
in accordance with Bradley's views, is unsatisfactory. Firstly,
a mere appearance cannot resemble the entity of which it is
said to be an appearance, since a mere appearance, by defini-
tion, is a characteristic, or set of characteristics, which
the entity does not have. And if the appearance, and the entity
in question, have no common characteristics, it is difficult
to understand in what respect they may resemble each other.

Secondly, to talk of mere appearances as being appearances
of an entity is somewhat misleading. A mere appearance is not
a part of the entity in question. And the characteristics
which are said to comprise the appearance are, by definition,
not actual characteristics of the entity. It is therefore
impossible for a mere appearance to contain any of the content
of the entity of which it is said to be an appearance. Mere
appearances cannot, then, be accorded degrees of reality on
this basis.

90. There is a further reason for rejecting the possibility
that mere appearances have degrees of reality. We have so far
spoken of mere appearances as if they are in some sense real,
if not existent. But if they are neither real, nor existent,
it would be impossible for them to have any degree of reality.
And secondly, even if mere appearances are real, then this
fact would be incompatible, I believe, with Bradley's monism.

Let us first briefly consider the question of the reality
of mere appearances. If I perceive a substance X as having
the quality b at a moment of time t, and if X does have the
quality b at t, then my perception is veridical. That is to say, there is no distinction between the way X is perceived as being, i.e. its appearance, and the way it really is. But to talk of an appearance in this sense is not to introduce a distinct entity into the situation described as my perception of X as b, over and above the substance X, and my perception of it. It is simply a way of expressing the fact that X is b, and is correctly perceived as such by me.

If, on the other hand, I perceive X as b at t, and if X is not b at t, then we ought to conclude that I misperceived X. But there are two ways in which this situation might be interpreted. We might acknowledge the analysis of the sense-datum theorist and conclude that I did not, in fact, misperceive X. Rather, it might be suggested, I correctly perceived another substance Y which was, in fact, b at t. The error involved in the perceptual situation is, accordingly, attributed to an erroneous perceptual belief. Now, if we follow this interpretation through, and apply it to all cases of ostensible misperception, it is clear that, since it removes the possibility of any strictly sensory, as distinct from noetic, error, it undermines the basis for the belief that there are any mere appearances. And if there are no mere appearances, then they cannot be accorded any degree of reality.

Or else, we might accept the possibility of misperception; in which case the mere appearance is ostensibly that quality, b, which I misperceive X as having. But if the mere appearance is identified with the quality b, which neither X nor any other existent substance has, then this characteristic, hence the mere appearance, cannot exist or be real; since, as was argued in the previous chapter, all real characteristics are
existent, and the only way a characteristic can exist is as a characteristic of an existent substance. The contention that mere appearances are characteristics which, although real, do not characterise any existent substances must, therefore, be false. And yet, if mere appearances are to be real, this, by definition, is what they must be. We must conclude, then, that mere appearances are neither existent nor real.

This conclusion will seem unduly paradoxical if we ignore the possibility of misperception. In the next chapter I will argue that the notion of misperception must be taken as ultimate; that is to say, it cannot be analysed in terms of, or reduced to, the veridical perception of a surrogate entity - a mere appearance. It will be argued, on a different basis to that used above, that there are no mere appearances, real or existent, although there are perceptual situations which imply the reality of error. It will also be argued that the sense-datum theorist's analysis of such perceptual situations is unsatisfactory, and that misperception is possible. A mere appearance, it will be seen, is not an entity - real or existent. It is, rather, the erroneous perception of an existent substance. A mere appearance, as Samuel Alexander put it, is "the real world seen awry or squintingly."15

91. But even if we were to ignore the above conclusions, and insist that mere appearances are, in some sense, and in some degree, real, it would, I believe, be impossible to reconcile this fact with Bradley's monism.

In order that a mere appearance should be real, it is necessary for certain conditions to be satisfied. The first is that both the mind which misperceives the one ultimately real entity, the Absolute, as having characteristics which it does
not have, and the erroneous perception as such, must be irreducibly real. The second is that the reality of error as ineliminable be acknowledged. Neither of these conditions is accepted by Bradley; and both are incompatible with his monistic Absolute in which all error is transmuted, and where all finite minds and their states, or finite centres of experience, are themselves said to be mere appearances. In other words, the reality of mere appearances would imply the reality of finite minds and error; and neither of these conditions can be reconciled with Bradley's ultimate metaphysical conclusions. Mere appearances cannot, then, even upon Bradley's own assumptions, have any reality or existence.

92. So, we have found no entities which might truly be said to have degrees of reality. The class of entities to which Bradley applied this doctrine, the class of appearances, must be either actual or veridical appearances - in which case they are either parts of, or characteristics of a real entity, and hence as the entity itself; or else they must be mere appearances - in which case they cannot be real, and therefore do not admit of degrees of reality.

The second feature of Bradley's theory - that appearances exist, and have degrees of reality - is therefore untenable.

93. The third feature of Bradley's theory of appearances is what he, at times, considers to be the most fundamental feature of appearances. So far in our discussion we have more or less assumed that the notion of an 'appearance' or, more accurately, that the distinction between reality and appearance, arises only in a perceptual context. But this sense of the term 'appearance' is, according to Bradley, secondary. What is fundamental, he suggests, is the sense in which an appearance
involves the disjunction of the *what* from the *that* - of content from existence.

The reader next should recall the twofold meaning of the word 'appearance'. That sense of the term in which something appears to someone is secondary. What is fundamental is the presence in everything finite of that which takes it beyond itself. (ETR p. 272)

The essence of reality lies in the union and agreement of existence and content, and, on the other side, appearance consists in the discrepancy between these two aspects. And reality in the end belongs to nothing but the single Real. For take anything, no matter what it is, which is less than the Absolute, and the inner discrepancy at once proclaims that what you have taken is appearance. The alleged reality divides itself and falls apart into two jarring factors. The 'what' and the 'that' are plainly two sides which turn out not to be the same, and this difference inherent in every finite fact entails its disruption. As long as the content stands for something other than its own intent and meaning, as long as the existence actually is less or more than what it essentially must imply, so long we are concerned with mere appearance, and not with genuine reality. And we have found in every region that this discrepancy of aspects prevails. The internal being of everything finite depends on that which is beyond it. Hence everywhere, insisting on a so-called fact, we have found ourselves led by its inner contradiction, this unrest and ideality of all things
existing is a clear proof that, although such things are, their being is appearance. (AR pp. 403-404)

When discussing this feature of Bradley's theory of appearances, there are two questions to be considered: To what extent is this feature of his theory internally consistent?; and; To what extent, if at all, is this feature of his theory consistent with the other features? The answers to both of these questions will, unfortunately, turn out to be somewhat negative.

94. The first thing that should be pointed out is that Bradley is not justified in his claim that this new sense of the term 'appearance' is more fundamental. As he himself suggests, its use in this way is derivative, and ultimately involves a licence.

We have found that no one aspect of experience, as such, is real. None is primary, or can serve to explain the others or the whole. They are all alike appearances, all one-sided, and passing away beyond themselves. But I may be asked why, admitting this, we should call them appearances. For such a term belongs solely of right to the perceptual side of things, and the perceptual side, we agreed, was but one aspect among others. To appear, we may be told, is not possible except to a percipient, and an appearance also implies both judgement and rejection. I might certainly, on the other side, inquire whether all implied metaphors are to be pressed, and if so, how many phrases and terms would be left us. But in the case of appearance I admit at once that the
objection has force. I think the term implies without
doubt an aspect of perceiving and judging, and such an
aspect, I quite agree, does not everywhere exist. For,
even if we conclude that all phenomena pass through
psychical centres, yet in those centres all is not per-
ception. And to assume that somehow in the Whole all
phenomena are judged of would again be indefensible. We
must, in short, admit that some appearances really do not
appear, and that a licence is involved in our use of the
term. (AR pp.429-430)

The extension of the meaning of certain terms so as to go
beyond what is implied by their normal usage is, I think, jus­
tifiable in philosphy, particularly where the normal usage is
either unduly restrictive, or inconsistent. But it is not jus­
tifiable if the extended meaning bears little, if any, relation
to the meaning normally accorded the term. And it is indefens­
ible if the disparity between the normal and the extended uses
is exploited so as to give the impression that the implications
arising from one use of the term are carried over, more or less
intact, to the other. And the latter is, I believe, the case
with Bradley's extension of the meaning of the term 'appear­
ance'.

The notion of an appearance which we have so far considered
is essentially derived from the context of perception. Explicit
reference to the notion of misperception is, in fact, included
in our definition of a mere appearance. In this respect, our
use of the term 'appearance' has been in accordance with norm­
al usage. The omission of any explicit reference to a perceptu­
ual context when extending the meaning of the term 'appearance'
would accordingly deprive the term of any meaning which it has been accorded by ordinary language. And yet, this is precisely what is involved in Bradley's extension of the meaning of the term. The proposed definition of an appearance as an entity which involves a discrepancy between content and existence makes no reference, implicit or explicit, to perception. For this reason, it is not a legitimate extension of the normal meaning of the term. It is, rather, a redefinition. Thus redefined, however, the term 'appearance' loses any of the implications associated with its normal usage; and any conclusions which might follow from the meaning normally accorded the term must, as a consequence, be put aside. Having made this point, we can now turn to a consideration of the philosophical difficulties with this notion of an appearance.

95. There is first of all the question of the internal consistency of this feature of Bradley's theory. We need not, at this stage, question his criterion of reality as the union and agreement of content and existence. In a general sense we might understand, and accept, that wherever we find these two aspects of reality to be discrepant or disjoined, we do not have reality as such. But what are we to understand by the proposition that appearances consist in the discrepancy of these two aspects? In our earlier discussion we defined a mere appearance as being a characteristic which is misperceived as the characteristic of an existent substance. An appearance, thus defined, clearly involves a discrepancy between content and existence; it is, in fact, some element of content disjoined from existence. As such, it would appear to be in keeping with Bradley's proposed redefinition. But it is evident that such appearances cannot exist. And we have also argued that it
is impossible for such appearances to be real. It is clear, then, that this cannot be what Bradley means by an appearance.

The discrepancy alluded to might, on the other hand, be understood to mean that some substance has content which is not its own; which, in effect, belongs to some other substance. This view is, however, clearly absurd. It is equivalent to the statement that some substance has content which it does not have.

Nor is our difficulty solved by adopting the position that an appearance consists in the disjunction of content and existence. An appearance might be said to presuppose such a disjunction, but it cannot be such a disjunction, since a disjunction is not a kind of entity. If an appearance is to be anything at all in this sense, it must be one of the disjoined aspects. But if the appearance is identified with the aspect of content alone, it cannot be existent. And if the appearance is identified with the 'that', or unmediated being or existence, then it will be devoid of content and, as such, incapable of being described or having any content.

An appearance, then, must somehow be the unity of content and existence which is either discrepant or disjoined. An appearance, then, must be a self-contradictory, hence impossible entity. Bradley might be prepared to agree with us to an extent in this conclusion if, by a 'self-contradictory' entity, we mean an entity which combines or unites incompatible or contradictory characteristics. But this is not the sense in which it is self-contradictory. It is contradictory in the sense that it would oblige us to assent to the proposition that such an entity does, and does not, exist. And this, rather than being a significant and enlightening statement about the
nature of appearances, is simply meaningless.

96. If we turn from this interpretation of Bradley's position, and emphasise, instead, the statement that an appearance is an entity whose nature implies its inclusion within a more extensive whole, we are no further ahead. By definition, a part of any whole, in so far as it is understood to be a part of that whole, must imply the existence, and to a lesser extent determine the nature, of that whole of which it is a part. And, if we perceive the part as a part of a particular whole, then, to that extent, we might be justified in saying that the whole is thereby immanent in the part. But this fact neither entails that the part in question, i.e. the appearance, is self-contradictory, nor implies that the part involves a discrepancy between content and existence.

This might not be exactly what Bradley means by his statement that the internal being of everything finite depends on that which is beyond it. He might mean that every finite entity is not self-existent; that its nature is conditioned by its inclusion within a greater whole, and that it depends upon this whole for its existence. But this fact, once again, does not imply that there is any discrepancy between content and existence in the part, or that it is, in any sense, self-contradictory.

Furthermore, neither of these interpretations of the significance of the part to the whole implies that the part is in any way delusive, i.e. a mere appearance. If it is a real part of the entity, that is to say, if it is either an actual or veridical appearance, then there is no possibility of error being involved.

97. But there is a more interesting, and probably more
controversial interpretation of Bradley's position. In a chapter entitled "On Appearance, Error and Contradiction", from *Essays on Truth and Reality*, Bradley gives the following characterisation of appearances.

Now in every finite centre (on our view) the Whole, immanent there, fails to be included in that centre. The content of the centre therefore is beyond itself, and the thing therefore is appearance and is so far what may be termed 'ideal'. (ETR pp.250-251)

This suggests a much more literal interpretation of the statement that the whole is immanent in its parts than either of the above interpretations. According to this interpretation, Bradley's position is much more like that of Leibniz, according to whom the fundamental constituents of the Universe - the monads - "mirror" or represent the whole universe, from a particular point of view, within themselves; or, like that of McTaggart's description of the Universe as a "self-reflecting" unity, according to which each member of a set of parts of the Universe corresponds with, and in a sense is a manifestation of, the Universe as a whole. Both of these theories suggest that a much closer unity prevails between the parts of the Universe, and the Universe as a whole, than that which is sometimes known as an "organic" unity. According to the notion of an organic unity, the whole is manifest in its parts, but only in all of the parts taken together. But according to McTaggart's theory, and I think the same can be said of Leibniz' theory, the whole is "manifest" or "immanent" in each of its parts taken separately. In this respect both theories
closely resemble the more literal interpretation of Bradley's position. The important point of difference is that both McTaggart and Leibniz have been able to set out, in an apparently consistent fashion, an insight which Bradley could only express as a contradiction.

But if such a position can be expressed in a consistent theory, then there is no real contradiction involved in the proposition that each part of a real entity "includes" the content of the whole. In this way we can agree with Bradley's contention that the content of any finite part of the Universe transcends its existence, that its what transcends its that, without being committed to his conclusion that this proposition involves a contradiction. There would, accordingly, be no valid reason to condemn such finite parts or "appearances" as mere appearances.

98. We have, I believe, established that the third feature of Bradley's theory of appearances is not internally consistent. But is it also incompatible with the other features of his theory? I believe that it is.

It is incompatible with the first feature - the claim that all appearances are either self-contradictory or imply the truth of a contradiction. None of the interpretations which we have given of Bradley's definition implies that such "appearances" are self-contradictory, except the claim that an appearance is a disjunction of content and existence. But this claim, we saw, is unintelligible.

And it is incompatible with the claim that appearances exist and have degrees of reality, which is the second feature of his theory. It may be true that there are finite entities which imply their being included in, and being existentially
dependent upon, a more extensive whole. And these entities might, as we have seen, be said, in a significant sense, to have content which transcends their existence. Furthermore, since there is no apparent contradiction involved in the notion of such entities, it is possible that they might exist. But these entities, if existent as appearances, must be either actual or veridical appearances of real and existent entities. And both actual and veridical appearances - being either parts or constituents, respectively, of real and existent entities - can be neither delusive, nor susceptible to being accorded varying degrees of reality.

99. We may now turn our attention to the fourth and final feature of Bradley's theory of appearances - the claim that appearances need not appear to a mind.

It is clear that this claim is unacceptable if an appearance is understood to be a characteristic or set of characteristics which a substance is perceived as having, i.e. if it is understood to be either a veridical or mere appearance. The elimination of any reference, implicit or explicit, to perception when discussing veridical or mere appearances is bound to render such talk meaningless.

If, on the other hand, he is talking of what we have termed 'actual' appearances, then it is true that such appearances need not appear to any mind. But, as we have argued, actual appearances cannot, in any sense, be said to be either delusive or of a diminished degree of reality - both essential features of Bradley's notion of an appearance.

It might be suggested that the claim that appearances need not appear to a mind is compatible with Bradley's definition of an appearance as an entity wherein content is discrepant
with, or disjoined from, existence. But Bradley has not, as I have argued, shown that this notion of an appearance is at all intelligible. But even if it could be expressed in an intelligible form, any conclusions which might be reached about such "appearances" would not necessarily apply to the more fundamental, perceptually-based, notion of an appearance. And yet it is this latter notion of an appearance, involving the possibility of error, which is implicitly, and at times explicitly, utilized in the first Book of *Appearance and Reality*. 16

100. On the basis of the preceding discussion we must, I think, conclude that none of the essential features of Bradley's theory of appearances is acceptable; and, that the theory as a whole is internally inconsistent.

At this stage we might be thought to have reached a dilemma. It is undeniable that a distinction between reality and appearance is often justifiably made. But we have seen that Bradley's analysis of the distinction and its basis is unsatisfactory. If the validity of an ontological distinction between appearance and reality is to be upheld, it will be necessary, then, to provide an analysis of the distinction, and of statements such as "X is an appearance", which avoid the difficulties associated with Bradley's own analyses.

In the following chapter I will attempt to state the basic conditions for upholding the validity of the distinction between appearance and reality. In doing so I will provide an interpretation of statements about appearances which will hopefully avoid the sort of problems discussed in this chapter. Where I will depart from Bradley is in the contention that appearances are neither real nor existent. The distinction
between appearance and reality will be understood in terms of veridical and erroneous perception; and not between different types of existent entities with varying degrees of reality.

Notes
2. To what extent, if at all, this position is consistent with the second feature of his theory will be considered at a later stage (Section 69 ff.). The apparent inconsistency is, I believe, evidence of an equivocation in his use of the term 'appearance'.
3. See AR, p.120.
5. ETR, p.269.
6. I do not mean that we ought to accept such a theory of meaning as the true one; only that the acceptance of this type of theory would render Bradley's argument more plausible than most alternative theories would.
8. This has, of course, been denied by some sense-datum theorists. We will discuss their arguments in detail in Chapter 3.
9. These definitions are tentative. Later, it will be argued that there are no mere appearances, real or existent.
13. In Chapter 3 it will be argued that there are conclusive reasons for rejecting the sense-datum analysis.

14. The question of the reality, as distinct from that of the existence, of mere appearances, will be discussed in more detail in Chapter 3.


16. This is particularly true of the initial argument in Chapter XII, "Things in Themselves", to show that appearances exist. On pages 113 and 114, for example, Bradley explicitly identifies appearances with phenomena, and then goes on to conclude that such appearances exist.
Chapter 3 - Reality and Appearance (Cont.)

101. In the previous chapter, a mere appearance was tentatively defined as being a characteristic, or set of characteristics, which a substance is erroneously perceived, or misrepresented as having. Misperception, accordingly, was understood to involve a multiple relation - at least triadic - between a mind, a substance, and a characteristic or set of characteristics.

In Chapter 1, I put forward an argument, derived from McTaggart, to show that all real characteristics are existent. In accordance with the conclusion of this argument it was pointed out that mere appearances, being characteristics which do not belong to any existent substance, cannot, as such, be either real or existent. The further conclusion was then drawn that, although there are illusory perceptions or misperceptions, there are no illusory or mere appearances.

It is clear, however, from this last point that the above analysis of misperception must be revised. If we analyse misperception in terms of a relation between a mind, a substance, and a characteristic or set of characteristics which do not exist, then we are placed in the somewhat awkward position of assuming the existence of relations between substances and non-existent characteristics. That is to say, we seem to be committed to the view that there may be multiple relations which have only two existent terms. Such a view is, I think, unacceptable, and perhaps ultimately meaningless. If the notion of misperception is to be preserved, an alternative analysis must be found.

This chapter will, therefore, be devoted to the analysis
and defence of the notion of misperception. I will also be concerned to show that the distinction between reality and appearance is valid, although it is not, as it has often been believed to be, a distinction between two different kinds of entities.

102. By misperception, I mean the perception of a substance as having a characteristic, or set of characteristics, which it does not have. In the previous chapter (Section 90) I suggested that misperception is an ultimate concept, and that it cannot be analysed in terms of the veridical perception of a mere appearance. I will, in this chapter, defend this view. My defence will, however, be somewhat circuitous, in the sense that, rather than provide positive arguments in its favour, I will, instead, attempt to show that there is no other plausible explanation for some types of perceptual error. In doing so I hope to anticipate some possible objections that might be raised against the notion of misperception.

103. But before beginning the discussion proper it is important to clarify the notion of perception being used. In the previous chapter perception was defined as being the direct awareness of a substance. It is thus analogous to Russell's\(^3\) relation of *acquaintance*, and more or less identical with Broad's notion of *prehension*\(^4\). In perception, the mind, as Alexander suggests, is *compressent* with its object.\(^5\)

It seems to me that it is impossible to be aware of a substance without being aware of its nature. A substance, it will be argued in Chapters 4 and 5, is manifest in, and exhausted by, its nature. To perceive a substance is thus to perceive it as having certain of those characteristics which comprise its nature. Perception might, accordingly, be said to be the
awareness of a substance under some description.

Perception may be veridical or erroneous. If a substance is perceived as having characteristics which it does have, and only characteristics which it does have, then the perception is veridical. If, on the other hand, it is perceived as having characteristics which it does not have, then the perception is erroneous, i.e. it is a misperception. A misperception may, however, be partially veridical. If a substance is perceived as having some characteristics which it does not have, and some which it does have, then it is what might be termed a mixed perception. But a mixed perception is still a misperception, since it is the perception of a substance as having some characteristics which it does not have.

All perceptions, being states of awareness, are essentially conscious. They are to be distinguished, in this respect, from perceptual beliefs which, according to some philosophers, are not essentially conscious.6

104. The concept of misperception has been introduced to explain the occurrence of some forms of perceptual error. Can all perceptual error be explained without recourse to the notion of misperception? I do not think that this is possible. If we admit that error is sometimes involved in perception, then, it seems to me that there are only two possible explanations for the occurrence of such error. The first is to attribute all error to misperception alone, or to a combination of misperception and erroneous perceptual belief. The second is to attribute all error to erroneous perceptual belief. If we adopt the first explanation, then our thesis will have been established. Or, if we can show that there are conclusive reasons for rejecting the second explanation, then
our thesis will also be established, since these two explanations would appear to exhaust the field of possible explanations for perceptual error. Any reason for rejecting one explanation will, accordingly, be a reason for accepting the other.

The argument in favour of the existence of misperception is, of course, based upon the assumption that error is sometimes involved in perception, i.e. that we are sometimes mistaken about the nature of the substances which we perceive. This assumption would, I believe, be universally accepted. Disagreement, if and when it arises, is usually over the nature of the conclusion to be drawn from this premiss. Does it imply, for example, that we misperceive these substances? Or, does it simply imply that we have mistaken beliefs about the nature of these substances?

We will now consider two distinct kinds of argument which profess to show that the latter conclusion is the correct one. Both are, I think, representative of the kinds of arguments which have been used in the past, and which sometimes recur in contemporary discussions.

105. The first kind of argument is that put forward by William James and, at one time, by Bertrand Russell. We have briefly considered Russell's views in the previous chapter. James' position is expressed in the following passage from *The Principles of Psychology*.

Note that in every illusion what is false is what is inferred, not what is immediately given. The 'this' if it were felt by itself alone, would be all right, it only becomes misleading by what it suggests. If it is a
sensation of sight, it may suggest a tactile object, for example, which later tactile experiences prove to be not there. The so-called 'fallacy of the senses' of which the ancient sceptics made so much account, is not fallacy of the senses proper, but rather of the intellect, which interprets wrongly what the senses give.7

According to Russell, there are no sensory illusions as such. Any error involved in perception lies exclusively with false perceptual beliefs based upon inferences from sensory data simply given in perception. Both James and Russell are therefore in agreement as to the origin and nature of perceptual error. It remains to be seen whether all perceptual error can be explained in this manner.

106. Concerning, firstly, Russell's position, it should be pointed out that his claims about the supposed infallibility of the senses are not as strong as they might initially appear to be. As I remarked in Section 79, his claim that the objects of sense - by which expression I understand him to mean those entities with which we have direct acquaintance in perception - are indubitably real is, in one sense, uncontentious. That which we perceive is real, and existent. But we are sometimes mistaken both about the precise substance which we do perceive, and about its characteristics. I might believe, for example, that the brown expanse with which I am now acquainted is a part of my table - a material substance. But my belief might be mistaken. The brown expanse with which I am acquainted may, in fact, be a sense-datum - which is not, by most theorists, considered to be a material substance. Or, in case my perception itself is erroneous, the substance with which I am
acquainted may not, in fact, be brown, although it appears to be brown. In other words, as we noted in the previous chapter, perception guarantees that what I perceive exists, and is real. But it does not guarantee that what I perceive has those characteristics which I perceive it as having.

Russell's position would be considerably strengthened, and his claims made more significant, if he were proposing that perception is always veridical; that is, if he were advocating the principle of the evidence of perception. At times this is, I am sure, what he meant to assert. But the claim that the objects of sense are indubitably real is not equivalent to the claim that the senses are infallible. And it is not a sufficient reason to believe that all perceptual error ought to be attributed to false perceptual beliefs—based upon unsound inferences from what is merely given in perception.

Russell's claim that all perceptual error can be attributed to false perceptual beliefs is, then, an hypothesis. It is not a valid conclusion from the premiss that the objects of sense are real and existent. In this respect, his position is on a par with James' view. Neither philosopher gives conclusive reasons for believing that their view must be the correct one. The only reasons that we might have for believing that it is the correct one are that perception is self-evidently correct or veridical; or, that the hypothesis can explain all types of perceptual error. Now, we have already seen (Section 79) that the principle of the evidence of perception is not self-evidently true. And, as I now hope to show, there are some types of perceptual error which cannot be accounted for in this way.

107. In the following two diagrams, we have examples of figures which almost invariably give rise to perceptual errors.
Figure 1

Figure 2
The circle in figure 1, although regular, almost invariably appears to be irregular. And the two central horizontal lines in figure 2, although parallel, appear to be curved. Now, according to the type of explanation offered by Russell and James, any 'illusion' which arises as the result of the perception of these two diagrams is to be attributed solely to false perceptual beliefs. The suggestion is, that in any such cases of perceptual error or illusion, the figures in the diagram are perceived as they really are - as a regular circle, and as parallel lines, respectively - although they are mistakenly judged or believed to be other than they are.

This explanation is, however, clearly unsatisfactory. If I mistakenly believe that the moon is larger than the sun, then, so long as I hold this belief, error exists. But if I subsequently come to the conclusion that the moon is not larger than the sun, then the error no longer exists. That is to say, any error which can be attributed to the fact that someone has a false belief, can be removed by that person ceasing to hold the belief. In the case of sensory illusion, if all error is to be attributed to false beliefs, then it would seem to follow that any error involved will be removed if the false beliefs cease to be held. In the case of our two examples, it follows, according to this type of explanation, that once I cease to believe that the circle in figure 1 is irregular; and, that the lines in figure 2 are curved, then the illusions will cease. The figures will no longer be perceived as being other than they are. But it is obvious that this does not, in fact, happen. The fact that I cease to be deluded by, i.e. hold false beliefs about, the figures does not mean that I thereby cease to undergo the illusion. I may no longer perceive that
the circle is irregular, or that the lines are curved, but I do not cease to perceive the circle as irregular, or the lines as curved. And to perceive the figures in this way - as having characteristics which they do not have - is to misperceive them. The error ought, then, to be attributed to misperception.

108. The only way in which the belief in the infallibility of perception might be maintained in the light of these examples is by claiming that whenever, as in Figure 1, I claim to misperceive the circle as irregular, I am, in fact, correctly perceiving an irregular circle. This irregular circle is not, however, numerically identical with the circle on the page. Any supposed instance of misperception is, in fact, an error of reference, arising from the mistaken belief that the circle which I perceive is numerically identical with the circle on the page.

There are a number of reasons for rejecting this explanation. The first is that it would imply that I can never perceive the circle on the page; since any supposed perception of the circle on the page will perceive it as irregular. And if perception is infallible, then any perception of a circle as irregular is *ipso facto* a perception of an irregular circle. But the circle on the page is not irregular, therefore I can never perceive it. This criticism does not refute the proposed explanation, but it does, I think, make it seem highly implausible.

The second reason is, I believe, probably conclusive. If I look at Figure 2, the two central horizontal lines appear to be curved. That is, the two lines are perceived as being curved. Now, according to the proposed explanation, whenever I perceive a line as curved, I am *ipso facto* aware of a curved
line. It follows, then, that since I perceive the two central lines in Figure 2 as curved, they are, in fact, curved. And yet, if, whilst perceiving the lines, I place a transparent rule - which I independently know to be straight, and which allows me, in virtue of its transparency, to perceive the entire figure while the lines are being checked - against either of the lines in question, then one and the same line which is perceived as straight according to the rule, is perceived as curved, and therefore is curved, according to the proposed explanation. If I adhere to the view that perception is infallible, I am therefore committed to the self-contradictory position of maintaining that, in the case of the above example, I perceive a straight, curved line.

A similar conclusion can be drawn in respect of the circle in Figure 1. The circle which I perceive is, according to the proposed explanation, a regular, irregular circle; since the circle which I perceive as irregular is, ipso facto, an irregular circle which, if checked with a pair of dividers, for example, whilst being perceived, is proven to be regular.

In both cases, and this is the important point, the figure which is perceived is one and the same as, i.e. numerically identical with, the figure on the page. The only plausible conclusion, then, is that the figures on the page are misperceived.8

We have, then, in these examples, at least two instances of perceptual error which, I suggest, cannot be attributed to veridical perception accompanied by false perceptual beliefs. The claim that all fallacies of the senses, or perceptual errors, are, in fact, fallacies of the intellect "which interprets wrongly what the senses give", is therefore unacceptable.
109. We have considered one attempt to eliminate misperception, and found that it is unsatisfactory. All perceptual error cannot be explained simply in terms of false beliefs about, or mistaken inferences based upon, what is simply given in perception. There is, however, a further theory of perception which attempts to eliminate misperception in favour of false perceptual beliefs. In his book, *Perception and the Physical World*, D.M. Armstrong gives the following explanation of perceptual error.

In sensory illusion there is no 'perception' of a quasi-object, but simply a false belief that there is ordinary veridical perception of an ordinary physical object or state of affairs. To suffer sensory illusion is to acquire a false belief or inclination to a false belief in particular propositions about the physical world, by means of the senses.

In so far as the error involved in perception is equated with false perceptual belief, Armstrong's theory is, I believe, susceptible to the same criticisms that we raised against the theories of James and Russell. When, for example, I look at the circle in Figure 1, it is possible for me to hold the true belief that the circle is regular, whilst undergoing the illusion that it is irregular. The circle is still perceived as being irregular, in spite of my belief that it is not irregular.

110. Armstrong was, I think, aware of this type of objection. He is therefore careful to distinguish between a belief - which is said to be a state, or disposition; and the
acquisition of a belief - which is an event. Veridical perception is accordingly defined as the acquisition, by means of the senses, of a true belief about the world. A non-veridical or illusory perception, on the other hand, is defined as the acquisition of a false belief, or inclination to a false belief, about the world.

According to this revised definition, to undergo a sensory illusion it is not necessary that I should acquire an actual false belief about the world. It is sufficient that I should acquire only the inclination to a false belief. Thus, in our example of the circle in Figure 1, I need not acquire the belief that the circle is irregular, I need only acquire the tendency to a belief that it is irregular, in order that I should undergo the illusion.

Although this revision is an improvement, in so far as it is an attempt to account for those cases of illusion where there is no ostensible false belief about the perceived object, the theory in general still suffers from a number of fundamental and, I believe, insuperable difficulties.

111. The first of these difficulties is to be found in the ambiguous use of the term 'belief', and the subsequent analysis of perception.

By a belief we may understand either of two distinct things: (i) the mental act or 'disposition' of believing; or (ii) the content or proposition which is believed. You and I might be said, for example, to share the same belief that the earth is round - where by 'belief' is meant the content or proposition believed; although we do not, thereby share one and the same mental act or disposition. Henceforward I will use the term 'belief' to refer only to the mental act or disposition of
believing, and the term 'proposition' to refer to the content of the belief.

With this distinction in mind, we should now be able to see the difficulty in determining exactly what is involved in Armstrong's analysis of perception as the acquisition of a belief, or the inclination to a belief, about the world. A perception might be understood to be either (a) The event of acquiring a belief, or the inclination to a belief, in a proposition about the world; or (b) The event of acquiring a proposition about the world - according as a belief is understood to be either a mental act or disposition, or the content of such an act or disposition. Unfortunately, there is a tendency by Armstrong to conflate, or perhaps confuse, these two analyses. But the importance of upholding the distinction between the two different senses of the term 'belief' is obvious when we reconsider the examples of sensory illusions mentioned previously.

When, for example, I am said to erroneously perceive the circle in Figure 1 as irregular, this might be understood to mean either that I acquire a false belief or inclination to a false belief that the circle is irregular; or, that I simply acquire the false proposition that the circle is irregular, depending upon whether we accept interpretation (a) or (b) as the correct one.

Now, the acquisition of a false proposition that the circle in Figure 1 is irregular is not sufficient to guarantee that I am undergoing any illusion, or that any error is involved. I may, for example, after checking the circle with a pair of dividers, acquire the proposition that the circle is regular. I may then entertain, or suppose both the proposition that the
circle is irregular, and the proposition that the circle is regular, without affirming either. And the possibility of error does not arise until I affirm one or the other of these two acquired propositions. In other words, we ought to distinguish between what Meinong called assumptions or supposals, which are not, strictly, capable of being either true or false, and hence not capable of sustaining error; and beliefs proper, which may be true or false, and hence erroneous. Beliefs differ from assumptions, then, in so far as they involve not merely the acquisition of a proposition, but a further act of affirming, or dissenting from, the acquired proposition. And it is not until we have this further act of affirmation or dissension that the possibility of error arises.

So, the only plausible explanation of perceptual error, or illusion, available to Armstrong is to equate it with the acquisition of a belief proper, or the acquisition of an inclination to a belief proper, in a false proposition about the world. However, the only interpretation that I can offer of what he means by a belief in a proposition about the world, is what I have termed the affirmation of a proposition about the world. We should understand his analysis of perception, then, to be the acquisition of an act of affirming, or the acquisition of an inclination to affirm, a proposition about the world. But it is clear that, unless I actually do affirm, and not merely incline to affirm, a proposition about the world, then I cannot be in a state of error or illusion. Any perceptual error or illusion must, accordingly, involve the actual affirmation of a proposition. Thus, when I perceive the circle in Figure 1 as irregular, I am, according to Armstrong, acquiring the act of affirming, or simply affirming, the proposition that
the circle is irregular.

But this is clearly not what happens when I undergo the illusion that the circle is irregular. If, having previously checked the circle with a pair of dividers and determined that it is regular, I then look at the figure again, I still perceive it as irregular; and this is in spite of the fact that, as a result of my previous check, I simultaneously believe in, or affirm the proposition that it is regular. According to Armstrong's analysis of sensory illusion, for this situation to occur, I must simultaneously affirm both the proposition that the circle is regular, and the proposition that it is irregular - in other words, I must simultaneously affirm two contradictory propositions. Now, although, as I suggested previously, it is possible to simultaneously assume or suppose two contradictory propositions, it is, I would suggest, psychologically impossible to simultaneously affirm or believe in, two contradictory propositions. For this reason, we must, I think, reject Armstrong's analysis of misperception or sensory illusion.

112. I have argued that Armstrong's analysis of perceptual error is unsatisfactory; and that the weakness in his analysis can be traced to the failure to clearly distinguish between a belief proper, and a proposition. But there are further problems with his theory of perception, in particular, and his account of mental acts in general, which can be traced to a failure to clearly distinguish between the act and the content of an act. In his discussion of mental images in A Materialist Theory of the Mind, for example, he begins his discussion with a comparison between mental images and perceptions.
It seems clear (pace Ryle) that there is the closest resemblance between perceptions (or perhaps we should say sense-impressions) and mental images.11

The analogy between mental images and perceptions is often drawn by philosophers and psychologists. And it seems to be a plausible analogy if, by a perception, we mean a sense-impression or sense-datum. But it is highly implausible if, by a perception, we mean the acquisition of a belief. It is reasonable, for example, to ask of my visual sense-impression or sense-datum of the table, what colour or shape it is. But it seems meaningless to ask the same questions about my act of acquiring the belief that the table is brown and rectangular. The problem is accentuated when we consider Armstrong's definition of a mental image. A mental image, he says, is an idle perception.

(Mental images are) events that resemble the acquiring of beliefs about the environment as the result of the action of that environment on the perceiver, although no belief or 'potential belief', nor any action of the environment is involved. Our introspective awareness of mental images is an awareness of mental occurrences of this sort.12

Again, it seems reasonable to ask about the colour or the shape of my mental image of the table; and, in this respect, the analogy between mental images and perceptions (sense-impressions or sense-data) is plausible and enlightening. But it is meaningless to ask, "What colour or shape is your "idle
perception" of the table?". In other words, Armstrong has given a plausible account of mental imaging, but an implausible, and perhaps incoherent, account of a mental image. Once again we have here, as before, a failure to clearly distinguish between a mental act and its content. The only way in which Armstrong might possibly avoid these difficulties would be for him to deny that there are any mental images as such. But then the analogy between mental images and sense-impressions or perceptions breaks down.

113. A similar problem arises in Armstrong's discussion of sense-impressions, and the relationship between sense-impressions and beliefs. It is an important part of his strategy to show that the introduction of sense-impressions or sense-data is unwarranted in the correct analysis of perception. Perception, according to Armstrong, is to be understood exclusively in terms of beliefs, and the acquisition of beliefs, about the world. I have already put forward one reason for believing that such an analysis is inadequate; namely, that it cannot give a satisfactory account of sensory illusions. But there are other reasons.

I have suggested that Armstrong has, at times, tended to conflate the act or event of perceiving, with the content of the perception. And, in doing so, he has also attempted to undermine the distinction between knowledge by acquaintance, and knowledge by description. One of the reasons he gives for taking this approach is that we cannot, allegedly, in perception, distinguish sense-impressions from beliefs or inclinations to believe. As such, there is, according to Armstrong, no datum involved in perception - apart from the belief\textsuperscript{13} - with which we can be said to be acquainted. There is only the belief
which, if true, is an instance of knowledge by description.

On the other hand, the belief that, in perception, we are directly acquainted with a datum - whether it be a sense-impression, or some other entity - is, as Armstrong himself admits, a commonplace. As such, in any discussion of the nature of perception, the onus of proof lies with those who, like Armstrong, would deny the truth of this presumption. Armstrong takes up this challenge, and offers a number of arguments against the view that perception involves the awareness of a datum.

114. The first argument that Armstrong puts forward is, that in perception, sense-data cannot be distinguished from what I have termed perceptual beliefs. In his discussion of the view that we may, on the contrary, have instances of ostensible perception which involve no beliefs whatsoever, Armstrong considers the following argument in its favour.

Even so, it will still be argued, there is a distinction between sense-impressions, on the one hand, and belief or inclination to believe that we are immediately perceiving something on the other. The two may in fact always be found together, but it is logically possible, at least, to have the first without the second. This argument.

He then gives the following argument to show that there cannot be such a distinction.

Now, if this view were taken, what would be the relationship between the sense-impression and the belief or inclination to believe we are immediately perceiving some physical state of affairs? Does having a certain sense-
impression entail having a certain belief or inclination to believe? If it does, then 'having a sense-impression' already involves having a certain belief or inclination to believe, and so the sense-impression is not distinct from the belief or inclination to believe, which is contrary to the hypothesis.  

The argument is, however, clearly unsound. I might be prepared to grant Armstrong the assumption that every awareness of a datum is accompanied by a perceptual belief, and even insist that having a sense-impression, or being aware of a datum, entails having a particular belief or inclination to believe, without thereby being committed to the conclusion that the datum or sense-impression is not distinct from the belief or inclination to believe. Furthermore, as I suggested earlier when discussing Armstrong's analysis of sensory illusion, there are very good reasons for believing that they must be distinct. Armstrong has not, therefore, with this line of argument, shown that the distinction between sense-impressions and beliefs, and the correlative distinction between knowledge by acquaintance and knowledge by description is unjustified.

The second line of argument he uses is, I believe, equally unsatisfactory. Throughout his book, Armstrong seems to work upon the assumption that the only plausible alternatives to his own theory are either phenomenalist, or representational theories of perception. And both of these types of theory, he maintains, are untenable. So that his reply to someone who consistently advocates a clear distinction between sense-impressions or sense-data, and perceptual beliefs, is to point out that such a distinction inevitably leads to either a
representative or a phenomenalist theory of perception - both of which are said to be philosophically unacceptable.\(^\text{16}\)

We need not consider Armstrong's critique of representative and phenomenalist theories to see that his conclusion in favour of his own theory as the only plausible alternative is without justification. This conclusion would only be justified if his own theory, together with representative and phenomenalist theories, exhausted the field of possible theories of perception. But this is not the case. The analysis of perception which I have proposed - as being the direct awareness of a substance as having certain characteristics - is not considered by Armstrong\(^\text{17}\). Nor does he consider the possibility of what I have termed misperception, as distinct from the question of the fallibility of perceptual beliefs.

Now, in accordance with the analysis which I have proposed, a distinction can, and should, be drawn between perception as such, and perceptual beliefs. But this does not commit us to either a representative or a phenomenalist theory of perception. We therefore avoid Armstrong's criticisms of these theories. Furthermore, we are able to give an explanation of the relationship between perception, and perceptual belief, without conflating the two. The fact that I perceive a substance as having certain characteristics can be said to be evidence for the belief that the substance has those characteristics, without entailing the belief, or inclination to believe, that the substance has those characteristics. Thus, we may explain the fact - which Armstrong has difficulty in explaining - that we often undergo sensory illusions, even though we have no false belief, or inclination to a false belief, about the nature of that which is perceived.\(^\text{18}\)
116. Those substances with which I am acquainted in perception may, of course, include sense-impressions or sense-data. But according to the view which I have advocated, perception does not necessarily (i.e. as a consequence of the definition) involve acquaintance merely with sense-data; so, we are not antecedently burdened with the problem of the 'veil' of perception - that of being acquainted only with one's own sense-impressions - a criticism that is often, though perhaps unjustifiably, made against representative and phenomenalist theories.

117. So far in our evaluation of Armstrong's theory I have been concerned that he has given no conclusive reasons for believing that misperception is impossible. But if we can show that there is a fundamental weakness in his overall theory of perception, then our position will be considerably strengthened. Is there, then, such a weakness?

I believe that there is. Perception, according to Armstrong, is to be understood entirely in terms of beliefs, and the acquisition of beliefs or inclinations to believe. But he also claims that it is possible for any type of mental event, perceptions included, to be unconscious. That is to say, the relationship between any belief, or inclination to believe, and consciousness, is contingent.

The view that there are unconscious mental events is not without precedent, and no serious problems arise (that is, apart from the intrinsic difficulty of understanding how any mental event can be unconscious) until we attempt to understand how it is possible, according to Armstrong's analysis, to acquire any evidence for the belief that any mental events exist.
118. The answer, it might be suggested, is obvious. We are simply conscious or aware of the occurrence of such events when introspecting. Such a reply would be adequate, I believe, on any view, such as the one which I have proposed, which understands consciousness to be an instance of simple acquaintance. But what does it mean, according to Armstrong's analysis, to say that someone is conscious of his own mental states or events?

Consciousness, or experience, then (as opposed to completely unselfconscious mental activity which is perfectly possible, and which occurs in the case of 'automatic driving') is simply awareness of our own state of mind. The technical term for such awareness of our own mental state is 'introspection' or 'introspective awareness'.

But awareness is not, according to Armstrong, to be identified with simple acquaintance - simple acquaintance, it will be remembered, was denied by Armstrong in favour of knowledge by description only. It is said to be analogous to perception in that it is simply the acquiring of beliefs about our own mental states or events. And the acquiring of beliefs, or inclinations to believe, is not, according to Armstrong, essentially conscious. Accordingly, it should be possible to be 'aware' of some mental event, in introspection, without being conscious of that event.

119. There are two problems with this view. The first is that the terms 'awareness' and 'consciousness' are generally considered to be synonymous; and I find it difficult to conceive of any significant sense in which I can be said to be
aware of an event without, at the same time, being conscious of it.

Armstrong may not, however, be concerned about this point. He might, in reply, suggest that the term 'awareness' simply denotes the process of acquiring beliefs about our own states of mind, i.e. introspection; and, that there are some such introspective acts which are conscious, and some which are not.

120. But this brings us to the second of our difficulties with his view. If it is possible for some introspective acts to be unconscious, then the relationship between introspection and consciousness is contingent. Two conclusions follow from this. The first is that the mere fact that I am, in Armstrong's sense, 'introspectively aware' of a mental state or event does not imply that I am conscious of that state or event. And yet, unless I am conscious of that state or event, or some other state or event from which the former can be inferred, then I can have no evidence for the existence of the former state or event. In other words, it is consciousness, and not introspection, that provides evidence for the existence of mental states or events; and, indirectly, for the existence of a 'physical world'.

The second conclusion that follows from the fact that the relationship between consciousness and introspection is contingent is that consciousness cannot be identical with introspection. Presumably Armstrong wishes to retain the notion of consciousness in his theory of the mind, otherwise, as I suggested above, there could be no evidence for the existence either of any mental states or events, or of the physical world. But if consciousness is not equivalent to introspection, then it is difficult to understand what it can be on Armstrong's
theory. It cannot, for example, be identical with belief, the acquisition of belief, or the inclination to believe; and yet, perception, to which consciousness is said to be analogous, is understood exclusively in terms of these mental states. It would seem, then, that there are only two conclusions available to Armstrong. The first is that consciousness is not a species of, or analogous to, perception. The second is that the proposed analysis of perception exclusively in terms of beliefs, is inadequate. Either conclusion is clearly inimical to Armstrong's overall theory.

Given that Armstrong would wish to retain the notion of consciousness, along with his analysis of perception, it seems to me that he has only one option - to admit consciousness as a distinct, and irreducible mental state. Now it is clear that such a conclusion is an insurmountable barrier to any programme of reductive materialism. But it also gives rise to a further dilemma. Since we need a name for the mental act which is the consciousness of particulars, we are entitled, on the basis of a consideration of ordinary language, to use the term 'perception' as a name for this act - since the direct conscious awareness of particulars or substances is, as philosophers of such diverse theories as Russell, Alexander and McTaggart have acknowledged, what is generally meant by this term. What Armstrong has attempted to do, and failed to do, is to show that there is no perception in this sense. But his arguments, we have seen, are unsatisfactory; and his theory, as I have argued, cannot adequately account for what is arguably the most fundamental element of perception in particular, and mental states in general, namely, consciousness. His proposed analysis is not so much an analysis of perception proper, as
an analysis of perceptual belief. But, as I have argued, the two can, and ought, to be distinguished.

121. I think that we can conclude, then, on the basis of the above criticisms, that Armstrong has no provides a satisfactory alternative theory of perception; and that, as such, he has not shown that misperception, as we have described it, is either impossible or implausible.

122. The attempt to reduce all perceptual error to either false beliefs about, or mistaken inferences based upon, what is simply 'given' in perception is, as we saw in the case of the James/Russell theory, unsatisfactory. We have reached the same conclusion with respect to Armstrong's attempt to analyse all perception, including misperception or sensory illusion, in terms of beliefs, and the acquisition of beliefs and inclinations to believe. And, as I have previously indicated (Section 104), the rejection of these two theories of perceptual error is indirect proof of the theory which we have suggested.

It is, of course, possible that these three theories do not collectively exhaust all possible theories of perceptual error. But I am unable to conceive of any other possibilities. And if as seems likely, discursive and intuitive knowledge - or knowledge by description and knowledge by acquaintance - together cover all forms of knowledge, then, by rejecting the possibility that all perceptual error can be attributed to discursive or descriptive forms of knowledge, we have as adequate a basis as is possible for concluding that some perceptual error must be attributed to misperception.

Having thus shown that misperception is possible, and that it is perhaps the only possible explanation for some types of perceptual error, we can now consider the question of the
relation between misperception and the ontological distinction between appearance and reality.

123. In a paper entitled, "Is There A Problem About Appearances?", Quentin Gibson has argued that the assumption that an adequate and complete account of the world can be given in terms of the traditional categorial schema of substance, quality and relation, must be questioned once we admit the validity of a distinction between appearance and reality; that is, between the way things appear to be, and the way they really are. Appearances, he suggests, cannot be readily subsumed under any of the above categories; for this reason they present a genuine problem for any attempt to give a systematic and complete account of the world in terms of the traditional categories alone.

Gibson considers a number of possible ways of dealing with appearances. The first is to give an analysis of appearing, and consequently of appearances, in terms of a triadic, or three-term relation between a substance, a mind, and a characteristic. The expression "T appears b to P", or "T is perceived as b by P"\(^{22}\), is to be understood as asserting that a triadic relation of appearing exists between T - the substance perceived; b - the characteristic which T appears to have, or is perceived as having; and P - the mind which perceives the substance T. The appearance, in so far as it is a mere appearance, is identified with the "free-floating" characteristic b, which does not belong, as an intrinsic characteristic, to T.

The second approach is that which I suggested has been taken by some sense-datum theorists - to identify the appearance with an existent substance, a sense-datum.

A third approach is to reject the substance, quality, and
relation schema as inadequate; and to admit a further category of things-as-they-appear.

The fourth approach is to recognise the fact that a distinction is often justifiably made between appearance and reality, but to deny that a place needs to be found for appearances in a complete account of the world. This is the approach which I believe is the correct one, and the one which I will defend. But before doing so, I will consider some reasons for rejecting the other three theories.

124. The main objection to the first approach is that it involves the introduction of "free-floating" characteristics; that is, characteristics which do not belong to any existent substance. Such an approach, Gibson suggests, is clearly at odds with the intuitive conviction that all characteristics, if they exist, are characteristics of existent substances.

We automatically rule out free-floating properties which are not the properties of any entities at all. We therefore rule out the property which is set down as the third term of our triadic relation. The bentness which the stick (in water) appears to have but in fact does not have persists as a metaphysical oddity of which we desire to be rid.²³

This objection is similar to that which we raised, at the beginning of this chapter, against the attempt to analyse misperception in terms of a triadic relation between a mind, a substance, and a characteristic or set of characteristics. Both approaches involve a commitment to "free-floating" characteristics - a commitment which, as Gibson remarks, ought to
be avoided if possible. For the moment, our objection to such free-floating characteristics must remain on this 'aesthetic' level. But in the next chapter, when dealing with the notion of a substance, further metaphysical arguments will be raised against free-floating characteristics. Furthermore, the need to posit the reality of such properties can, I believe, be avoided by the view of misperception such as I will propose at a later stage in this chapter. And this is probably the most satisfactory way of dealing with the notion of free-floating characteristics - by showing that we do not need to posit their reality in order to explain the facts which their introduction is intended to explain.

125. The second approach to the 'problem' of appearances is to attempt to fit them into the traditional categorial schema as entities or substances in their own right. This, as was mentioned previously, is the approach which has been taken by most sense-datum theorists.

There are some advantages in such an approach. It allows us to deal, for example, with hallucinations and dreams, where there is no ostensible entity other than the 'appearance' which appears, or is perceived. It also allows us to dispense with the awkward analysis of appearing in terms of a triadic relation between a substance, a characteristic, and a mind. Appearing becomes simply a dyadic relation between a mind and an 'appearance' or sense-datum. This approach has been taken by a number of philosophers since Descartes. Russell, in *Our Knowledge of the External World*, and C.D. Broad, in *Scientific Thought and The Mind and Its Place in Nature*, have taken the view that appearances or sense-data, are substances in their right. According to this theory, the analysis of statements of
the form "T appears b to P", is to be understood as expressing the fact that P is acquainted with a b-like appearance of the substance T. Thus, whenever it is suggested that something appears to be other than it is, we are, according to this approach, to understand not that misperception is taking place, but that the observer or perceiver is not acquainted exclusively, if at all, with the substance which he believes himself to be acquainted with. He is, instead, acquainted with an appearance of the substance in question - the appearance having those characteristics, or that characteristic, which are mistakenly attributed to the substance itself.

Several objections might be raised against this approach. The first is that which I mentioned when discussing Bradley's attempt to prove that mere appearances exist in the last chapter; namely, that it seems to presuppose the validity of the principle of the evidence of perception. Thus, when, for example, a coin on a table, viewed from a particular angle, appears to be elliptical, it is thought to be self-evidently true that the observer is acquainted with an elliptically-shaped entity - an appearance or sense-datum. The obvious reply to this approach is to deny that the conclusion follows from the premisses. The fact that an entity appears to have a particular characteristic does not, as we have seen, entail that the entity in question, or any other entity - an mere appearance, for example - has that characteristic. If we return to Figures 1 and 2, for example, the fact that the circle in Figure 1 appears to be irregular does not entail that there is any irregular circle, real or existent; and the fact that the two central lines in Figure 2, appear to be curved does not entail that I am thereby aware of any curved lines when looking
the figure. In other words, the principle of the evidence of perception, which is presupposed by those who wish to establish the reality of appearances, is not a self-evident truth and, if my previous arguments are sound, it is, in fact, demonstrably false.

Furthermore, the acceptance of this principle, and the associated theory of appearances, would lead to some unacceptable conclusions. If a substance is perceived as having characteristics which are subsequently judged to be contradictory, then it follows, according to the above approach, that there is an appearance which has these contradictory characteristics. And this would imply that such appearances are *impossibilia*. 

At this stage we might be thought to have reached a dilemma. If we adopt the approach in question, then it is conceivable that we might, in some circumstances, be committed to the reality of self-contradictory, hence impossible, entities. On the other hand, if we deny the soundness of the above approach to the problem of appearances, and the principle of the evidence of perception upon which it is based, then we are committed to nothing more extravagant than the admission that perception is fallible. The latter position is, I think, the only philosophically acceptable position to take.

126. Appearances cannot, then, be readily accommodated into the traditional categorial schema as either 'free-floating' characteristics, or as substances or entities in their own right. But perhaps the schema is to restrictive, and ought to incorporate *things-as-they-appear*, as well as substances, qualities and relations. This is the third approach to the problem considered by Gibson, and one which he believes that J.L. Austin, in virtue of his rejection of the sense-datum theory, is
Austin is concerned to reject commitment to sense-data, and since he pays no attention to alternative realistic views, he is presumably committing himself to the view that the world contains things-as-they-appear to people.

His readiness to do this and thereby to challenge the restrictive assumption is no doubt due to a general dislike of reductive analysis, a general disinclination, that is to say, to minimize differences or say of anything that it is after all a case of something else. That things appear other than they are, it is felt, is a fact we must accept and if it does not fit into a scheme which includes only entities, properties and relations, so much the worse for that scheme. 26

The acceptance of a revision in a traditionally accepted categorial schema is dependent upon a number of considerations. Firstly, the suggested revision must be necessary to account for facts which cannot possibly be accommodated by the traditional schema. Secondly, it should not create more difficulties than are involved in the acceptance of the traditional schema. Thirdly, it should not simply "cover up" genuine problems. And fourthly, the revised schema should not be used to create entities.

127. We will leave the first of these considerations till the next section, where I hope to show that the traditional schema is adequate to accommodate a distinction between appearance and reality; that is, to accommodate a distinction between the way things appear to be, and the way they really are.
The remaining considerations are closely related. The introduction of a category of things-as-they-appear is not, as Gibson points out, a return to a satisfying naivety. The *thing-as-it-appears*, he suggests, is metaphysically unacceptable to the ordinary man. As such, any revision of the categorial schema so as to include things-as-they-appear cannot be supported by an appeal to common sense. Nor can it be supported by an appeal to ordinary language. It is true that ordinary language embodies expressions about the way things appear to be, as distinct from the way they really are, and this, in turn, would seem to imply a tacit acceptance of the notion of a thing-as-it-appears. But language serves many functions, and one of these, as Gibson remarks, is to enable us to get by without raising too many awkward questions.

And I have already suggested that the terminology of appearances (or things-as-they-appear)* fulfills this function admirably. Using phrases like 'the stick looks bent' involves us in recognizing a difference between how things look and how things are. But it simply evades the question what it is that we are describing when we describe how things look. And it certainly does not commit us to the view that in describing how things look we are describing some unique feature of the world which is different from any kind of entity or property or relation of entities.27

For this reason, the appeal to ordinary language is inconclusive. It is clear, then, that if the introduction of a category of things-as-they-appear is to be justified, it must be
justified on other grounds than an appeal to common-sense or ordinary language. Just what these grounds might be, it is difficult to discover. Perhaps the most plausible would be the contention that it is the only way in which we may consistently distinguish between appearance and reality. But this contention is plainly unwarranted. Both the sense-datum theory, and the view which I shall propose in the next section, are capable, it would seem, of accommodating such a distinction; and both are based upon the traditional categorial schema. It is true that the sense-datum theory has internal difficulties. But, on the other hand, it is not clear that the notion of a thing-as-it-appears is free from difficulties.

For one thing, there does not seem to be any obvious way of deciding whether, and in what way, the thing-as-it-appears differs from the thing "in itself"; that is, with the thing as it actually is. And yet such a distinction must be drawn if the category of a thing-as-it-appears is to have any valid application. In one sense the thing-as-it-appears must be identical with the thing-in-itself; since it is the thing-in-itself, and not the thing-as-it-appears, which appears. But, in another sense, the thing-as-it-appears must differ from the thing-in-itself, since the thing-as-it-appears can, and often does, have characteristics which the thing-in-itself does not have. This difficulty is, I believe, both fundamental and irresolvable; and it points to an inherent contradiction in the notion of a distinct category or class of things-as-they-appear.

This last point brings us to the third and the fourth considerations. The introduction of a category of things-as-they-appear does not solve the question, raised by Gibson, as to
what it is that we are describing when we talk of how things look or appear. Are we describing the thing-in-itself, or are we describing the thing-as-it-appears? If it is the thing-in-itself, then there seems to be no need to introduce a further category of things-as-they-appear. If it is the thing-as-it-appears, then we must explain how the thing-as-it-appears can at once be identical with the thing-in-itself, and yet have different qualities or characteristics.

Furthermore, the introduction of such a category would tend to create entities unnecessarily. It is clear that, if the thing-as-it-appears has different characteristics to the thing-in-itself, then it must be judged to be a distinct entity in its own right. But such an unprincipled spawning of entities would seem to indicate the folly, rather than the wisdom, of the proposed categorial revision. Any analysis of the distinction between appearance and reality which can avoid the introduction of a category of things-as-they-appear will, in this respect, have a decided advantage.

128. It is clear, then, that there are genuine difficulties with each of the three approaches to the distinction between reality and appearance so far considered. There remains only the fourth approach to consider. This approach is described by Gibson in the following way.

The assumption, as I have stated it, is that a complete account of the world can be given in terms of entities, their properties and their relations. If we can find no place for appearances in this account, there are two things we can do about it. The first is to say the assumption is unduly restrictive. But there is a second
possibility. This is to accept the assumption as it stands and deny that we need find a place for appearances in a complete account of the world. For we must distinguish, it may be said, between appearance and reality. In describing the world we only describe what is, and not how it appears to any particular person. Hence things-as-they-appear, though they may be mentioned, cannot be said to exist.28

In the previous chapter, when discussing Bradley's theory of appearances, we considered and rejected the main arguments he uses to show that mere appearances exist. The distinction between appearance and reality, I suggested, should be based upon the more fundamental distinction between veridical perception and misperception. And misperception, we have seen, cannot always be reduced to false perceptual beliefs, or the acquisition of false beliefs. Any error involved in misperception, as distinct from false perceptual beliefs, is to be attributed to the way in which a mind perceives an existent substance, rather than to the introduction of an illusory entity - a mere appearance. Mere appearances, on this view, are not existent or real entities. They are, as Dawes Hicks - following Alexander - has suggested, "ways in which the reality itself is apprehended, - as partial, imperfect, incomplete ways in which the reality is known."29

In this way, the validity of a distinction between appearance and reality can be upheld without the need to posit mere appearances as a class of real or existent entities. The distinction between appearance and reality is ultimately a distinction between the world seen "awry", and the world seen
correctly. We have, in this explanation, an answer to Gibson's question about the status of appearances. Appearances do not figure among the entities in the world; the entities which we are describing when we describe the way things look are the things themselves, and not their 'appearances'. To talk of the way a thing appears to be, or of its 'appearances' is, simply, an elliptical way of expressing the fact that the thing or substance in question is perceived as having certain characteristics. To talk of illusory or mere appearances, is, accordingly, to express the fact that a substance is misperceived.

129. The question of the status of hallucinatory entities can be readily resolved within the context of our theory. Hallucinations are to be understood, according to our theory, as misperceptions, hence perceptions, of the existent. The apparent paradox in this suggestion can be easily explained. It is often assumed that an hallucination is the awareness of an hallucinatory entity, or mere appearance; such entities being considered to be, in some sense, unreal. Thus, when Macbeth claims to perceive a dagger before him, it is often suggested that he is, in fact, aware of an hallucinatory dagger - which is neither existent nor real. But according to the analysis which I have proposed, the introduction of a class of such hallucinatory entities is unnecessary. Provided that Macbeth is undergoing a genuine hallucination, and not simply erroneously believing that he is perceiving a dagger, then the hallucination consists in the perception of some existent substance, e.g. the spatial field before him, as having certain characteristics, viz. those which are normally attributed to a dagger, which it does not have. This type of analysis can, I believe, be extended to cover all cases of
ostensible hallucination. The object of an hallucinatory per-
ception, like that of a veridical perception, is a real and
eexistent substance. An hallucination, being an instance of
misperception, is simply the real world, or some part fo the
real world, perceived erroneously, i.e. as having character-
istics which it does not have.

130. The distinction between reality and appearance has
often been understood as being akin to an object surrounded
by a veil - the so-called "veil of appearances" - which comes
between and hides the real world from the mind. But such an
analogy can be misleading. If the "veil of appearances" is
considered to be such that it completely obscures the real
world from the mind, then the analogy is misleading. If the
analogy is to be retained, then the "veil" should be under-
stood as being translucent, rather than opaque; distorting,
rather than eliminating, our awareness of the real world. The
analogy should not, however, be pressed. In one important
respect it breaks down. To talk of a "veil" of appearances
would seem to imply that appearances are, in some sense, ent-
ities in their own right; and this view, we have seen, is
false. For this reason, it is perhaps better to retain only
the literal interpretation of our analysis of the distinction
between reality and appearance, as being ultimately a dis-
tinction between the world misperceived, and the world per-
ceived as it really is.

131. At this stage we may give an unequivocal answer to the
question whether appearances exist - a question which, Gibson
contends, demands an unambiguous reply. Our reply to this
question is that appearances, by which I mean mere appearances,
are neither existent nor real. This is not to say that we are
we are denying that the distinction between the way a thing appears to be, and the way it really is, i.e. the distinction appearance and reality is valid. The distinction, as I suggested in the previous sections, is valid. But it does not rest upon a distinction between two orders of being. It is simply a distinction between correct and incorrect perception.

The basic conditions for the validity of the distinction can also be stated at this stage. It is clear that if the distinction rests upon the way in which the world is perceived, then it can only arise, and have any valid application, where there are existent minds which perceive existent substances. Thus, the distinction between reality and appearance presupposes the reality both of existent substances which are perceived, and of existent minds which either misperceive, or correctly perceive, these substances. It also presupposes the reality of misperceptions; since the contrast between the way a thing really is, and the way it appears to be, can only arise where there is misperception.

On the basis of these conditions, it follows that any view, such as Bradley's, which presupposes the validity of a distinction between appearance and reality, and yet denies the validity of the categorial schema of substances, qualities, and relations, and which denies the ultimate reality of selves, of which perceptions, including misperceptions, are parts or states, is involved in a fundamental inconsistency. We have, then, by accepting the validity of a distinction between appearance and reality, implicitly endorsed the traditional categorial schema. In the next four chapters I will attempt to defend this schema against Bradley's critical arguments. And if, as I will argue, he has not provided any conclusive
reasons to believe that this schema is philosophically un­
acceptable, then our analysis of the distinction between appearance and reality, being based upon the validity of this schema, will receive further support.

132. Having indicated the basic conditions for the validity of the distinction between appearance and reality, and having shown that it rests ultimately upon a more fundamental dist­
tinction between veridical perception, and misperception, we can now consider the question of the analysis of mispercept­ion.

At the beginning of this chapter I suggested that misper­ception should not be understood as being, or involving, a triadic relation between a substance, a mind, and a "free­floating" characteristic. It should now, I think, be clear as to why such an analysis is unsatisfactory. The misperception of a substance as having a particular characteristic does not, we have seen, imply that the substance in question, or any other substance for that matter, has the characteristic in question. It does not, in other words, imply that the mind, in misperceiving a substance, is aware of the characteristic which the substance is misperceived as having. It follows, from this fact, that misperception does not involve, or is not equivalent to, a triadic relation between a mind, a sub­stance, and a characteristic. It is, I suggest, a unique and irreducible state, involving a two-term relation between a mind and a substance. It cannot be understood to be the ver­idical perception of an illusory entity - a mere appearance. Nor is it to be analysed in terms of the acquisition of a false belief, or a tendency to a false belief. Our initial definition must, I think, be taken as final - misperception
cannot be further analysed. We may say of misperception what Cook Wilson has said of judgement - that it is unique, "it cannot be reduced to any other denomination. We must simply recognize it in its universal character through instances in which we excercise it."\(^3\)

133. In the previous chapter we discussed and criticised Bradley's theory of appearances and his views on the basis for a distinction between appearance and reality. In this chapter, I have attempted to show that, although Bradley's own interpretation of the distinction is unsatisfactory, a satisfactory analysis of the distinction can be given. This analysis is based upon the notion of misperception which, I have suggested, must be taken as a unique and irreducible kind of cognitive act. The analysis is also based upon the acceptance of the categorial schema of substance, quality, and relation. In the following chapters we will be concerned with defending this schema against Bradley's criticisms.

Notes

1. The mind, itself, I consider to be a substance - hence one term of the relation.

2. By *multiple*, I mean having more than two terms.


6. The importance of this distinction will become evident when we come to discuss Armstrong's theory.


8. Since I initially wrote this, I have come across an article by David Sanford in which he uses a similar argument against the reality of sense-data. He concludes that neither the sense-datum analysis, nor the 'epistemic' analysis of sensory illusion can account for the above type of illusion. The notion of misperception which I have advocated is, I believe, a genuine explanation for such illusions. See David H. Sanford, "Illusions and Sense-Data", in *Midwest Studies in Philosophy*, Vol. VI, University of Minnesota Press, Minneapolis, 1981, pp. 371-385.


13. Once again, it is not clear whether by "belief" Armstrong means the proposition, or the mental state of believing.


17. He does, in passing, mention Russell's view that perception is the acquaintance with particulars (pp. 107-108) - but he says nothing which amounts to a direct criticism of this view.

1957, pp.3-4.


22. I will use these two expressions interchangeably.


24. See especially *Scientific Thought*, Chapter VIII.

25. The precise nature of the relation between a substance and its "appearances" varies according to different theories.


27. Q. Gibson, *op.cit.*, p.325.

27. The bracketed phrase is mine.


Chapter 4 - Substance

134. According to Lotze, if we summarize the most universal factors of the ordinary view of the world, the summary will be found to include the following suppositions: That there are things in indefinite number; that every thing has certain properties or qualities; and can, in so far as it has a prior existence, enter into all manner of relations with other things; and, that these relations are the reason for which changes take place in these things.

In accordance with the suppositions we might say, then, that the ordinary view of the world assumes that there are three distinct and irreducible types of entity: things or substances, qualities, and relations.

135. That these suppositions are fundamental to the ordinary view of the world is, I think, uncontroversial. What is controversial is the question of the ultimate consistency and intelligibility of this view.

In Appearance and Reality Bradley raises some serious objections to the ordinary or common-sense view of the world. In this chapter I wish to discuss and evaluate, in particular, Bradley's criticism of the fundamental notion of a substance or a thing, and the consequent distinction between a substance and its qualities. In doing so I will put forward, and defend, a view of substances which, I believe, avoids Bradley's criticisms; and yet which also has much in common with his own views on the nature of ultimate reality.

My discussion of Bradley's views will be based upon Chapters II and VIII of Appearance and Reality, entitled respectively, "Substantive and Adjective", and "Things".
136. Perhaps the first point which should be raised in a discussion of the notion of a substance is the importance of
the distinction between a substance and a substantive. Al­
though the title of Chapter II of AR would suggest that it is
a critique of the more general notion of a substantive, the
discussion is, for the most part, limited to criticism of the
narrower notion of substance or thinghood.

The distinction between a substance and a substantive is
important for a number of reasons. In the first place, some
philosophers have claimed that there are various kinds of
entities which can be described as substantives (i.e. bearers
of qualities), although they are not traditionally considered
to be substances. The list of such entities includes facts,
processes or events, classes (as distinct from groups), and,
in general, the class of entities which are called occurrents,
as distinct from continuants - which are alone considered to
be genuine substances². It would also seem to be possible for
qualities and relations to be substantives (as the bearers of
further qualities), although, in accordance with most defin­
itons, it is impossible for a quality or a relation to be a
substance.

Secondly, the distinction between substantive and adjective
is basically, although no exclusively, a grammatical dis­
tinction, relative to the syntax of a given statement; whereas
the distinction between substance and quality is ontological
and absolute. It is possible, for example, that a term should
function both as a substantive and an adjective, although it
is impossible for a term to be at once a substance and a
quality.

Thirdly, although any criticism of the distinction between
substantive and adjective is applicable to the distinction between substance and quality - a substance being an instance of a substantive - an objection to the notion of substance is not *ipso facto* an objection to the more general notion of a substantive; since, as I suggested above, the class of substantives is not co-extensive with the class of substances.

Having recognised the significance of this distinction, it will, I think, become obvious that Bradley is primarily concerned with criticising the notion of a substance, rather than that of a substantive.

137. Bradley begins the discussion in Chapter II by presenting, and subsequently criticising, two traditional ways of construing the relationship between a substance and its qualities. According to the first of these views, a substance is not identical with its qualities; it is, in some sense, distinct from, and possibly independent of, its qualities. According to the second view, a substance is not something distinct from its qualities; it is simply various qualities which are related to each other in a particular way. The latter view is what has been called the "bundle" theory of a thing. I will now consider each of these views in turn.

138. Bradley's criticisms of the notion of substance are based upon what he considers to be a fundamental and insuperable difficulty faced by any attempt to formulate a consistent theory of 'things' - that of reconciling the diversity of the qualities attributed to the thing, with its supposed unity. This difficulty is set out in the following passage.

We may take the familiar instance of a lump of sugar. This is a thing, and it has properties, adjectives which
qualify it. It is, for example, white, and hard, and sweet. The sugar, we say, is all that; but what the is can really mean seems doubtful. A thing is not any one of its qualities, if you take that quality by itself; if 'sweet' were the same as 'simply sweet', the thing would clearly be not sweet. And, again, in so far as sugar is sweet it is not white or hard; for these properties are all distinct. Nor, again, can the thing be all its properties, if you take them each severally. Sugar is obviously not mere whiteness, mere hardness, and mere sweetness; for its reality lies somehow in its unity. But if, on the other hand, we inquire what there can be in the thing beside its several qualities, we are baffled once more. We can discover no real unity existing outside these qualities, or, again, existing within them. (AR p.16)

One's response to this point will differ according as a substance is considered to be either distinct from and independent of, its qualities; or distinct from, but not independent of, its qualities.

139. Let us consider, firstly, the view that a substance is both distinct from, and independent of, its qualities. How does this view fare against Bradley's criticism? The relevance of his criticism to such a view is, at first look, somewhat difficult to determine. He seems to be suggesting that such a view cannot provide an intelligible account of the nature of the relation between a substance and its qualities. This is not, however, a decisive objection. The fact that the relation between two terms is unintelligible does not necessarily mean that the relation is non-existent or unreal. The relation
might be unintelligible in the sense that it is indefinable. Or else, the relation might be unique, and unlike any other kind of relation - in which case it might be unintelligible in the sense that it is not analogous to, or definable in terms of, some other, more familiar relation. But if the relation between a substance and its qualities is unintelligible in either of the above senses, then Bradley's criticism is somewhat innocuous. The acceptance of indefinable relations - such as the relations of identity and difference - is, I think, a commonplace. And the view that the relation in question should be analogous to, or definable in terms of, some more familiar relation is quite unreasonable. Besides, what relation would seem to be more familiar than the relation of inherence which exists between a substance and its qualities?

But perhaps his objection is based upon the tacit acceptance of the conclusions of the anti-relational arguments of Chapter III; in which case any relational analysis of a thing would prove to be unacceptable. It is my contention, however, that the arguments in Chapter III presuppose the truth of the conclusions argued for in Chapter II. Bradley cannot, accordingly, introduce these conclusions as premisses in his argument against the notion of a substance without the argument becoming circular.

140. So far, it would seem that Bradley's criticism is more or less irrelevant to the view that a substance is both distinct from, and independent of, its qualities. This conviction would seem to be strengthened even more when we consider his more general objection - that the unity of a substance is incompatible with the diversity of its qualities.

The correct reply to this more general objection would
appear to be obvious. It will be pointed out that a substance, being independent from its qualities, is simple (i.e. without parts), thereby retaining its unity in spite of the diversity of its qualities. The qualities 'belong' to the substance in virtue of the fact that they stand to it in a unique and perhaps unanalysable relation of inherence. A substance, it will be suggested, has its qualities without being any of them. It can be identified by its qualities without, thereby, being identical with them. There is, it will be suggested, no genuine problem to be resolved; the unity of a substance is compatible with the diversity of its qualities simply because it is independent of them.

Although, perhaps obvious, this reply is ultimately unsatisfactory. And the explanation as to why it is unsatisfactory will, I think, bring out the true nature of Bradley’s objection to this view of substance.

141. Bradley's fundamental objection to the view that a substance is both distinct from, and independent of, its qualities, is, I suggest, that it obliges us to introduce an absolute distinction between a substance and its nature. And this, I will now argue, leads to some untenable conclusions.

In the first place, an absolute distinction between a substance and its nature would entail that judgements such as "Sugar is white", can never be interpreted literally. That is to say, if the subject term is understood to denote a substance, then that substance cannot &e white. An absolute distinction between a substance and its nature would, in fact, imply the truth of the contrary judgement "Sugar is not white" (although it would not imply the truth of the judgement "Sugar is not-white").
The charge that this criticism is based upon the failure to distinguish between the *is* of identity, and the *is* of predication would, I think, be unwarranted. For the question at issue here is that of the actual significance of the copula in a predicative judgement. And I believe that at least part of what we mean (whatever difficulties this may appear to generate) when we say, for example, that sugar is white, is that sugar is, in one respect, and in some sense, literally identical with the quality of whiteness. For this reason, I don't believe that we are justified in considering the apparent distinction between the two senses of the copula to be ultimate.

142. The difficulties involved with any attempt to effect an absolute distinction between a substance and its nature will perhaps become more obvious if we consider the nature of change.

As Lotze has suggested, it is a supposition inherent in the ordinary view of the world that there are things or substances which, by entering into certain relations with other substances, undergo changes. Let us assume, then, in accordance with the ordinary view of the world, that substantial change is possible. Now, if we also assume that a substance is both distinct from, and independent of, its nature, we will I believe, be led to the contrary conclusion that substantial change is not possible. The argument which leads us to this conclusion is as follows.

If a substance is said to change, we would normally understand this to mean that, at some moment of time \( t \), the substance has some quality, or set of qualities, which it does not have at some other moment of time \( t' \). And if we define
the *nature* of a substance as being either the class of qualities which are true of a substance; or, in accordance with McTaggart, as a compound quality which has, as its parts, all those qualities which are true of a substance, then we may understand a change in a substance to be a change in its nature. But if the nature of a substance is distinct from, and independent of, the substance itself, then any change in the nature of a substance will not necessarily be, or determine, a change in the substance itself. In fact, since any substantial change can only be understood in terms of the qualities of the substance, i.e. as a change in its nature, an absolute distinction between a substance and its nature will preclude the possibility of substantial change. Thus, on the assumption that a substance is independent of its nature, we must conclude that substances cannot change - which is contrary to our initial assumption that they do change.

We have seen that, upon the assumption that a substance is independent of its nature, it is impossible for the substance itself, as distinct from its nature, to change. But I think that we can also show that, upon this assumption, if the nature of a substance changes, then the substance itself must change.

If a substance has different qualities at different moments of time, then, as I have argued, it can be said to change its nature. For example, if, at a moment of time $t$, the nature of a substance is comprised of the qualities $A, B, C$ and $D$; and, at another moment of time $t'$, it is comprised of the qualities $A, B, C$, and $E$, then the nature of the substance will be said to change from $A, B, C, D$ to $A, B, C, E$. But, in addition to this change in the nature of the substance, we must also consider
the relation between the substance and its nature. Now if, at
time t, the nature of the substance is comprised of the qual­
ities A, B, C and D, then the substance will, at that time, have
the further quality, M, of having A, B, C and D as comprising
its nature. Similarly if, at time t', the nature of the sub­
stance is comprised of the qualities A, B, C and E, then the
substance will, at that time, have the quality N, of having A,
B, C and E as comprising its nature. But the two qualities M
and N, which are generated by the relationship between the
substance and its nature at different moments of time, cannot
themselves be parts of the nature of the substance, since
their existence presupposes that the nature of the substance
at t and t', respectively, is independently determined. That
is to say, M and N are logically subsequent to the determi­
ation of the nature of the substance at times t and t'. But
they are nonetheless qualities of the substance; and, since
they do not form part of its nature, they must be ascribed
to the substance itself. And, in so far as the substance does
not possess these qualities simultaneously, it must possess
them at different moments of time - which is to say that the
substance itself must change.

The assumption that a substance is independent of its nat­
ure leads us, then, to the self-contradictory conclusion that,
if the nature of the substance changes, then the substance
itself cannot, and yet must, change. The assumption that a
substance is independent of its nature must, therefore, be
rejected.

143. At this point it might be suggested that we have only
shown that a substance cannot be independent of its nature if
we assume, in accordance with the ordinary view of the world,
that substances can, and do, change. There may, however, be changeless substances - in which case no such contradiction would seem to arise.

There are a number of possible replies to this objection. Firstly, it should be pointed out that, according to this view, not only must all substances be changeless, they must also be atemporal - since any continuant (i.e. a substance which endures through a period of time, or has a temporal dimension) must undergo a change in its temporal qualities of being past, present, and future. This is not, of course, a conclusive reply, but it does undermine one of the most commonly cited reasons for assuming that a substance is independent of its nature; namely, to account for the possibility that a substance can retain its identity through a period of time and, consequently, change.

The second reply is that put forward by David Armstrong. In his criticism of the so-called "Lockean" account of substance, Armstrong suggests that, if a substance is held to be independent of its nature, then we are faced with an infinite regress of relations when we attempt to explain the way in which the two are united. It is interesting to note that Armstrong claims to derive this argument from Bradley, although there is no evidence to suggest that Bradley did, in fact, use this type of argument against the view we are presently discussing.

Finally, if we assume that a substance is independent of its nature, this implies that it is independent of all of its qualities - both formal and material. And this, in turn, leads to the absurd conclusion that the substance must be independent of the quality of being a substance, and of the quality of
being identical with itself. And if it is suggested that the notion of independence is somewhat obscure, we can state our objection in a slightly different way. If an entity is said to be "independent of" another entity, then we must at least mean that the relation between the two terms is contingent; so that, if we say that a substance is independent of its qualities, then we must at least mean that the relation between the substance and its qualities is contingent. But if the relation between a substance and its qualities is contingent, then the relation between a substance and the quality of being a substance, and the quality of being identical with itself, must be contingent. And such a conclusion is clearly absurd.

144. We have, I believe, established that a substance cannot be independent of its nature. Bradley's own reasons for rejecting this view proved to be somewhat obscure. But our discussion has led to a number of independent reasons for rejecting this view. We will now consider the view that a substance is distinct from, but not independent of, its nature.

145. As with the previous view, it is difficult to be sure that one has understood the exact point of Bradley's criticism. The relevant passage is that which I quoted previously (Section 138) in relation to his criticism of the view that a substance is independent of its qualities. The point he wishes to make seems to be that, because a substance is not identical with any one of its qualities, taken individually; or, that it is not something which exists independently of its nature, that it is therefore nothing at all. But this conclusion would only follow if these two analyses of a substance together exhausted all possible analyses. They are not, however,
exhaustive. The fact that a substance is not an entity which exists independently of its nature, and the further fact that it cannot be identified with any of its qualities taken sever­ally, does not preclude the possibility that a substance is real only when taken in conjunction with its nature. That is to say, it might be argued that, when attempting to understand the notion of a substance we ought to take a substance-with­its-qualities as both conceptually and ontologically funda­mental. This is, in fact, the view taken by both Leibniz\(^5\) and McTaggart\(^6\).

Such a view might be thought to be unacceptable for two reasons. In the first place, it seems to leave the relation between the substance and its nature unexplained. Secondly, although it does not assume that a substance is an independent entity, it does appear to assume that it is a distinct entity over and above its nature; and yet, if we attempt to characterise a substance, we can only do so in terms of its qualities.

146. The first objection is, as I have argued previously, not conclusive. It might even be understood to beg two very important questions: (a) Whether the relation between a substance and its qualities is explicable; and (b) Whether there is, in fact, any such relation. Concerning (a), I have already suggested that the fact that we are unable to explain the nature of the relation between a substance and its qualities does not entail that there is no relation. On the other hand, as Armstrong has pointed out, any attempt to explain the substance/quality distinction in terms of a relation between two distinct kinds of entity would generate an infinite regress of relations. Such a regress need not, however, be vicious\(^7\);
and a more serious criticism is to be found in the second objection.

Concerning (b), it has been argued by some philosophers that we should not, strictly, speak of a relation between a substance and its qualities. Rather, to avoid the above-mentioned regress, it is better to speak of a merely formal distinction, or of a non-relational 'tie' between them. The introduction of such a non-relational tie between a substance and its qualities seems, however, to be somewhat ad hoc, and little more than the introduction of a relation under a different name. Furthermore, it still leaves us with the problem of explaining what a substance is, as distinct from its nature. In other words, it does not provide us with a satisfactory answer to the second part of Bradley's criticism. And to speak of a merely formal distinction between a substance and its nature implies that there is no material distinction between them; which, in turn, seems to entail that it is impossible for the distinction between a substance and its qualities to be understood as a distinction between two distinct kinds of entity.

147. The view that the distinction between a substance and its nature is a merely formal distinction, and not a distinction between two different and irreducible kinds of entity does, however, have its attractions. The most important of these is that it provides us with a means of answering the familiar objection that, since a substance is not independent of its nature; and, since we cannot form a concept of a substance which is distinct from its nature, the notion of substance is therefore metaphysically otiose or vacuous.

A substance, we might reply, is simply a unity (more
specifically, and to avoid a possible regress of relations analogous to that mentioned previously, a non-relational unity) of various qualities - which qualities comprise its nature. Subject to further qualification we might even, at this stage, propose that a substance be defined in this way.

If we accept this definition, then it seems to me that there remains little force in Bradley's criticisms. Although some philosophers may doubt that such non-relational unities can exist, Bradley cannot be counted among them, since he explicitly ascribes this type of unity to the Absolute, or that which is ultimately real; and to immediate experience. He cannot then object to the notion of substance on the grounds that it would involve the recognition of non-relational unities. But there is not much else that Bradley could find objectionable in such a definition. To the question, "What is a substance apart from its qualities?", we can reply that it nothing, and thereby agree with Bradley. But this is not to say that it is not something when taken in conjunction with its qualities; or, that it is not distinct from them - although as I suggested, the distinction is formal only. And although a substance is not independent of the qualities which comprise its nature, it cannot be reduced to their simple conjunction. It is the non-relational unity of these qualities, and not a mere group or bundle of them. In the next chapter I will discuss this view of substance in more detail. But for the moment, it is enough that it should be acknowledged as a plausible reply to Bradley's criticisms.

148. Bradley's criticism of the notion of substance has so far proved to be inconclusive. The remainder of Chapter II of AR is basically a critique of the 'bundle' theory of a thing.
or substance. According to this theory, a substance is simply various qualities in relation. It is clear, however, that whilst any objections Bradley raises against this theory may be important in their own right, they are not directly applicable to the definition of substance which I put forward in the previous section. But they are relevant to the proper understanding of the arguments in Chapter III. They also provide us with the basis for what I believe to be a conclusive refutation of a commonly held view of the nature of 'things'.

149. According to Bradley, if we reject the view that a substance is an entity distinct from its nature whilst still desiring to retain the general notion of substance or thinghood, our only option is to give an analysis exclusively in terms of qualities and relations. Bradley considers, and subsequently rejects, two different approaches to this type of analysis. The first is to view the relations as characteristics of the qualities. The second is to view the relations as both distinct from, and independent of, the qualities.

150. Concerning the first approach, the first point which Bradley makes is that any unity a substance might have cannot be found in any simple identity among its qualities. Each of the qualities of a substance differs from every other of its qualities. The lump of sugar which we mentioned in our previous example is said to be white and sweet. But the quality of being white, and the quality of being sweet, are not identical with each other; nor are they identical with any of the other qualities ascribed to the sugar. Furthermore, in so far as the qualities differ, they must be diverse - i.e. numerically distinct. But if each of the qualities of a substance is an entity in its own right, then the mere conjunction of these qualities
will not yield the genuine unity of a substance.

The significance of this conclusion for the view that relations are characteristics of qualities is obvious. If the relations are simply characteristics of the qualities, then they cannot provide a unifying ground between them; and the mere conjunction of diverse qualities with their respective characteristics will not, as I suggested above, provide the genuine unity which is to be ascribed to a substance.

151. But the view that relations are attributes or characteristics of the terms which they relate is somewhat obscure, and it is possible that when it is stated in a more precise form, it can avoid the above objection.

Bradley considers two ways in which this doctrine might be interpreted. If A and B are two qualities which, we will assume, are related to form a substance; and if the relation between them is to be an attribute of the qualities, then it might be understood to be an attribute of either, but not of both, qualities; or, it might be understood to be an attribute of both qualities, i.e. what is sometimes called a two-term, or dyadic, predicate.

Now, if the relation is an attribute of A alone, then there is no unifying ground between A and B that is provided by the relation. The same conclusion follows if the relation is taken to be an attribute of B alone.

This difficulty is not avoided if the relation is understood to be an attribute of both qualities. It is, of course, possible, in one sense, for two or more entities to share the same characteristic. A substance \( x \) may have the quality of being red, and another substance \( y \) may also have the quality of being red. And, providing we accept the reality of universal
characteristics, we can say of the two substances x and y that they share the same quality. At the same time we should recognize the importance of the distinction between a universal-type, and a universal-token. Two substances may share the same quality-type, but not the same quality-token. The same principle will apply to relations, if they are understood to be characteristics of qualities. The fact that two entities share the same type of relation does not mean that they share the same relation-token. Thus, two qualities might share the relation-type r, but they will not necessarily share the same relation-token. A will have a token r' as a characteristic; and B will have the token r" as a characteristic. Ultimately, however, we will have two complex characteristics Ar' and Br", composed of the qualities A and B, and the relation-tokens r' and r". But they will not, when taken in conjunction, form the genuine unity of a substance. The view that relations are characteristics of the terms which they relate cannot, then, explain the unity of a substance.

It might be suggested that, not only do the qualities share the same relation-type, but they also share the same relation-token; and that this relation-token, although not a proper constituent of either A and B, nonetheless relates them both. This, in effect, is to deny that relations are genuine characteristics of their terms, and to grant them a distinct, and independent existence. And this brings us to the second way in which the theory that a substance is simply various qualities in relation might be interpreted. Bradley's criticism is interesting, and it is worthwhile quoting the relevant passage in full.
Let us abstain from making the relation an attribute of the related, and let us make it more or less independent. 'There is a relation C, in which A and B stand; and it appears with both of them.' But here again we have made no progress. The relation C has been admitted different from A and B, and no longer is predicated of them. Something, however, seems to be said of this relation C, and said, again, of A and B. And this something is not to be the ascription of one to the other. If so, it would appear to be another relation D, in which C, on one side, and, on the other side, A and B, stand. But such a makeshift leads at once to the infinite process. The new relation D can be predicated in no way of C, or of A and B; and hence we must have recourse to a fresh relation, E, which comes between D and whatever we had before. But this must lead to another, F; and so on, indefinitely. Thus the problem is not solved by taking relations as independently real. For, if so, the qualities and their relation fall entirely apart, and then we have said nothing. Or we have to make a new relation between the old relation and the terms; which, when it is made, does not help us. It either itself demands a new relation, and so on without end, or it leaves us where we were, entangled in difficulties.

(AR pp.17-18)

152. The essential point of Bradley's argument is that any attempt to understand, or explain, the unity of a substance in terms of independent qualities and relations leads to a vicious infinite regress of relations. The regress arises in the following way. If we assume that the relation r, between the
qualities A and B is distinct from, and independent of, these qualities, then we are confronted with three diverse entities. The problem arises, according to Bradley, when we attempt to explain how, upon this assumption, these diverse entities can be united to form a single thing or substance. One plausible response would be to suggest that they are united to form a substance in virtue of their being related to a single, distinct, substantive. But this reply is inadmissible, since the analysis in question is an attempt to avoid the introduction of any entities over and above the two qualities and the relation.

If the only unities between qualities are to be 'relational' unities, and if qualities and relations are distinct entities, then any unity between the two qualities A and B must be a relational unity. But if the relation, r, is itself independent of both A and B, then it can only be united with them to form a complex unity by introducing two further relations, or a further three-term relation, which will 'unite' A with r, and B with r. But these further relations, being themselves distinct and independent entities, can only be united with A, B, and r if we introduce four further relations, or a further four-term relation which will relate our original qualities A and B, our original relation r, and the further relations introduced as a ground for uniting A and B with r.

It is easy to see that this process will lead to an infinite regress of relations. Now, an infinite regress need not be vicious, in which case no real problem arises - apart from those who object to any infinite regress as a matter of ontological economy. But, in the above case, the regress is vicious, since the two original qualities A and B can only be
united once we reach the final term of an infinite series of relations. Which is to say, they can never be united. The view that qualities and relations are mutually independent cannot, for this reason, provide a satisfactory account of the unity of a substance. The attempt to analyse a substance exclusively in terms of distinct and independent qualities and relations must, therefore, be rejected.

153. I believe that the above objection is conclusive if directed, as it is directed, against the attempt to explain the unity of a substance in terms of independent qualities and relations. I do not think that it is a conclusive objection to the reality of relations as such; since the infinite regress of relations is only vicious when interpreted in the above manner - as an attempt to explain the unity of a substance in terms of independent qualities and relations alone. But then Bradley's argument is not intended to be a criticism of relations as such; and it would be unfair to assume that, at this stage, Bradley is criticising the doctrine of 'external' relations - an assumption which has been made by some critics.

154. In the above arguments we have, I believe, the essential features of Bradley's criticism of the notion of a thing or substance - as set out in Chapter II of AR. His arguments against the reality of substances are, I have argued, inconclusive. The definition of a substance as a non-relational unity of various qualities does not seem to have been considered by Bradley; and it consequently avoids his objections to the 'relational' analysis of the unity of a substance.

His criticisms of the attempt to analyze the unity of a substance exclusively in terms of qualities and relations are, however, more satisfactory; and, in the case of the theory
that qualities and relations are distinct and independent entities, probably conclusive.

Bradley's critique of the notion of substance is not, however, restricted to Chapter II of AR. It is continued in Chapter VIII under the title "Things". The basis of the criticism in the latter chapter differs, however, from that in Chapter II. In the earlier chapter Bradley is concerned to show that no satisfactory analysis of a thing or substance can be given either in terms of an independent substantive with diverse qualities; or, in terms of distinct qualities and relations. In Chapter VIII, however, his criticisms reflect a different approach. The main point of his criticism in this chapter concerns an alleged difficulty in the view that a substance, to be real, must endure through a period of time - i.e. be a continuant. According to Bradley, any identity which a substance retains through a period of time involves the disjunction of the what from the that, of content from existence. The nature of any temporally bound substance, he claims, is thereby self-transcendent; and, in accordance with one of the criteria he uses to distinguish appearance from reality, thereby a mere appearance. Having outlined the basis for Bradley's criticism in this chapter, we can now examine his arguments in more detail.

155. He begins by pointing out that the meaning which we attach to the terms "thing" or "substance" is often vague and imprecise. Rainbows, waterfalls, and flashes of lightning, for example, all may or may not qualify as substances - depending upon the criterion used. In spite of this fact, there does, he admits, seem to be a recognizable element of consistency in ordinary usage. A substance, it would seem, ought to have some
160) degree of independence or self-existence, as well as a definite spatial location, and a temporal duration. This much at least seems to be demanded by the ordinary notion of a thing or substance. But each of these demands presents us, according to Bradley, with serious difficulties.

156. There is, first of all, the problem of the vagueness of meaning, and possible inconsistent usage, of the term "thing". This, in itself, is not an insurmountable problem; and it certainly does not entail that the notion of a substance ought to be dismissed as philosophically unsound. Once this imprecision in general usage is pointed out we ought, however, to take steps to ensure that any inconsistencies are avoided when the term is used in a technical sense. This can be achieved by the provision of clear definitions of the principal terms used in subsequent discussion. But even at a more technical level, we often encounter uses of the term "thing" or "substance" which are vague and imprecise. This fact can, I think, be attributed to the failure, on behalf of philosophers, to distinguish between at least four distinct, and historically preceded, technical senses of the term.11

There is, on the one hand, the use of the term "substance" to denote those entities which, in Aristotle's words, are "neither predicable of a subject, nor present in a subject".12

There is also the use of the term to denote those entities which are self-existent or independent. Descartes, for example, used it in this way.

We can mean by substance nothing other than a thing existing in such a manner that it has need of no other thing in order to exist.13
Thirdly, there is the use of the term to denote those entities which endure through a period of time; and which, consequently, are the subjects of change - entities which we have elsewhere described as continuants.

Fourthly, there is the view which equates substantiality with spatio-temporal position. This view is found in a number of works; but it is perhaps best exemplified in the theories of Samuel Alexander.

157. We have, then, at least four distinct technical senses of the term "substance". It is possible that there are others, but these four are, I believe, the most widely espoused, and they are particularly relevant to Bradley's criticisms. The fact that these criteria are distinct does not, however, imply that they are mutually incompatible. It is, *prima facie*, possible, for example, that all existent substances should be at once the bearers of qualities and relations without, themselves, being either qualities or relations; that they should be self-existent, capable of enduring through time and change, and have spatio-temporal positions - thereby satisfying all four criteria. How, then, is each of these views affected by Bradley's criticisms?

Let us firstly consider the relevant passage of criticism. It can be found on page 61 of *AR*.

If the connexions of substantive and adjective, and of quality and relation, have been shown not to be defensible; if the forms of space and of time have turned out to be full of contradictions; if, lastly, causation and activity have succeeded merely in adding inconsistency to inconsistency - if, in a word, nothing of all this can,
as such, be predicated of reality - what is it that is left? If things are to exist, then where and how? But if these two questions are unanswerable, then we seem driven to the conclusion that things are but appearances. (AR p. 61)

The force of this criticism is largely dependent upon our acceptance of the conclusions argued for in earlier chapters of Bradley's work. Apart from the distinction between substance and quality, we have not, as yet, considered his criticisms of the various categorial schemata and phenomena that he mentions in this passage. But is is clear that if his arguments are, any of them, conclusive, then it will be difficult to find anything which could possibly satisfy any of the above-mentioned definitions of substance. If, for example, Bradley has conclusively shown that both space and time are illusory or mere appearances, then there can be nothing which can satisfy either the third or the fourth of these definitions; and, if these were the only two consistent definitions of substance, there could, plainly, be no real substances.

We have seen, however, that the distinction between substance and quality is, in principle, defensible against Bradley's criticisms. And he nowhere offers any objection to the view that identifies substantiality with self-existence or 

Fortunately, Bradley is not content to rest his criticisms entirely upon arguments set out in his earlier discussion; and, having made the above points, he then presents us with what I
consider to be the central argument in the chapter.

158. The criticism which he raises is, as I suggested in Section 154, based upon an alleged inconsistency in the notion of a continuant, i.e. a substance which endures through a period of time. If a substance is to endure through a period of time, then it must, according to Bradley, retain its self-identity at each moment of the period through which it endures, as well as retaining its self-identity from any one moment of its duration through to any other moment. These two conditions, when taken in conjunction, are said to generate a paradox.

the continuity, which is necessary to a thing, seems to depend on its keeping an identity of character. A thing is a thing, in short, by being what it was. And it does not appear how this relation relation of sameness can be real. It is a relation connecting the past with the present, and this connexion is evidently vital to the thing. But, if so, the thing has become, in more senses than one, the relation of passages in its own history. And if we assert that the thing is this inclusive relation, which transcends any given time, surely we have allowed that the thing, though not wholly an idea, is an idea essentially. And it is an idea which at no time is ever real. (AR pp.61-63)

Now, according to Bradley, the fact that the identity of a continuant requires the identity of its present nature with its past nature, implies that its nature transcends the content of its present existence. And, wherever we have this transcendence, or disjunction of content from existence, we
have, according to one of Bradley's criteria, appearance rather than reality.

159. This argument is unsatisfactory for a number of reasons. Firstly, as I have argued in Chapter 2, the criterion which Bradley uses to condemn continuants as mere appearances - that they presuppose the disjunction of the what from the that - is itself basically incoherent.

Secondly, Bradley's criticism is based upon the false assumption that only what exists now exists at all. That he does use this assumption in his argument is evident from the following passage.

And this identical content is called ideal because it transcends given existence. Existence is given only in presentation; and, on the other hand, the thing is a thing only if its existence goes beyond the now, and extends into the past. (AR p.62)

That this assumption is false, we have argued in Chapter 1. But it is only when we realise that Bradley's criticism is, in fact, based upon this assumption, that we can understand his contention that the content of a continuant transcends its existence; i.e. its present existence. The fact that the identity of a continuant presupposes the identity of its present nature with its past nature does not, then, imply that its nature 'transcends' its existence; so that, even if Bradley's criterion for appearances were valid, we should still have no real reason for classifying continuants as mere appearances.

Thirdly, there seems to be some confusion in Bradley's
argument between two distinct senses of identity. In one sense, all entities, including substances, can be said to be identi­
cal with themselves without this implying that they have any temporal duration whatsoever. This sense of identity is re­
lected in the logical axiom $A = A$. This axiom is held to be true without any reference to time or temporal position, i.e.
tenselessly. In this sense, the identity of a substance holds whether the substance be a continuant, an occurrent, or simply atemporal.

But there is also a sense in which a substance is said to retain its self-identity through a period of time and change; so that a substance $S$, at a moment of time $t$, can be said to be identical with itself at a different moment of time $t'$, even though it may have undergone a change in its nature. Some philosophers, taking the view that substances do not have temporal dimensions, have thought that this sense of identity raises some serious problems. Difficulties arise, it is sugg­
ested, when we attempt to explain how a substance, with a particular nature at one time, can be numerically identical with a substance which has a different nature at some other mement of time. The identity involved cannot, it is maintained, be merely qualitative, since the nature of the substance diff­
ers from one moment of time to another. This is the basis of Bradley's criticism. Any identity, he suggests, must ultimately be qualitative. Mere numerical identity, is claimed to be impossible.

All identity then is qualitative in the sense that it all must consist in content and character. There is no same­
ness of mere existence, for mere existence is a vicious
We have already seen that the notion of substantial identity through change is impossible if the substance is conceived as being independent of its nature (Section 132). And yet, if it is to be the nature of the substance which remains identical, there seems to be no consistent explanation for the possibility of change.

Bradley's response is to accept this difficulty as genuine; and to then argue that any identity we attribute to a continuant must be ideal - that is, it must involve the abstraction or disjunction of some aspect of the nature of the substance at one moment of time, which aspect, in turn, is claimed to endure and recur at another moment of time. This abstracted aspect is sometimes called the essence of the substance; as distinct from those qualities, or parts of its nature, which vary over periods of time, and are called accidents or accidental qualities. But, in so far as this process of abstraction involves the disjunction of content from existence, of the what from the that, the abstracted content - upon which the identity of the continuant is said to depend - is ideal, or a mere appearance. And if the identity of a continuant, i.e. that aspect of its nature which endures through time, is ideal or a mere appearance, then the continuant itself having no identity apart from its nature, is also ideal or a mere appearance.

160. There are a number of replies to this argument of Bradley's. The first is to point out that his argument is based upon the assumption that substances cannot have temporal dimensions. If, on the other hand, we allow this possibility,
then there is no genuine problem involved in understanding the self-identity of continuants. The sense of identity involved is the same as that presupposed by the truth of the logical axiom of identity. For example, if a substance S is blue, in one respect, at a moment of time t, and red in the same respect at another moment of time t', this fact presents us with no greater conceptual difficulty than that involved in the presumption that it is possible for a substance to be the bearer of diverse, and at times contrary, qualities throughout its spatial dimensions. There is no obvious difficulty or inconsistency involved in the statement that a substance is red at one point in its spatial dimensions, and blue at another point. But if the validity of such statements is not problematic, then there seems to be no real reason for believing that the validity of analogous statements involving the qualities of a substance's temporal dimensions should be.

Secondly, as I have suggested previously, Bradley's argument is based upon the tacit assumption that existence is a quality of present entities only. Once we reject this assumption, as in Chapter 7 I argued that we ought, then his criticisms become largely groundless.

161. The view that substances may have temporal dimensions, (although not necessarily temporal parts), and, that both past and future states of a substance may exist in an unqualified sense does not, however, invalidate the notion of change. It does undermine the possibility of the analysis of change in terms of absolute becoming - in Broad's sense of that expression. But just as we can, and do, speak of a multi-coloured entity changing its colour along one or more of its spatial dimensions, so we may, I suggest, speak of a substance changing
its qualities along one or more of its temporal dimensions. The substance may, at some stage of its temporal dimensions, cease to possess some quality which it possesses at some other stage. But this does not mean that it ceases, absolutely, to possess that quality; in the same way that a multi-coloured substance does not cease, absolutely, to possess a particular colour simply because it does not possess that colour throughout all of its spatial dimensions.

162. The final point which Bradley makes in Chapter VIII is that it is often difficult, perhaps impossible, to define the bounds of a particular substance. The example he uses is the familiar one of Sir John Cutler's silk stockings, which were "darned with worsted until no particle of the silk was left in them, and no-one could agree whether they were the same old stockings or were new ones." (AR p.63). But this problem is actually a problem related to the individuation of substances, rather than to the nature of substance as such; and we will return to it in the next chapter.

163. In this chapter I have been concerned to defend the notion of substance against Bradley's criticisms. The conclusions reached at this stage are, firstly, that Bradley has not pointed out any genuine inconsistency or incoherency in the view that a substance is both distinct from, and independent of, its nature; although we did suggest a number of other reasons for believing that a substance cannot exist independently of its nature.

The second conclusion which we reached was that no satisfactory analysis of a substance could be given exclusively in terms of qualities and relations which are considered to be either mutually independent; or such that the relations are
understood to be attributes of the qualities which they relate.

We have also put forward a tentative definition of a substance as a non-relational unity of various qualities. This definition, it was suggested, avoids Bradley's criticisms, as well as the further criticisms which we raised against the notion of an independent substance. In the next chapter we will discuss this view of substance in more detail.

Finally, we concluded that Bradley's criticisms of the notion of a continuant, in so far as they did not depend upon the prior conclusion that time is illusory, are inconclusive.

Notes
2. Cf. Broad, An Examination of McTaggart's Philosophy, Vol. 1, Chapter VII.
3. See, The Nature of Existence, Section 64.
6. The regress is only vicious if the relation is understood to be a unifying ground between the substance and its qualities.
7. The most recent of these being Armstrong, ibid., Vol.1, pp.109-111.
8. See AR, pp.140-142, et passim.
10. See ETR, Chapter VI.


14. The criterion of aseity is, in fact explicitly invoked by Bradley as a criterion of reality (AR p. 321 et passim.). The equation of substantiality with aseity is, I believe, the basis for Wollheim's otherwise questionable contention that Bradley's metaphysic "centres around an implicit notion of substance" (Wollheim, F. H. Bradley, p. 191).

15. That is, unless we accept the Leibnizian view that no real substances can have spatial parts or dimensions.

16. Spinoza, for example, argued that substances do not have spatial parts, although they do have spatial dimensions; and I suppose that a similar claim might be made about temporal parts and temporal dimensions of substances.

164. In Section 147 it was proposed that a substance be defined as a non-relational unity of various qualities. This definition has, I suggested, two important merits. In the first place, it enables us to avoid the contradictions involved in the view that a substance is both distinct from, and independent of, its qualities. Secondly, and perhaps most importantly, it enables us to avoid the type of vicious infinite regress of relations which arises from the attempt to explain the unity of a substance exclusively in terms of distinct and independent qualities and relations.

But the notion of such a non-relational unity is, perhaps, somewhat unusual; and if our view of substance is to be acknowledged as a genuine reply to Bradley's criticisms, as well as providing the basis for a consistent overall theory, it will be necessary to clarify some of the conceptual implications of this view; and, at the same time, to consider some possible objections.

Furthermore, the definition of substance which we have proposed is not the only possible or actual definition. There are other views which display a prima facie plausibility; and some of these views ought to be considered. But the advantages of our view will, I think, become apparent when we come to assess the ultimate consistency of these other views.

In this chapter we will, then, be concerned with a more detailed discussion, and defence, of our view of substances.

165. Perhaps the first point we should make is that the notion of a quality is taken to be primitive in our definition. That is to say, the meaning of the term "substance" is
ultimately determined by the meaning of the term "quality". The term "quality" is, I believe, both indefinable and ultimate. We can, however, understand the meaning of the term by suggesting instances of qualities. The most obvious examples of qualities are, perhaps, the so-called 'sensible' qualities. Red, for example, is a quality; as are all colours. McTaggart has suggested the following criterion for a quality. If something is true of an entity, then that something, say q, is a quality of the entity. But this is not a definition of a quality; and McTaggart goes on to show that any attempt to define a quality in this way will ultimately involve us in a vicious circle.

Although the notion of a quality is taken to be a primitive element in our definition of a substance, this does not mean that qualities are more fundamental, in an ontological sense, than substances. Nor does it mean that qualities are capable of existing independently of substances. What is fundamental, both from an ontological, and an epistemological point of view, is the substance or concreatum. The claim that, in perception for example, we are primarily aware of simple qualities, and only derivatively or indirectly aware of substances is, as Leibniz pointed out in reply to Locke, without foundation. Furthermore, if, as I shall argue at a later stage in this chapter, it is impossible for qualities to exist except as united with other qualities to form a substance, then substances must be taken to be fundamental from an ontological standpoint.

166. The next point which should be made concerning our definition of substance is that, although the unity between the various qualities which comprise a substance is said to be
non-relational, this does not mean that there cannot be any relations between the qualities in virtue of their being united to form a substance; it only means that these relations are not constitutive of the basic unity of the substance.

167. One of the most important of the relations which exist between the qualities of a substance in virtue of their being united to form a substance is the relation of Extrinsic Determination. According to McTaggart, who first drew attention to the importance of this relation 3, between each quality of a substance, and every other quality of the substance, there exists a relation such that it is impossible either that the substance might have had a nature other than that which it does have, and still be one and the same substance; or, that any quality of the substance should differ without this determining a change in each of the other qualities of the substance. It follows, according to this principle, should it be valid, that any inferences based upon the assumption that a particular substance might have had a different nature than that which it has, are invalid.

The validity of the principle of Extrinsic Determination can be seen to follow from our definition of substance. If a substance, X, has a nature which is comprised of the qualities a, b, c, and d, then, according to our definition, X is simply the unity of these four qualities. If we assume that X might not have had the quality d, for example, then our assumption amounts to the contention that it is possible for a unity comprised of the qualities a, b, c, and d, not to have the quality d. And this contention is clearly false.

The principle of Extrinsic Determination might also be interpreted in a stronger sense. Not only is the assumption that
a substance might have had a different nature than that which it has invalid, but we also have no right to assume, as McTaggart has pointed out\(^4\), that had any of the qualities of the substance been different, then the others would have both remained, and remained the same. If the substance \(X\), for example, did not have the quality \(d\), then we have no right to assume that there would have been a substance \(Y\) in its place, with all or any of the qualities of \(X\) except \(d\). This conclusion follows from the fact that every quality of a substance has the further quality of being united with each of those particular qualities which constitute the nature of the substance; and that, if it did not have this further quality, it would not be the particular quality that it is. The quality \(d\), for example, has the further quality \(d'\) of being united with \(a\), \(b\), and \(c\) to form \(X\); and if it did not have this quality \(d'\), it would not be the quality \(d\).

It might be objected that, in making this last claim, we have presumed that the qualities of a substance are particular, rather than universal. On the other hand, if the qualities of a substance are universal, rather than particular, then our conclusion, it might be argued, would not follow. Redness, for example, it might be suggested, does not cease to be redness simply because one or more of its particular instances ceases to qualify a certain substance. But this objection is clearly valid only upon the assumption that there can be universal qualities. In Chapter 7 I will argue, however, that all qualities are necessarily particular; and that their nature, hence their identity, is determined by their relations with other existent entities.\(^5\) It is also valid only upon the assumption that such 'universal' qualities are capable of retaining their
self-identity irrespective of the nature and number of their particular instantiations. But it seems to me that there is no sound reason to believe that this assumption is true. For it is a quality of the 'universal' redness that it is instantiated by X; and it is clear that such universal qualities, if they are real, are no more capable of retaining their self-identity independently of those qualities which comprise their natures than substances are.

168. There is further conclusion which follows from the validity of the principle of Extrinsic Determination. In Chapter 1, when discussing the relation between counterfactual conditional judgements and the reality of possible worlds, we remarked that Lewis' argument in favour of the reality of such possibilia was based upon the unargued assumption that a substance is more or less independent of its nature; and, that things might therefore be, or have been, other than they are. We are now in a position to support our original contention that this assumption is unjustified with an argument based upon a more detailed consideration of the nature of substance. On the basis of the conclusions reached above concerning the principle of Extrinsic Determination, we can see that counterfactual conditional judgements, being based upon the assumption that substances are more or less independent of their natures, are necessarily invalid. So, one of the main reasons for assuming the reality of possible worlds - that they are needed to provide truth conditions for counterfactual conditional judgements - is thus undermined. Once again, it should be pointed out that our conclusion does not imply that judgements about possibilities are false or invalid; only that they should be analysed in such a way that the reality of possibilia is not
169. We have spoken of the relation of Extrinsic Determination as if it is between the qualities of a substance. It is not, strictly, an attribute or further quality of these qualities; although it does determine the relational quality of being related by this relation in each of the terms which it relates. In these respects, the relation of Extrinsic Determination is like all relations. The fact that relations are distinct from, and do not inhere in, their terms does not, however, compromise the unity of the substance whose qualities they relate, since the relations between the qualities of a substance exist in virtue of, rather than as constitutive of, the unity of the substance.

It is also true that any relation between the qualities of a substance will also, as we pointed out earlier in our discussion, determine an infinite regress of relations, as well as a corresponding number of relational qualities in the terms which it relates. But the regress of relations will not, in this case, be vicious; since it is not necessary that the series of relations generated be completed before we can truly say that the original qualities are united. Nor is it necessary that the regress be completed before the qualities of the substance can truly be said to be related, since the regress is generated as a consequence of the qualities be related, and not as a basis for their being related.

170. Having briefly considered the question of the status of the relations between the qualities of a substance, we will now consider that of the status of relations between substances.

If we assume that there is more than one substance, then we
must, I believe, conclude that there are relations between these substances. Even if there are only two substances, then these substances must differ from each other; a relation of difference thereby exists between them. From this apparently trivial conclusion we are, however, led to a very important result; namely, that the relations between substances determine the nature of the substances which they relate. The truth of this conclusion can be demonstrated by the following argument.

Any two substances X and Y, which are related by the relation r, must, in virtue of this fact, each have as amongst the qualities which comprise their respective natures, the quality of standing in this relation with the other substance. Now, to say that a substance has a particular quality can only mean, according to our analysis, that this quality forms part of the nature of the substance. And this, in turn, means that the quality is one of those qualities which form the unity of the substance. But in accordance with the principle of Extrinsic Determination, it is impossible that a substance should not have any of those qualities which it does have. If a substance has the quality of standing in a particular relation to another substance, it necessarily has this quality. Thus, any substance which stands in a relation to some other substance, necessarily (i.e. as a consequence of its nature) stands in that relation to the other substance.

In this way it is possible to retain the traditional view that relations between substances are distinct from these substances, whilst accepting the view that these relations at once determine, and are determined by, the substances which they relate.
The view that relations between substances at one determine, and are determined by, the nature of these substances is, perhaps, paradoxical. But it is paradoxical only if we make two unjustified assumptions: That the relation of determination (by which I mean the relation of intrinsic determination - see Section 4) is an asymmetrical relation; and, that a relation cannot exist between a quality and another relation. Concerning the first assumption, we can see, from the following example, that the relation of intrinsic determination is, at least in some instances, symmetrical. If a man is married, then the relation of marriage between himself and his wife determines that he has the quality of being a husband; whilst the quality of being a husband determines that the man stands in a relation of marriage to his wife. The relation of intrinsic determination thus holds between the quality of being a husband, and the relation of marriage. And in this case the relation is symmetrical. This example is also sufficient to show that the second assumption is false; since the relation of intrinsic determination holds, in this case, between the quality of being a husband and the relation of marriage.

171. In Section 169 I suggested that the occurrence of a relation between any qualities of a substance determines both an infinite number of relations, and an infinite number of relational qualities in the terms which it relates. But it is also true that any relation between two or more substances, or between a substance and a relation, will determine an analogous regress of relations, and a corresponding infinite number of relational qualities in the substance which it relates. For example, if we have two substances X and Y standing in a relation r, then this fact determines that both X and Y shall
have, as among the qualities which comprise their respective natures, the quality of standing in the relation \( r \). But it is also true, as Bradley pointed out with respect to the attempt to understand the unity of a substance in terms of independent qualities and relations, that a further relation exists between any relation and its terms. Thus, between \( X \) and \( r \), there will be a further relation, which we shall call \( r' \); and this relation will, in turn, determine a further quality in \( X \) — namely, the quality of standing in relation to the relation \( r' \). Now, between this last quality, which we shall call \( q \), and the relation \( r' \), there will be a further relation \( r'' \), and this will determine in \( X \) the occurrence of a further quality — that of standing in relation to \( r'' \) — and so on, indefinitely.

The fact that any substance will stand in an infinite number of relations and, consequently, have an infinite number of relational qualities, does not, however, point to any difficulties for our view of substance. The regress of relations in this case is not vicious; since the truth of the original judgement that \( X \) is related to \( Y \) by the relation \( r \), is not dependent upon the subsequent regress of relations being completed.

172. We have reached the conclusion that any substance which is related to any other substance must, in virtue of the subsequent regress of relations and relational qualities, have an infinite number of qualities. That is to say, there can be no substances with a \textit{simple} nature. But although there can be no substances which have a simple nature — i.e. which have only one quality — all substances, I will now argue, are simple in the sense that they do not have parts.

173. The relation of part to whole is generally thought to
be validly applicable to individual substances. McTaggart, for example, has claimed that all substances are infinitely divisible, and that they therefore have an infinite number of parts. This view, he claims, is evidently true. 6

On the other hand, there are philosophers, such as Leibniz, who make a distinction between compound and simple substances; and while all compound substances can substances can, he maintains, rightly be said to have parts, this is not true of the simple substances or monads of which the compound substances are comprised.

1. The monad, of which we shall speak here, is nothing but a simple substance which enters into compounds; simple, that is to say, without parts.

2. And there must be simple substances, because there are compounds; for the compound is nothing but a collection or aggregatum of simples. 7

The soundness of Leibniz' argument is debatable. The conclusion that there must be simple substances because there are compound substances, only follows because he has implicitly defined a compound substance as an aggregate of simple substances. But there is nothing in the notion of a compound substance that determines that it be comprised of simple substances. It might be suggested, for example, as McTaggart has suggested, that all compound substances are comprised of further compound substances ad infinitum. Leibniz' argument would appear, then, to involve a simple case of question-begging. But the truth of the conclusion that substances are without parts can, I believe, be established by a different line of
174. If a substance is to have parts, then relations must exist between each of the parts, and every other part of the substance. A relation must also exist between each part of the substance, and the substance as a whole. The first type of relation we may call a part/part relation; and the latter type a part/whole relation. Now these two facts preclude the possibility that the unity of the substance can be a simple or non-relational unity. But, as I shall now argue, unless the unity among the parts is a non-relational unity, we are faced with a vicious regress of relations similar to that discussed in the previous chapter.

Let us consider, firstly, the relation between the individual parts of a substance, and the substance as a whole, i.e. the part/whole relation. This relation might be analysed in either of two distinct manners. Each part of the substance might be understood to have a separate relation to the whole - in which case the part/whole relation is a two-term or dyadic relation. Or, each part of the substance might be understood to be a single term of an n + 1-term relation (where n represents the number of parts which the substance has), which relates each part of the substance to the substance as a whole. On either interpretation a vicious regress arises. If the relation is understood to be a dyadic relation, then we must also assume that the three distinct entities, viz. the substance as a whole, the individual part of the substance, and the relation between them, can only be united to form a complex whole by introducing a further relation as the ground for their being united - and so on, indefinitely. This regress of relations is vicious for the same reason that the attempt
to explain the unity of a substance in terms of distinct qualities and relations led to a vicious regress; namely, that we cannot arrive at a genuine unity among the original terms of the relation until we reach the final term of an infinite series - i.e. never. A part of a substance, and the substance as a whole, cannot, then, form a genuine unity.

The same argument will apply, mutatis mutandis, if the part/whole relation is understood to be an \( n + 1 \)-term relation.

175. If we turn from the consideration of the relation between the parts of a substance, and the substance as a whole, to a consideration of the relations between the individual parts, we will be faced with the same kind of problem.

Between any two parts, A and B, of a substance there will be a relation \( r \), which professes to unite A and B. However, since A, B, and \( r \) are, themselves, distinct entities, they can only be united if we stipulate a ground for their being united; and this can only be another relation \( r' \). But \( r' \) is itself a distinct and independent entity, and it can only be united with A, B, and \( r \) if we stipulate a further ground distinct from the four terms A, B, \( r \) and \( r' \) for their being united. This will be yet another relation \( r'' \) which, in turn, requires a further, distinct relation to serve as the ground for its being united with our previous four terms. In this way an infinite regress of relations is generated. Furthermore, this regress is vicious, since the parts A and B can only be united when we reach the final term of the infinite series of relations. Which is to say, they cannot be united. If a substance is to have parts, then these parts cannot be related so as to form a genuine unity.
176. The assumption that substances have parts thus leads us to two conclusions. The first is that there cannot be any genuine unity between the individual parts of the substance, and the substance as a whole. The second is that there cannot be any genuine unity between the individual parts of the substance. I believe that it would, however, be generally admitted that part of what is meant by a *whole* is that its parts should form genuine unities both with each other, and with the whole. But as we have seen in the previous two sections, the parts of a substance cannot form a genuine unity. The parts of a substance cannot, therefore, form a whole. And this surely is a *reductio ad absurdum* of the assumption that substances have parts.

177. We have seen that substances must be simple, or without parts. We have also claimed that the relations between substances are not attributes, i.e. they do not inhere in, the substances which they relate; although the relations between substances at once intrinsically determine, and are intrinsically determined by, the natures of the substances which they relate. These two conclusions lead us to the further conclusion that a *group* of substances is not itself a substance, or a genuine substantive.

By a *group* of substances I mean a collection of substances, which collection is determined by denotation. A group of substances differs from a class of substances in that the latter is determined by a class-concept. The pen on my table, the coffee-cup on the floor, and the chair in the corner of the room form a group of substances. The collection of white tea-cups, on the other hand, is a class of substances, and is determined by the class-concept *white tea-cup*. It is possible,
however, for the members of a group to form a class. The various substances in my room form a group; but they might also be said to form a class, determined by the class-concept "substances in my room". The members of a group do not always, however, form a class, as is evident from the example of the pen, the coffee-cup, and the chair.

Now, according to the view of substance at which we have now arrived, it is impossible for a substance to have parts. It is therefore impossible for one substance to be a part of another substance. But if a group of substances is, itself, to be thought of as a substance, then the members of the group would need to be parts of the group; and this, we have seen, is impossible. Accordingly, if it is impossible for a group of substances to be a substance, then it is impossible for the Universe, which is a group of substances, to be a substance. In this respect, our view of substance differs from the views of McTaggart and Armstrong, for example, who both claim that the Universe, as a group of substances, is itself a substance.

178. In Section 162 I briefly mentioned Bradley's query as to the identity of Sir John Cutler's silk stockings. I said that this is in fact a problem about the differentiation of substances, and postponed discussion until this chapter. At this stage we can offer a reply to Bradley's query. The problem of the identity of the stockings through a process of gradual material replacement arises, I suggest, only upon the assumption that the stockings - which are divisible into a number of replaceable constituents, and hence are groups of substances - are genuine substances. But this assumption has now been shown to be false. The stockings, in so far as they are divisible into 'parts', are, in fact, groups of substances.
Any identity they have is therefore determined by their constituent members; if the members change, then the stockings are no longer the same stockings.

179. The view that the Universe or, more generally, any group of substances, is not a substance might be thought to create a serious difficulty. Ordinary language would seem to suggest that, although groups of substances may not be actual substances, they are most certainly substantives. How is this fact to be reconciled with our conclusions? Although we have given an explanation of the way in which various qualities can be ascribed to a substance, we have not, thereby, given an account of the way in which qualities can be ascribed to groups of substances. The Universe, for example, is a substantive which, according to our view, is not a substance. How are we to understand the relation between the Universe and its various qualities?

There are, I believe, two ways in which this problem might be approached. The first is the most drastic, although it is nonetheless defensible and consistent. It is to simply point out that it is impossible for any group of substances, including the Universe, to be the bearers of qualities. To be the bearer of a quality, i.e. to be a genuine substantive, an entity must be genuinely one entity. But a group of substances is not genuinely one entity; and any judgement which ascribes a quality to a group of qualities, qua group, is demonstrably false.

Although perhaps somewhat paradoxical, this is, I believe, a defensible position to take. Whatever conflict there may be between this view, and that reflected in ordinary language, might simply be put down to an element of metaphysical naivety.
on the part of the latter. The view that groups of substances cannot be genuine substantives can be shown to be true, moreover, by an argument similar to that which we used to show that groups of substances are not substances. If a group of substances is to be ascribed a quality, then the quality is not to be ascribed to the members of the group taken severally. It must be ascribed to the group taken as a whole. But the contention that a group as a whole has a quality can only be true if a group of substances can form a genuine unity. And we have seen that this is impossible. A group of substances cannot, therefore, be a genuine substantive.

180. I have argued that judgements which profess to ascribe qualities to groups are, strictly speaking, false. But this does not necessarily imply that they are meaningless. Although ostensibly judgements about a group as a whole, in many cases these judgements can be understood to be, in fact, judgements ascribing qualities to individual members of the group; and this provides us with the second approach to the problem of groups which are, or appear to be, genuine substantives. If it is said, for example, that the Universe as a whole is evil; or, that it is more evil than good, we might understand these judgements to mean that the total amount of evil which characterises the individual substances which make up the Universe is greater than the total amount of goodness which characterises them. Or, again, that with respect to the individual substances which make up the Universe, there is a greater number which are characterised by a preponderance of evil than are characterised by a preponderance of goodness.

In this manner we may distinguish between the qualities of a group, and the qualities within a group. Judgements about
the qualities of a group are, as I have argued, invalid. But in many cases, such judgements may be interpreted to be about qualities within a group. The Universe, for example, being a group of substances, is not a genuine substantive. It cannot, therefore, strictly be said to be either good or evil. But this is not true of the individual members of the Universe, which are genuine unities, and therefore capable of being ascribed value-qualities. For this reason, although judgements about the value of the Universe are, strictly speaking, false; judgements about value within the Universe (i.e. about the value-qualities of the individual substances which make up the Universe) may be both significant and true. 10

181. Apart from judgements which profess to ascribe value-qualities to groups of substances, one of the most obvious classes of judgements which are commonly thought of as involving the ascription of qualities to groups is the class of what may be termed enumerative judgements - judgements which are concerned with the number of members which comprise a group. The judgement "The group comprising the pen on the table, the coffee-cup on the floor, and the chair in the corner of the room, has three members", is an example of an enumerative judgement.

A problem arises, however, when we attempt to give a correct analysis of such enumerative judgements. The above example might, for instance, be understood to mean that the group, as a whole, has the quality of having three members. Enumerative judgements have, in fact, been understood by some logicians to be essentially predicative. 11 But we have seen that it is impossible for a group, qua group, to be the bearer of qualities. If enumerative judgements are essentially predicative, then
they must, when applied to groups, be false. It would be unreasonable, however, to deny that enumerative judgements correspond, in some sense, to a genuine fact about the world. How is it possible to preserve the significance of such judgements whilst insisting that, when understood as involving the ascription of a quality to a group, they are false?

There are, I believe, a number of possible answers to this question. But perhaps the most plausible is to suggest that enumerative judgements are not strictly predicative; that they do not satisfy the traditionally accepted subject-predicate form of judgements. It might be suggested, for example, that such judgements are essentially relational, rather than predicative; that is to say, that they involve an assertion that certain entities are related in a particular fashion. The prejudice against such relational judgements has, I think, been successfully removed by Russell; and there seems to be no obvious reason for rejecting the possibility that enumerative judgements are to be included among the class of such judgements.

182. But it is one thing to deny that enumerative judgements are predicative. It is another thing to suggest a satisfactory alternative analysis. There have been, of course, attempts to provide such an analysis. One of these is to interpret enumerative judgements in terms of statements about class-membership relations. A second is to interpret them as asserting a relation between the members of a group, and an abstract entity - a number. But there is one which, to my knowledge, has not been considered; although it is at once relatively straightforward, and faithful to the fact which it professes to explain. If the truth of the judgement that a
particular group has three members is to be determined by whether or not it corresponds to some fact, then the fact in question cannot, as I have explained, be the fact that the group, as a whole, has the quality of having three members. It may, however, be understood to correspond to a different fact; namely, the fact that the group-membership relation which exists between the members of this group is triadic or three-termed. In this way, what is, according to one analysis, a false judgement involving the ascription of a quality or predicate to a group as a whole, may in fact be understood to be a true judgement concerning the nature of the relation between the members of the group. This particular analysis may be generalised to cover any instance of an enumerative judgement; so that, for any judgement of the form "The group G has n members", we may understand this to mean that the group-membership relation which exists between the members of the group G, has n terms.

It is true that the judgement, "The group G has n members", and the judgement, "The group-membership relation which exists between the members of the group G has n terms" convey slightly different meanings. But this does not preclude the possibility that they both correspond to the same fact. The difference in meaning might simply be put down to the fact that each judgement expresses the same fact from a different point of view; in much the same way that two different perceptions can be said to perceive the same substance from different perspectives.

Our analysis of enumerative judgements does involve the assumption that the group-membership relation is not determinate with respect to the number of terms which it may relate.
But this assumption is not gratuitous. There are many relations which have this characteristic. The relation of parenthood, for example, does not have an *a priori* limit upon the number of terms which it may relate; although, as is the case with the group-membership relation, the number of terms which it relates will be determinate in any particular instance.

183. We have seen examples of the way in which judgements that profess to ascribe qualities to groups of substances can be interpreted as either judgements involving the ascription of a quality, or a set of qualities, to the individual substances which comprise the group; or, as judgements concerning the nature of the group-membership relation which exists between the members of a particular group. But it may not always be possible to give a satisfactory alternative analysis of judgements which profess to ascribe qualities to groups of substances; and where this is not possible, we ought to consider the judgements in question to be false.

184. Two important points have, I believe, begun to emerge from our discussion. The first concerns the nature of relations. When we considered the attempt to explain the unity of a substance in terms of distinct qualities and relations, we found that we were faced with a vicious infinite regress of relations. An analogous regress prevented us from accepting the possibility that substances have parts. And this, in turn, led us to the conclusion that a group of substances is neither a substance, nor a genuine substantive.

It seems clear, then, that there is something fundamentally wrong with any attempt to unite distinct entities by means of relations. This contention is, of course, probably the central thesis of Bradley's work. But whereas Bradley was led to
conclude that relations as such, and, consequently, any form of relational experience, cannot be ultimately real; the conclusion that ought to have been drawn is not that relations are unreal, but that they do not unite the terms which they relate. That is to say, relations *relate*, but do not unite, their terms. There are, as such, no genuine relational or *synthetic* unities. Once stated, this conclusion does, I think, present itself as a truism. But it is a truism which is often neglected by philosophers. An adequate discussion of this point would, however, take us beyond the immediate concerns of this chapter, and I shall postpone it until the next.

185. The second point concerns the emphasis that I have placed upon viewing a substance as an individual, non-relational unity. In this respect, our view of substance is similar to Bradley's views on the nature of the Absolute. It is also in agreement with, without presupposing, Leibniz' principle that what is not truly one entity, is not truly one entity. But it differs from the tradition which considers *particularity* to be the essential and even definitive characteristic of substances. Our emphasis upon the unity, rather than the particularity of substances has, however, a number of advantages.

In the first place, the notion of particularity is not without ambiguity. Particularity is sometimes equated with *haecceity* or *thisness*; at other times with *individuality*, with *uniqueness*, or with spatio-temporal position. The failure, in some discussions, either to recognize, or to distinguish between these distinct senses of the term often generates serious confusions.

But secondly, and perhaps more significantly, it is, as I
shall now argue, not clear that particularity in any of the above senses can be considered to be either an essential, or a definitive characteristic of substances.

186. Let us begin with haecceity. It seems clear that the notion of haecceity or 'thisness' - like the notion of 'newness' - only has meaning within the context of a cognitive situation. That is to say, a substance has haecceity only in so far as it is either a cognitive act, or the object of a cognitive act. Now, unless we assume that all substances are either cognitive acts, or the objects of cognitive acts, haecceity is not an essential, or even a common feature, of substances. And it is obvious that any judgement which asserts that all substances are either cognitive acts, or the objects of cognitive acts, must be synthetic. It is not generally considered to be a part of the meaning of the term "substance" that its extension be limited to those entities which are constituents of cognitive situations. Particularity, then, in the sense of haecceity, is at best a contingent feature of substances.

But haecceity cannot be considered to be a definitive characteristic of substances either. Even if we assume that all substances are either cognitive acts, or the objects of cognitive acts, it does not follow that only substances have these characteristics. It has been suggested, for example, that there is a species of awareness which has for its objects qualities and relations per se, rather than substances, or the qualities and relations of substances - in which case it would appear that qualities and relations may also satisfy the criterion for haecceity.

187. In reply to the above argument, it might be suggested
that I have failed to give an adequate explication of the notion of haecceity; and that, as well as the aspect of 'thisness', there is also a sense in which haecceity is understood to confer uniqueness upon a substance.

This criticism would, however, be unjustified. As I suggested in §85, the various senses of the term "particular" are often confused or conflated. Such is the case, I believe, with the wider meaning of haecceity - 'thisness' is either confused, or conflated with uniqueness.

By uniqueness, I mean the quality of non-repeatability. When applied to substances, it means that a substance has a nature which is not shared, or cannot be shared, by any other substance. A substance which is unique might be said to be either essentially unique or contingently unique. It is essentially unique if it has a nature which cannot, in principle, be repeated. It is contingently unique if, as a matter of fact, its nature is not repeated or shared by another.

Now we can, I believe, show that haecceity neither implies, nor is equivalent to, uniqueness. Consider, for example, the case of what I have termed 'confused' perceptions. The characteristic feature of a confused perception is that two or more substances are perceived as one substance. In such cases, the description, "This (that I perceive)", satisfies more than one substance. Let us assume, further, that the principle of the Dissimilarity of the Diverse is false, and that it is possible that there are two substances which share the same nature. In the case of a confused perception, it would thus be possible for two substances with identical natures to be perceived as one substance. But if we assume that haecceity is
either equivalent to, or implies, uniqueness, then we may conclude that the judgement, "This (that I perceive) is unique", is necessarily true. But if the description, "This (that I perceive)" is satisfied by two substances which are, \textit{ex hypothesi}, qualitatively identical, then the judgement, "This (that I perceive) is unique", will be false. Haecceity, accordingly, neither implies, nor is equivalent to, uniqueness.

Although our argument, in the above form, is based upon the assumption that the principle of the Dissimilarity of the Diverse is false, our position would, in fact, be strengthened should the principle be true; since, in that case, the uniqueness of any two substances would be implied by their numerical diversity, and not by the fact that they are the objects of cognitive acts; i.e. by their 'haecceity'.

188. I have argued that haecceity is neither an essential, nor a definitive characteristic of substances. I have also claimed that haecceity does not imply uniqueness. We can now consider the question of the uniqueness of substances in more detail.

There is firstly the question of whether or not uniqueness is a definitive feature of substances. The traditional distinction between universals and particulars was originally understood to be a distinction between what is essentially repeatable, and what is essentially unique. But it has often been conflated with the distinction between substances and their characteristics; with the result that substances have been assumed to be essentially unique, whilst qualities and relations have been considered to be essentially repeatable.
It is, I think, in this sense, that substances have often been referred to as 'particulars'. But it is fairly obvious that the distinction between universals and particulars is not equivalent to the distinction between substances and qualities. There are many qualities, for example, which are essentially unique - such as the quality of being the most virtuous man in Australia. Uniqueness is not, therefore, a definitive feature of substances.

But is it an essential feature? That is to say, is it possible for two substances to share the same nature?

We should firstly note that, according to our definition, a substance is not independent of its nature - it is simply the unity of those qualities which make up its nature. We can therefore reject the possibility that there may be two identical substances which have different natures. It should also be noted that there is no real basis for an ontological distinction between what have been termed 'original' qualities, and merely relational qualities. The nature of a substance comprises all those qualities which may truly be ascribed to it, including relational qualities. And, according to the principle of Extrinsic Determination, it is impossible that a substance should either fail to have any of those qualities which it does have; or have qualities other than those which it has. The fact that a substance has certain relational qualities cannot, as such, be considered to be a contingent feature of that substance. We can thus reject the possibility that there might be two identical substances which have different relational qualities.

Thirdly, we can reject the possibility that there might be
two identical substances which are numerically different, or diverse. The fact that two substances, A and B are numerically different implies that they are dissimilar - since A will have the quality of being numerically different from B, and B will have the quality of being numerically different from A. And neither quality can be shared by both substances.

On the basis of these considerations we can, I think, conclude that it is impossible for two substances to share one and the same nature. And this, of course, is what is meant by the principle of the Dissimilarity of the Diverse. We can therefore consider this principle to be established. But even if the principle could be shown to be false, our view of substance would not be seriously affected - since we have not equated substantiality with uniqueness.

189. It has been argued that all substances are unique. And, in so far as this conclusion does not follow directly from our definition of substances, it is a synthetic truth. But it is also an a priori truth, since we have not based our argument for this conclusion upon any empirical premisses.

On the other hand, the conclusion that all substances are individual can be seen to follow from our definition of substances. By 'individual', I mean indivisible, or without parts - what we have elsewhere described as 'simple'. Earlier, I argued that the assumption that substances have parts leads to a vicious regress of relations; and that the assumption should, accordingly, be rejected. This conclusion supported our then tentative definition of a substance as a non-relational unity. But our view of substance is also supported by the fact that the terms "individual" and "substance" or
"thing" are often used interchangeably in ordinary language. The fact that the individuality of a substance can be seen to follow from our definition; and the fact that the above terms are used interchangeably in ordinary language, show that our definition is not arbitrary. 17.

Although the quality of individuality can be considered to be an essential feature of substances, it is not—as with uniqueness—a definitive feature; since there are also many qualities which are simple, and therefore individual.

Having drawn a distinction between haecceity, uniqueness, and individuality; and having subsequently shown that none of these qualities can be considered to be at once a definitive and an essential feature of substances, we can now consider the relation between substance and spatio-temporal position.

190. We may begin our discussion by distinguishing between that theory which equates substance with spatio-temporal position; and that which considers spatio-temporal position to be an essential feature of substances. We should also distinguish these two theories from the theory that equates particularity, as distinct from substance or substantiality, with spatio-temporal position. I will consider each of these theories in turn, although it is clear that any criticism of the second view will be more or less relevant to the first view.

191. There are several reasons for doubting the soundness of the first theory. The first is that, by equating substance with spatio-temporal position, the proposition that there can be no substances which lack either a spatio-temporal dimension or spatio-temporal qualities, becomes analytically true. And yet even if this theory is true, it is surely not true simply
by definition. Furthermore, such a restriction upon the extension of the term "substance" is quite arbitrary; as is shown by the fact that some philosophers, such as Leibniz, have argued that no substances can have spatial dimensions; and others, such as McTaggart, have argued that no substances can have either spatial or temporal qualities.

Secondly, by equating substance with spatio-temporal position, it is not clear whether it is meant that every spatio-temporal position is a distinct substance; or, whether it is meant that a substance may occupy more than one such position or point-instant. If it is meant that every point-instant is a distinct substance, then we would seem to be committed to the conclusion that no single substance can have a spatial or a temporal dimension - since to have a spatio-temporal, or a spatial or a temporal dimension, it is necessary that a substance should occupy more than one point-instant, or point or instant. This conclusion is not, in itself, absurd or troublesome. But it does present a problem for those who, like Alexander, wish to equate spatio-temporal position with substance; whilst insisting that all substances have spatio-temporal dimensions. If, on the other hand, it is meant that all substances have spatio-temporal dimensions, then we would be committed to the view that substances may have parts - each point-instant being a part of a substance. But as we have seen, the assumption that substances have parts is unacceptable.

Thirdly, it has been capably argued that point-instants in particular, and spatio-temporal positions in general, are either abstractions or logical constructions, derived from
something more fundamental; namely, events or processes. In which case the notion of a substance is not a genuine or primitive category \(^{19}\).

192. Apart from the somewhat questionable appeal to physics, or "total science" as the final arbiter in questions of ontology, the main reason for believing that spatio-temporal position is an essential feature of substances seems to be the belief that spatio-temporal position is essential for the individuation or differentiation of substances. But this view is unsatisfactory.

In the first place, it seems obvious that, in so far as spatio-temporal position does act as a basis for individuation, i.e., as a condition which determines uniqueness, it does so in virtue of the fact that it determines within each substance, a set of relational qualities which are unique or non-repeatable; so that substances are differentiated not so much by the fact that they have a spatio-temporal position, as by the fact that they have qualities which are not shared by any other substance.

Secondly, spatio-temporal position can only act as a basis for individuation if there is only one system of spatio-temporal co-ordinates. But it would seem to be possible, as Bradley and Broad have suggested \(^{20}\), that there should be more than one such system; in which case spatio-temporal position alone — without specifying in which system it is located — cannot ensure uniqueness. Furthermore, diverse spatio-temporal systems can only be differentiated by some criterion other than their spatio-temporal position; i.e. by some unique quality.
Thirdly, it is possible to individuate a number of kinds of substances which have no ostensibly spatial qualities or spatial positions, and which do not differ in their temporal positions. There are, for example, mental acts and states, and certain auditory and olfactory sensa which have no ostensibly spatial qualities, positions, or dimensions; and, insofar as they are simultaneous, which do not differ in their respective temporal positions. And yet, they are still capable of being individuated. Thus, spatio-temporal position is not essential for the individuation or differentiation of substances.

193. But possibly the most important reason for rejecting the view that spatio-temporal position is an essential or a definitive feature of substances is that it leads to the unacceptable conclusion that substances have parts. That it does lead to this conclusion can be shown by the following argument.

If a substance occupies more than one point-instant, then it must have both a spatial and a temporal, or a spatio-temporal dimension. I consider this conclusion to be evidently true. And if a substance has either a spatial or a temporal, or a spatio-temporal dimension, then it is divisible throughout these dimensions. But if a substance is divisible through any of its dimensions, it must have parts in that dimension. So, if a substance occupies more than one point-instant, it must have parts.

The only way of avoiding this conclusion, it seems to me, is to insist that although all substances have spatio-temporal positions, no substance can occupy more than one point-
instant. But this reply is unsatisfactory for the reason that a single point-instant is not an indivisible unit of space-time. It is, rather, an ideal limit of divisibility. A substance which occupied only a single point-instant would not occupy a spatio-temporal position as such; since a point-instant is a minimal limit upon spatio-temporal occupancy.

194. The conclusion that any substance which has a spatio-temporal position must have parts is important for another reason. It is a basic precept of classical or 'Cartesian' materialism that there are material substances whose definitive feature is that they have a spatial, and perhaps a spatio-temporal, position. Now, we have seen that it is impossible for a substance to have a spatio-temporal position without this determining that the substance has a spatio-temporal, or simply a spatial, dimension. But if a substance has either a spatial, or a spatio-temporal dimension, then it is divisible, and therefore has parts, throughout that dimension. And the conclusion that substances have parts, we have seen, leads to a vicious infinite regress of relations. We must conclude, then, that no substances can have a spatio-temporal, or a merely spatial, position. That is to say, classical materialism is false.

In this respect, our views on the nature of substances are similar to the conclusions of Leibniz and McTaggart. But the arguments which we have used to support these views are quite different from those used by either philosopher; and, in the case of McTaggart, are based upon very different premisses. 21

195. Having argued that we cannot identify substance with spatio-temporal position; and, that we cannot consider spatio-
temporal position to be an essential feature of substances, we will now briefly consider the view which equates particularity - in any of the three senses which I have mentioned - with spatio-temporal position.

We will begin with that view which equates haecceity with spatio-temporal position. In §186 I suggested that a substance has haecceity or 'thisness' only in so far as it is either a cognitive act, or the object of a cognitive act. Now, unless we assume that all cognitive acts, or objects of cognitive acts, have spatio-temporal positions, it is clear that we cannot equate haecceity with spatio-temporal position. And there are, I believe, conclusive reasons for rejecting this assumption.

In the first place, there are very good reasons for accepting the Cartesian view that all mental substances, including cognitive acts, are essentially non-spatial. In which case, it would seem to follow, no cognitive acts can have a spatio-temporal position. But cognitive acts can certainly be truly described as 'this' or 'that' cognitive act; and therefore as having haecceity. It is also possible, when introspecting, to be aware of cognitive acts, as well as certain olfactory and auditory sensa, as objects; so that there may be objects of cognitive acts which have haecceity, but which cannot unproblematically be ascribed any spatio-temporal position. The only obvious reason to doubt that mental substances have no spatio-temporal position would be if, as has been claimed by some materialists, mental substances are, in fact, parts of the brain; in which case, since all parts of the brain are spatio-temporally located (presumably), all mental substances
must have a spatio-temporal position.

On the other hand, we have, I believe, established that there can be no material substances; so that mental substances, if they exist, cannot be identified with parts of the brain. There is, then, no sound reason to doubt our initial contention that mental substances lack a spatio-temporal position. In which case our example does show that spatio-temporal position cannot be equated with haecceity.

196. It might be objected that even though we may have shown that haecceity cannot be equated with spatio-temporal, or simply spatial, position, the fact that some mental substances can be described as being simultaneous with one another, or as being either past, present, or future, implies that they can nevertheless be assigned a temporal position; and that this temporal position alone might be equated with haecceity.

In one respect, this objection is significant. If two substances can be truly described as being simultaneous with each other, or as being either past, present, or future, then it would seem to follow that they do have a temporal position. But it does not show that temporal position can be equated with haecceity. Now, a substance might be said to have a temporal position in either of two ways: as a term in an A-series; or, as a term in a B-series. These two types of series differ in that the terms of an A-series are ordered by their intrinsic temporal qualities of being either past, present, or future; whereas the terms of a B-series are ordered by the relations, or corresponding relational qualities, of being earlier than, simultaneous with, or later than. The fact that
a substance is a term in either series cannot, however, be equated with its assumed haecceity. Consider, firstly, the terms of a B-series. The birth of Christ, and the birth of Muhammad, can both be said to have positions in a single B-series – since the former is earlier than the latter. But there is nothing, in this fact alone, which determines that either should be described as this or that event.

Similarly, the fact that an event can be ascribed a position in an A-series, i.e. as either past, present, or future, does not, in itself, determine that the event should be described as 'this' event. At best, it might be claimed that presentness is a necessary condition for 'thisness' or haecceity. But even this contention is questionable; since, as I suggested in Chapter 1, there does not seem to be any sound reason to doubt that past, and even future, events may be directly cognised – thereby satisfying the conditions for haecceity. Furthermore, it has been cogently argued, that no existent substances can have the characteristics normally ascribed to terms in an A-series; in which case presentness could not be considered to be even a necessary condition for haecceity.

197. We cannot, then, equate spatio-temporal position and haecceity. But neither, I suggest, can it be equated with uniqueness. A substance is unique, according to our definition in §187, if it has a nature which is non-repeatable or not shared by any other substance. A distinction was then drawn between that which is contingently unique, and that which is essentially unique. As a consequence of our acceptance of the principle of the Dissimilarity of the Diverse, it was
concluded that all substances are essentially unique.

Now it is clear from our definition of uniqueness that spatio-temporal position does not mean, and hence is not equivalent to or identical with, uniqueness. It might be claimed, however, that although spatio-temporal position does not mean uniqueness, it nevertheless intrinsically determines qualities which are essentially unique or non-repeatable in any substance which has a spatio-temporal position; thereby determining that the substance itself is essentially unique. But this claim is not, in itself, of great significance. Even if it is true, it only amounts to the contention that spatio-temporal position is one way of determining uniqueness in a substance. It does not, and cannot, make the claim that it is the only way in which the uniqueness of a substance may be determined. And there are very good reasons for believing that it is false.

198. Firstly, as I suggested earlier, it is possible that there is more than one spatio-temporal system; and that these distinct systems are not spatio-temporally related. In which case, the fact that a substance has a spatio-temporal position will not determine that the substance is unique. For this to be the case, we would need to be certain that the spatio-temporal system in which it is located is, itself, unique. But spatio-temporal systems can only be differentiated by means of some criterion other than their respective spatio-temporal positions. So, ultimately, the uniqueness of a substance which has a spatio-temporal position is not determined by the mere fact that it has a spatio-temporal position; but by the fact that it has a spatio-temporal position.
in a system which is unique. And the uniqueness of a spatio-temporal system cannot be determined, without involving us in a vicious circle, by its spatio-temporal position.

We can also rule out the possibility that the uniqueness of a spatio-temporal position is determined by the fact that it is within this spatio-temporal system; since haecceity or thisness does not, as we have seen, determine uniqueness.

199. Secondly, as I have argued, it is impossible for any substance to have a spatio-temporal position without this determining that the substance has either a spatial or a spatio-temporal dimension; and this, in turn, leads to the unacceptable conclusion that substances have parts. So, if the principle of the Dissimilarity of the Diverse is true, and all substances are essentially unique, then their uniqueness cannot be determined by their spatio-temporal position.

200. We have seen that spatio-temporal position is neither equivalent to, nor determines, haecceity. And we have just argued that it is neither equivalent to, nor determines, the uniqueness of a substance. But we must also conclude that spatio-temporal position is neither equivalent to, nor determines, individuality. For, if a substance is to have a spatio-temporal position, it must, thereby, occupy more than a single point-instant. But if it occupies more than one point-instant, then it must have a spatio-temporal dimension; and this implies that it has parts in that dimension. But a substance which, per impossible, has parts, cannot be individual or simple. Spatio-temporal position is therefore incompatible with individuality.

201. We have thus established that spatio-temporal position
is neither equivalent to, nor determines, either haecceity, uniqueness, or individuality. And since these are the only senses in which we have used the term "particular", spatio-temporal position is neither equivalent to, nor does it determine, particularity.

202. In conclusion, there are some points which I would like to discuss as a sort of prelude to the next two chapters. In Chapter 1 I drew attention to the need to distinguish between a quality-type and a quality-token; that is, between a quality as such, and an instance of that quality. But we have not, as yet, made it clear in what this distinction consists. I also suggested, in that chapter, that a quality can only exist as the quality of a substance. But at that stage I did not offer any proof of this suggestion. Thirdly, we have not offered any proof that there are substances, as distinct from quality-instances; and yet such a proof would appear to be desirable if our theory of substance is to be convincing.

These three apparently disparate points can, I believe, be shown to be intimately related; and an answer to the first will, I think, provide us with the basis for an answer to the remaining two.

203. The distinction between a quality as such, and an instance of that quality consists, I suggest, in a distinction between a quality, and an existent quality. However, since existence is itself a quality, and since we cannot simply equate two distinct qualities, we must understand a quality-instance to be a unity of the quality of existence, and the quality in question. We have seen, however, that the only unity which can exist between distinct qualities is a
non-relational unity. But a non-relational unity between two or more qualities is what we mean by a substance; so that any quality-instance is a substance. We now have a reasoned basis for the previously unargued assumption that a quality can only exist as the quality of a substance; and, as long as we are granted the modest assumption that there is at least one quality-instance, we have a proof that there are substances.

By equating a quality-instance with an existent quality, we are able to understand why it seems implausible, and even meaningless to ask whether the quality of existence has any instances - since this would amount to asking whether or not existence exists - even though it is reasonable and meaningful to ask this question of any other quality.

204. At this stage, and in light of the above discussion, we should qualify our earlier definition of a substance. Although it has been defined as a non-relational unity of various qualities, it is evident that it cannot be a unity of qualities which are not real qualities. An unreal quality is not some sort of modally different quality. It is not a quality at all; in the same way that a non-existent substance is not a kind of substance. A substance should, then, be defined as a non-relational unity of various real qualities.

Now we can, I think, give a definition of a real quality. A real quality is a quality which has an instance. This definition is, I believe, in accordance with ordinary language. The quality of phoenixhood, for example, would appropriately be termed an unreal quality, since it has no instances. A real quality, then, is a quality which has an instance. But
to say that a quality has an instance is, as I have suggested, to say that it forms a non-relational unity with the quality of existence. So that a real quality is a quality that exists. A substance can accordingly be defined as a non-relational unity of various quality-instances; and this means that, in Spinoza's words, "Existence belongs to the nature of substance". 27

Existence is thus a quality of every substance. That is to say, it is one of the qualities which form a non-relational unity of various qualities, i.e. a substance. And it is a quality which is to be found as a constituent of every such unity. Furthermore, and in accordance with the principle of Extrinsic Determination, it is impossible for any substance which has existence as one of its qualities (and all substances, we have seen, have existence as a quality) not to have, and impossible for it not to have had, this quality. In this sense, no substance which exists can cease to exist. All substances can be said to be eternal.

205. There remains one question which will lead us to the next chapter. This question is whether there is more than one substance. That is, whether the Universe is a group of substances, or a single substance. We have so far assumed that the common-sense presumption in favour of pluralism is true. But Bradley has argued that pluralism is impossible. His arguments are based, however, upon a consideration of the nature of qualities and relations. In the next chapter we will consider Bradley's criticisms of these two categories.

Notes

2. Leibniz, *New Essays Concerning Human Understanding*, Book II, Chapter XXIII.


4. McTaggart, *ibid.*, Chapter XIX.

5. Broad suggests that the principle of Extrinsic Determination is more or less valid if applied to particular quality instances (*An Examination of McTaggart's Philosophy*, Vol.1, p.258ff).


8. McTaggart, *ibid.*, Chapter XV.


12. Consider, for example, the following passage from T.H. Green's *Prolegomena to Ethics*: "In like manner the one relation is a unity of the many things. If these relations really exist, there is a real unity of the manifold." (§28). Also Russell, *Logic and Knowledge*, p.108.


14. Cf. AR, Chapter XIX; also Hegel, *Phenomenology of Spirit*, Section A.I., "Sense-Certainty: Or the 'This' and
'Meaning'. Also, see Bradley, PL, Terminal Essays IV & V.

15. This distinction is important when considering the truth of the principle of the Dissimilarity of the Diverse. Should this principle be interpreted so as to mean that diverse substances are essentially or only contingently unique? Broad, for example, claims that it is not a necessary truth, although, as a matter of fact, it may be true.

16. If our conclusion in Chapter VII is correct, then, since all qualities are particular - in the sense of being non-repeatable or unique - it will follow that two substances cannot be other than dissimilar.

17. As does the fact that the term "individual" is derived from the Latin term "individuus" - meaning indivisible.


20. See AR, Chapter XVIII; Broad, *An Examination of McTaggart's Philosophy*, Vol.1, p.177.

21. Our arguments differ also from Foster's, although our conclusions are similar.

22. In referring to the two types of temporal series as the 'A-series' and the 'B-series', I am following the now widely adopted terminology first used by McTaggart.

24. §187.
25. §194.
26. This fact may explain Russell's identification of particulars with quality-instances. See *Logic and Knowledge*, p.113.
27. Spinoza, *Ethics*, Proposition VII.
Chapter 6 - Qualities and Relations

206. In the previous chapter we arrived at certain conclusions concerning the notion of a substance. A substance, it will be recalled, was defined as a non-relational unity of various qualities. This account of substance, I argued, is immune from the criticisms which Bradley raises against the more traditional versions of the substance/adjective distinction, and the corresponding theories of substance.

So far, the notions of quality and relation have remained unanalysed. In this chapter I will defend the view, which we have more or less implicitly accepted as true, that qualities and relations are both real and existent. In particular, I will consider and evaluate the arguments against the ultimate reality of qualities and relations used by Bradley in Chapter III of AR. I will also, where relevant, consider some of his later views on this subject, as found in ETR and the unfinished essay on relations included in CE.

In the next chapter I will defend a particular view about the nature of qualities and relations. It has often been assumed to be self-evidently true, and at times the theory has been explicitly defended, that qualities and relations are universal entities. I will argue that, quite independently of some of Bradley's own arguments, there are conclusive reasons for believing that this theory is false; and that qualities and relations are, as a matter of fact as well as a matter of logical necessity, particular, rather than universal.

207. Bradley's main objection to the ultimate reality of
qualities and relations is clearly stated in the following passage:

Relation presupposes quality, and quality relation. Each can be something neither together with, nor apart from, the other; and the vicious circle in which they turn is not the truth about reality. (AR p.21)

The rest of the chapter is simply a development and expansion of this argument. The chapter is divided into three sections. The first section, by far the longest, is devoted to an attempt to show that "qualities are nothing without relations" (AR p.21). The second section attempts to show that qualities, taken together with relations, are "unintelligible" (AR p.25).

The objection to the reality of qualities and relations, as found in Chapter III of AR is, then, that the distinction between qualities and relations, and consequently the quality/relation schema, involves a vicious circle. Later in this chapter I will consider some different arguments which Bradley elsewhere puts forward against the reality of relations. For the moment, however, we will be concerned with evaluating the argument mentioned above.

208. Before considering Bradley's argument in detail, it will be helpful if we try to clarify some of the terms and expressions which Bradley uses. For example, what are we to understand by the verb "presupposes", when it is claimed that qualities presuppose relations, and vice versa?

The expression "X presupposes Y" might be understood to mean that X logically entails, or implies Y. Or else, it may
mean that the existence of X is dependent upon, or determined by, the existence of Y. Now, by "presupposes", I think that Bradley meant to cover both of these interpretations. But they are not equivalent expressions; and I suspect that the ambiguity of the term "presuppose" is exploited somewhat by Bradley to the extent that he might fairly be charged with resting his criticism upon an equivocation.

The above distinction between the two different senses of "presuppose" is important in that the fact that X and Y are taken to be mutually implicative does not, unless the presupposition relation is understood to be asymmetrical, involve us in a vicious circle. But it is quite clear that the presupposition relation, when taken to be equivalent to the relation of implication, is not necessarily asymmetrical. For example, the quality f, of being a father, implies a relation of fathering, between any entity X which is f, and another term Y, which is his child. In the same way, the relation of fathering implies the quality f, in at least one of its terms. In other words, the quality of being a father, and the relation of fathering, are mutually determining or mutually implicative. In accordance with the first interpretation of the presupposing relation we can say, then, that the quality f of being a father, and the relation r, of fathering, presuppose one another. But it is clear that, in making this contention, we are not involving ourselves in a vicious circle.

On the other hand, if we understand "presuppose" to mean, "existentially dependent upon", where dependent upon is an asymmetrical relation, then the claim that F presupposes r, and r presupposes F would involve us in a vicious circle.
Bradley's claim that qualities and relations presuppose one another is only an objection to their reality if the relation of presupposition involved is asymmetrical. We can now consider his arguments in detail to see whether they do, in fact, show that the relation in question is asymmetrical.

209. In Section I of Chapter III of *AR*, Bradley argues that qualities are "nothing without relations". He begins by pointing out that psychological - by which he means "phenomenological (see CE Chapter XXII)" - which suggests that perceived qualities are altered by changes in their relations within a *Gestalt*, is not strictly relevant in deciding whether or not qualities, as such, may exist independently of relations. The most that such evidence could establish is that perceived qualities cannot exist, or retain their identity, independently of relations. This disclaimer is important for two reasons. Firstly, it provides us with an explanation of what Bradley means by his statement that qualities are "nothing without relations". He means that there are no original or independent qualities; that there are no qualities which are logically prior to relations.

Secondly, the disclaimer serves to emphasise the fact that Bradley is not, as has been suggested by M.J. Cresswell, explicitly basing his argument upon the assumption that reality is experience. Whether or not he does in fact ignore such evidence when formulating his arguments is another matter. When we consider his later arguments against the reality of relations - as found in the essay on relations in *CE*, for example - it will, I think, become quite plain that appeals to what is *given* in experience form a significant part of his
argument to show that relations are not ultimately real.

210. Having made this disclaimer, Bradley then restates his argument in the following way.

You can never, we may argue, find qualities without relations. Whenever you take them so, they are made so, and continue so, by an operation which itself implies relation. Their plurality gets for us all its meaning through relations; and to suppose it otherwise in reality is wholly indefensible. (AR p.22)

At first glance, this would appear to be merely a factual claim about qualities and relations - that qualities never are, as a matter of fact, found independently of relations. But Bradley is claiming more than this. He wishes to make the stronger claim that it is impossible for qualities to exist independently of relations. In support of this contention he provides two arguments. The first involves an appeal to what is merely given in experience.

... if you go back to mere unbroken feeling, you have no relations and no qualities. But if you come to what is distinct you get relations at once. (AR p.22)

The second argument does not appeal directly to the nature of what is given in experience; rather, Bradley argues that any 'separateness' or plurality of qualities implies a (prior) act of separation. And this act of separating, he further claims, essentially involves the introduction of relations.
I will consider each of these arguments in turn.

211. According to Bradley, if we consider the nature of given experience, we find that, rather than it being comprised of a series of discrete sensory qualities, sensa, or mental states, it is instead, a continuous, unbroken, or non-relational whole of feeling. Now, within this felt continuum, we find what he terms "discernible aspects". But these aspects, he contends, cannot be considered as qualities proper.

For if these felt aspects, while merely felt, are to be called qualities proper, they are so only for the observation of an outside observer. And then for him they are given as aspects - that is, together with relations. (AR p.22)

Qualities proper, he elsewhere argues, arise only as the terms of relations. But if this is the way in which we are to understand the notion of a quality proper, then Bradley's earlier claim that qualities presuppose relations (i.e. cannot exist without relations), becomes true by definition - if a quality is simply a 'term' of a relation, then it is plain that it cannot exist independently of that relation. Bradley's actual argument to show that qualities presuppose relations would appear, then, to be superfluous. The genuinely important question is whether or not the diverse felt 'aspects' in given experience can rightly be considered to be qualities. If so, then, in so far as feeling is, according to Bradley, a pre-relational, hence non-relational, unity, then it would seem that we have, in feeling, the presence of qualities which
exist independently of relations.

Is there any genuine reason, then, to suppose that the diverse aspects within feeling should not be considered to be qualities proper? I do not believe that there is any such reason. Even within the context of Bradley's own theories, it would seem that these diverse aspects ought to be considered to be qualities proper. For, within any felt whole, we find diverse, hence distinct aspects. And these aspects - in so far as they are distinct - must be qualitatively different; since according to Bradley, there can be no merely numerical difference between entities. The difference between the diverse aspects must, accordingly, be a difference of content. But I am unable to discern any intelligible difference between what Bradley means by 'content', and what is normally meant by the term 'quality'. Nor do I see that Bradley has made the distinction between content and quality at all significant, except by introducing the *ad hoc* principle that qualities proper do not exist except as terms of relations.

Our objection to Bradley's initial argument for the view that qualities may not exist independently of relations is that he can only genuinely deny that the diverse aspects of the non-relational unity of a felt whole are qualities proper by assuming what needs to be proved - that such aspects cannot be qualities proper because they exist independently of relations; and that, unless he makes this assumption, then the appeal to what is given in experience would tend to refute, rather than confirm, his conclusion that qualities presuppose relations.

212. In reply to this objection, it might be pointed out
that even if we assume that these diverse aspects are qualities proper, this will still not be sufficient to establish the conclusion that qualities may exist independently of relations. It might be suggested, for example, that if the diverse aspects are qualities proper, and if we further admit that these qualities are not united by relations in a felt whole (i.e. if feeling is a non-relational unity of these qualities), it would still appear necessary to admit that there are relations between the qualities of the felt whole, even though these relations may not be constitutive of the unity of the felt whole. And we might be asked to consider the fact that if there is a genuine diversity of the qualities of the felt whole, then there must be a difference between these qualities. But the fact that they are different would seem to imply that a relation of difference exists between the qualities in question. So, it will be concluded, if there is a genuine diversity of aspects or qualities in a felt whole, then these qualities must be related by a relation of difference. Qualities cannot, then, even within a non-relational unity of feeling, exist independently of relations.

This is, I believe, a plausible reply to our initial objection. And it is, in fact, the sort of argument which Bradley uses in the second stage of his proof that qualities presuppose relations. We will now consider this second stage.

213. By appealing to what is supposedly given in experience Bradley claims to have established that, as a matter of fact, qualities are never found independently of relations. We have seen that this appeal is inconclusive, and possibly inconsistent with other features of his philosophy. But he does not
rest his position entirely upon such an appeal. And in response to possible criticism, Bradley then argues that it is impossible for qualities to exist independently of relations.

One such possible criticism is that, even though qualities might never, in fact, be found apart from relations, this does not prove that qualities cannot exist independently of relations - i.e. it does not show that the notion of independent qualities is logically impossible or self-contradictory. To demonstrate that it is impossible for qualities to exist independently of relations, Bradley asks us to consider the nature of the mental act of comparison, whence, it is claimed, the notion of a relation arises. The view which Bradley is considering can be found in the writings of Green; and is, perhaps, ultimately traceable through Kant to Leibniz. The suggestion is that perceived difference between qualities; although impossible without the introduction of a relation between the terms which are compared, and perceived to be different, does not imply that a relation of difference exists between the terms in question when they are not the objects of an act of comparison, or when they are unperceived. So, even though qualities which are perceived as different cannot exist independently of relations, this does not mean that there may not be qualities which are different, although they are not perceived to be different, and hence existing apart from relations; and the evidence for this is to be found in the fact that we may consider or imagine qualities as existing independently of relations.

214. Bradley's reply to this suggestion is somewhat obscure. He points out, correctly I think, that we cannot validly
conclude from the premiss that qualities can be considered independently of relations, as the result of a mental process of abstraction and/or comparison, that they can therefore exist as such independently of this ongoing process of abstraction or comparison.

But how this is to be taken as a reply to the view that relations are either introduced by, or arise as a consequence of, comparison and abstraction is not clear. On the one hand Bradley seems to be claiming that relations between qualities only arise as the result of comparison; that relations are what have been termed entia rationis. But, on the other hand, he appears to admit that it is possible for qualities to be considered in abstraction, or independently of relations — i.e. that such mental acts do not involve the introduction of relations. He seems to be claiming, in other words, that distinct qualities, i.e. qualities which are perceived to be different, qua distinct, cannot exist independently of relations; whilst, at the same time, claiming that distinct qualities, qua abstracta, can be considered independently of relations. But the question is whether qualities can, in fact, be considered independently of relations. Bradley, at one point is saying that they can, and at another that they can't.

What needs to be shown, and I do not think that Bradley's reply does establish this, is that it is impossible, i.e. self-contradictory, for a quality to exist independently of relations. If he has established anything, he has established only that perceived qualities cannot exist independently of relations. Now, we might agree that if, as the result of a process of comparison, two pens are perceived as having
different qualities (for example, if one is perceived as red, and the other perceived as blue), then the fact that they are perceived as different implies the existence of a process of comparison. And we might even agree that this perceived difference implies the existence of a relation of difference between the two qualities; and, perhaps more importantly, that this relation of perceived difference cannot exist independently of the process of comparison. But this does not show that it is impossible for the qualities in question to exist independently of this relation. In fact, as Bradley himself admits, the act of comparison presupposes a difference in the compared qualities, which difference is independent of the act of comparison.

By pointing out that Bradley has failed thus far to show that qualities cannot exist independently of relations, we have not, of course, established the truth of the contrary view - that they can exist independently of relations. But we do not need to do this in order to establish the inconclusiveness of his arguments.

215. We have assumed that Bradley has been arguing that perceived qualities cannot exist independently of relations. But perhaps what he wishes to argue for is the conclusion that qualities as such cannot exist apart from, and except as the products of, a process of abstraction and/or comparison. In which case it would be impossible for qualities to exist independently of relations. This is, I am certain, the actual nature of his criticism. It is, however, difficult to see any force in this approach; and there are a number of genuine inconsistencies even in Bradley's exposition of this view.
In the first place, it is the notion of a quality does not analytically imply that of a relation - so we cannot directly infer the existence of relations from the existence of qualities. For example, if we are prepared to admit that green is a quality, then we cannot conclude that a single instance of green implies, or intrinsically determines, the existence of any relations. And Bradley is, elsewhere, prepared to admit this.

To take an ordinary sense-perception - say, for instance, that of a green leaf - as a unity which consists in one or more relations is to me to go counter to the plainest fact. (CE p.633)

It seems to me, that the only way in which we may establish a relation of direct implication between the notion of a quality, and that of a relation, is to stipulate that an entity is not strictly a quality proper except in so far as it is the product of a process of abstraction and/or comparison - in which case, as I mentioned in §211, Bradley's argument would become quite uninteresting.

Secondly, and relatedly, Bradley actually endorses the view that there are what are generally called 'qualities' to be found independently of relations - in feeling or immediate experience. The perceived green leaf mentioned above is one such example. Now, to reconcile this view with his arguments in Chapter III, Bradley would need to deny that the felt green is not a quality proper; and we have already seen (§211) that there is no sound reason for making this denial.
216. We may conclude, then, that the first stage of Bradley's argument to show the unreality of qualities and relations is unsatisfactory. The claim that qualities presuppose relations can only be supported either by defining the notion of a quality in such a way as to include the notion of a relation within the definition - in which case the argument and its conclusion becomes uninteresting; or, by appealing to what is given in feeling or immediate experience - in which case we do, in fact, find (contrary to Bradley's assumption) qualities existing independently of relations.

Bradley has not, thus far, shown that qualities cannot exist apart from relations. And if his appeal to immediate experience is to be taken seriously, then he has, rather, provided us with an example of qualities which do not presuppose the existence of relations.

217. Even though Bradley may not himself have established that qualities cannot exist apart from relations, there might still be other arguments which will support this conclusion.

One such argument is the following. If A and B are two distinct qualities, then A must be different from B. But, if this is the case, then A and B are related by being different; therefore a relation of difference exists between them. That is to say, it might be argued that there can be no diversity of qualities without relations. On the assumption that there exists more than one quality, it follows, accordingly, that such qualities cannot exist independently of, and therefore presuppose, relations.

On the other hand it might be pointed out that the premiss that there exists a plurality of qualities is an empirical
premiss; and that it cannot be used in an *a priori* argument which professes to show the logical impossibility of qualities existing independently of relations. This is, I think, a valid objection. But there is a possible reply to it; namely, that the assumption that there is only one quality equally implies the existence of a relation, since the one quality is, presumably, identical with itself, and this fact involves the relation of self-identity as one of its constituents.

The soundness of this type of argument clearly depends upon the soundness of the inference from the premiss that two qualities are different from one another to the conclusion that a relation of difference therefore exists between them; and, in the second case, from the premiss that a quality is identical with itself, to the conclusion that this fact involves a relation of self-identity as one of its constituents. We should ask then, whether the fact that A and B are different has a relation of difference as a constituent. Attempts have been made to show that such an analysis is unsatisfactory—the most notable of which being those of Leibniz and Lotze. Both claim that so-called 'relational' facts do not, in fact, have relations as constituents. For example, the qualities of red and green differ from one another. Now, does this fact, that red and green differ, have or consist in, the qualities red and green and a relation of difference? I do not see that it does, and I know of no cogent arguments which profess to show that it does. It is true that in order for us to know that they are different, then it would seem (as Green has argued), that they must be brought before the mind in an act of comparison and in some sense related. But I do not see that
this implies that they are thereby related in the same sense apart from such an act - and yet this is what needs to be proved.

218. Bradley's reply to this sort of objection is to merely assert that there can be no difference without a relation.

I rest my argument upon this, that if there are no differences, there are no qualities, since all must fall into one. But if there is any difference, then that implies a relation. (AR pp.24-25)

It is plain from this passage that Bradley is claiming that the proposition that two distinct qualities must be related by a relation of difference is self-evidently true. But we would simply deny that the proposition is self-evidently true. We may agree with the view that if there are no differences, then there are no qualities as such, or qualities proper, "since all must fall into one". But this proposition is not equivalent, I would suggest, to the proposition that difference implies a relation, and it is the latter which Bradley needs to establish his conclusion. To talk of the relation of difference between two entities A and B, as if we were talking about an entity distinct from either A or B is to uncritically accept a particular form of expression as denoting an existent entity. But such expressions, I suggest, are simply another way of saying that A is different to B. The introduction of a distinct relation between A and B involves an unwarranted hypostatization of the meaning of relational expressions. And to argue, as Bradley does, that the difference between A and B
must fall either "inside" or "outside" A or B, is, I suggest, to ignore the possibility that the "difference" is not an entity; and, as such, falls neither "inside" nor "outside" the different terms.

219. For these reasons, I do not believe that Bradley has established that qualities presuppose relations, in the sense that qualities are existentially dependent upon relations. The first stage of his arguments against the reality of qualities and relations is accordingly unsatisfactory. We will now consider his arguments to show that qualities are incompatible with relations.

220. Before beginning our discussion of these arguments, we should note that any such arguments, if sound, will support our conclusion that Bradley has not shown that qualities presuppose relations. For, if qualities are incompatible with relations, then we may safely conclude that, in the absence of any sound arguments to the contrary, qualities do not, and cannot, presuppose relations. By denying that difference is a relation, we are not, however, committed to the denial of the reality of relations as such.

221. Bradley begins with the contention that qualities are unintelligible when taken in conjunction with relations. The meaning of the adjective "unintelligible" is not entirely clear, however, and the reader is left here, as elsewhere, to presume that it means either 'self-contradictory' or 'inexplicable'. Now, the fact that qualities, taken in conjunction with relations, are inexplicable is certainly not a valid objection to their being real. We may not be able to explain the fact that qualities are almost invariably found in conjunction,
with relations, but this is not a sound reason to doubt the reality of either. We might, in fact, insist that the conjunction of qualities and relations is simply an ultimate, and therefore inexplicable, fact; and the only reason to doubt the reality of either would be that this conjunction issued in a contradiction. Bradley's claim that the conjunction of qualities is unintelligible can only be understood, then, to mean that their conjunction involves a contradiction. Do his arguments establish that any contradiction is involved in their conjunction?

He firstly points out, correctly I believe, that qualities cannot be resolved into relations. I know of no attempt which has been made to deny the reality of qualities in favour of relations. And Bradley's oblique reference to Hegel as a proponent of the doctrine that relations create their terms is, I believe, misguided. In the absence of any such attempt, and in view of the fact that any such view would appear to be intrinsically incoherent, we can therefore accept this premise of Bradley's argument.

Having made this point, Bradley then states what amounts to the essence of his criticism. Qualities, he claims, exist; and in keeping with the conclusion which he claims to have proven in the first Section of Chapter III, such qualities are also necessarily related, or stand in various relations to other entities. But this fact, he insists, leads to a contradiction.

Hence the qualities must be, and must also be related. But there is hence a diversity which falls inside each quality. Each has a double character, as both supporting
and as being made by the relation. It may be taken as at once condition and result, and the question is as to how it can combine this variety. For it must combine the diversity, and yet it fails to do so. (AR p.26)

So, according to Bradley, the conjunction of a quality and a relation leads to the conclusion that any quality is both one and many; and this, in turn, is said to give rise to an infinite regress.

A is really both somehow together as A(a - a'). But (as we saw in Chapter II) without the use of a relation it is impossible to predicate this variety of A. And, on the other hand, with an internal relation A's unity disappears, and its contents are dissipated in an endless process of distinction. (AR p.26)

222. There are a number of points which Bradley is making in these passages; and he tends, I think, to confuse some of them. There is also a suppressed premiss involved in his argument which, when made explicit, tends to undermine its cogency.

The first point he makes is that any quality-in-relation is complex — as both supporting, and as being made by the relation. This is clearly the most important premiss in his argument, but its exact meaning is somewhat obscure; and when the obscurity is removed, I believe that it becomes much less paradoxical than Bradley would have us believe that it is. To say that a quality 'supports' a relation appears to mean that
the type of relations which a quality enters into are deter-
mined by the intrinsic nature of the quality. Red, for ex-
ample, is brighter than brown; but it cannot be either taller
or shorter than Mt. Everest since, by its very nature, it
cannot enter into relations of extensive magnitude with other
terms. This position is, I think, fairly uncontroversial.

On the other hand, to say that a quality is 'made' by a
relation would appear to mean that the intrinsic nature of a
quality is determined by the relations into which it enters
into. If red, for example, is brighter than brown, then Brad-
ley would seem to be committed to the view that red is the
quality that it is in virtue of it being related to brown by
the relation of being brighter than. And this position is, un-
like the previous position, somewhat controversial. Is it true
that the intrinsic nature of redness is determined by its
relation with browness? It is certainly true that if red were
not brighter than brown, then it would not be red; but this is
not true of say yellow. Both red and yellow stand in the same
relation with brown, viz. that of being brighter than. But
since red is not yellow, then it is clear that the intrinsic
nature of these two qualities is not determined merely by this
particular relation; even though their intrinsic natures can
be said to 'support' this relation. So Bradley's second pos-
ition would appear to be in need of further justification if
we interpret his statements in the above way.

But if, following McTaggart 7, we make a distinction between
a quality \( \rho a \), and the nature of that quality, then it
might be maintained that even though the quality \( \rho a \) is not
'made' by the relations in which it stands, it is nonetheless
true that the quality in question has the further quality of standing in these relations; and that this quality forms part of the nature of the quality. For example, even though red is not red merely in virtue of its being brighter than brown, it is true that red has the quality of being brighter than brown; and this latter quality, being part of the nature of red, is 'made' by this relation which it has to brown. So, we may conclude that even though qualities per se are not necessarily made by their relations, the nature of the qualities is 'made' by its relations. And if we then proceed to deny that a quality, like a substance, can be independent of its nature, then it would seem to follow that a quality is 'made' by the relations into which it enters.

223. We may agree, accordingly, that every quality-in-relation has, in the above senses, a diverse character. It is, in the first place, the ground or determinant of the type of relations into which it enters. And, in the second place, its nature is, in part, determined by the relations into which it enters.

But what conclusions ought to be drawn from this fact? The first, perhaps, is that every quality-in-relation must be either complex, or have a complex nature (according to whether or not the validity of the distinction between a quality and its nature is accepted), since any quality will have the further quality of standing in that relation. The second is that there is no genuine contradiction involved in the conclusion that every quality-in-relation is complex. A contradiction only arises if it is assumed that every quality-in-relation is simple.
We might illustrate this last conclusion with an example. If $A$ is a quality-in-relation, then we may agree with Bradley that it therefore has a complex nature consisting of the quality $a$—its nature as supporting the relation, and $a'$—its nature as 'made' by that relation. But in making this assumption we do not, as Bradley seems to think, thereby commit ourselves either to the view that $A$ is a distinct quality apart from these diverse aspects of its nature; or, to the view that the unity of $A$ is 'destroyed' in virtue of its having this complex nature.

With respect to the complex nature of $A$, we can say that $A$, which appears to be simple, is, in fact, complex, consisting of $a$ and $a'$. 'A', in other words, is the name of a complex quality consisting of $a$ and $a'$. And with respect to the unity of $A$, we can say that no vicious regress of relations arises from the complexity of $A$ if the unity of $A$ as $(a-a')$ is a non-relational unity. $A$, in other words, turns out to be, in accordance with the definition proposed in the previous chapter, a substance—i.e. a non-relational unity of various qualities. In this way we may avoid the following criticism of Bradley's.

Every quality in relation has, in consequence, a diversity within its own nature, and this diversity cannot immediately be asserted of the quality. Hence the quality must exchange its unity for an internal relation. But, thus set free, the diverse aspects, because each something in relation, must each be something also beyond. This diversity is fatal to the internal unity of each;
and it demands a new relation and so on without limit.

(AR p.27)

It should be noted that, in the above passage, Bradley equates unity with simplicity. To suggest, as we have, that any quality-in-relation is complex does imply that it cannot be simple; but it does not imply that it is without any genuine unity. Once again, as we pointed out in the previous chapter, the unity of a complex quality is non-relational; and while this precludes the possibility that the unity of the qualities can be constituted by a relation, it does not mean that there are no relations between the qualities. The fact that qualities-in-relation are complex means that their constituent qualities are related. But they nonetheless form a unity. We may conclude, then, not that the diversity of aspects is fatal to the unity of a quality, but that it is fatal to its simplicity. That all qualities in relation must be complex does not, however, involve any genuine contradiction.

224. Bradley has not, then, shown either that qualities presuppose relations; or, that qualities are incompatible with relations. The first two stages in his critique of qualities and relations are, therefore, inconclusive. We can now consider the third and fourth stages of his argument.

225. In Section 3 of Chapter III, Bradley attempts to prove that relations are 'unintelligible'—either independently of, or in conjunction with, qualities.

He begins with the contention that relations cannot exist without terms. I think that this contention is obviously true. The relation "taller than", for instance, cannot exist
independently of two entities of unequal height which it relates. Although a relation is distinct from its terms, this does not imply that it can exist independently of them.

Bradley then argues that the way in which a relation 'stands' to the qualities which it relates is unintelligible. If it is nothing to the qualities, then they are not related at all; and, if so, as we saw, they have ceased to be qualities, and their relation is a nonentity. But if it is to be something to them, then clearly we shall require a new connecting relation. For the relation hardly can be the mere adjective of one or both of its terms; or, at least, as such it seems indefensible. And, being something itself, if it does not itself bear a relation to the terms, in what intelligible way will it succeed in being anything to them? (AR p.27)

The problem is to find how the relation can stand to its qualities; and this problem is insoluble. If you take the connexion as a solid thing, you have got to show, and you cannot show, how the other solids are joined to it. And, if you take it as a kind of medium or unsubstantial atmosphere, it is a connexion no longer. (AR p.28)

There are several points to consider here. But there is one assumption which is evident in the above passages, and which is implicit throughout Bradley's entire critique of relations. The assumption in question is that relations unite their terms — an assumption which we rejected as false in the previous chapter. For example, he speaks of relations as "connexions", 

and of them being "joined" to their terms; and the problem of understanding how relations stand to their terms is spoken of in terms of "links being united by other links".

On the other hand, once we reject this assumption, the question as to how relations stand to their terms is readily answered; and the supposed vicious infinite regress of relations will turn out to be neither vicious, nor, according to some interpretations, genuinely infinite.

Let us consider, firstly, the claim that if relations are nothing to their terms, then the terms cease to be qualities. Now Bradley claims to have already established this point — although it is not clear to which argument he is referring. If it is the argument which professed to show that qualities presuppose relations, then we have seen that it is inconclusive. But I am unable to discover any other argument which might be taken as an argument for this conclusion. So the first premiss of his argument is, at best, somewhat questionalbe.

He next insists that if relations are not "nothing" — i.e. if they are "something" — to their terms, then both the terms and the relation require a further relation to "connect" them. This process is said to generate an infinite regress of relations; and for this reason, the assumption that relations are something to their terms is rejected. Now, apart from the difficulty of understanding what is meant by the statement that relations must be either "something" or "nothing" to their terms, there is also the difficulty, in Bradley's argument, of determining whether or not the supposed regress of relations is genuine and/or vicious.

It is clear from our previous discussion that relations
do determine relational qualities in their terms. If some term A is conjoined with a relation r, then A, in virtue of this fact, has the quality a of standing in this relation. In this sense, all relations are 'something' to their terms. The real question, then, is whether or not this leads to a vicious infinite regress of relations. I believe that it does lead to a regress of relations; but I do not believe that the regress is vicious for the following reason. Suppose, for example, that John is taller than Paul. If we analyse this fact into three constituents: John, Paul, and the relation between them - J, P, and r, respectively - then it will be true that a relation exists between these three terms. We might call this relation $r'$. But there will also be a further relation between J, P, r and $r'$; and a further relation between these four entities, and so on indefinitely. It is easy to see how an infinite regress of relations is generated in this way. But the regress is not vicious for the reason that the original fact JrP is a determinant of this regress, and does not presuppose the completion of the regress for the statement "John is taller than Paul" to be true. That is to say, the fact that John is taller than Paul, or JrP, implies [JrP]$r'$, but it does not presuppose this fact; and the regress, though infinite, is not vicious.

226. We may summarize our objection to the third stage of Bradley's argument against the reality of qualities and relations by saying that his arguments rest ultimately upon the assumption - which we have seen to be false - that relations unite their terms. Once we reject this assumption, the problem of understanding the way in which relations stand to their
terms (i.e. qualities), is easily resolved; and the celebrated vicious regress of relations which is alleged to arise as the result of any attempt to explain this problem is avoided. In answer to Bradley's initial question as to how relations stand to qualities, we may reply that they relate them. And this reply, we have seen, does not commit us to any vicious regress of relations.

227. The consideration of this last argument completes our study of Bradley's arguments against the reality of qualities and relations. We have concluded that none of his arguments can be said to conclusively demonstrate the unreality of either qualities or relations, or to indicate any genuine inconsistency in the quality/relation schema. We have also seen that some of the premisses which he uses in his arguments are incompatible with some of his other views — in particular his views on the nature of what is given in experience.

228. In the following chapter we will be concerned with a problem that was not explicitly, or systematically discussed by Bradley; namely whether qualities and relations are particular or universal entities. The relevance of this discussion to some points which were raised in previous chapters will, however, become evident.

Notes
1. Professor Sprigge makes considerable use of such evidence to support his view that all relations are what he terms holistic relations — relations which are only to be found as constituents of, and whose nature's are determined by, a whole which is greater than the relations and their

2. See Appendix - "Cresswell on F.H. Bradley".

3. AR p.525.

4. AR p.23.

5. See *Prolegomena to Ethics*, Book 1, Chapter 1.


Chapter 7 - Qualities and Relations (Cont.)

229. I have, in a number of places throughout this work, made reference to the view that qualities and relations are particular, rather than universal, to support some of the conclusions that we have reached. One of these conclusions is that the principle of the Dissimilarity of the Diverse is a necessary truth should qualities and relations be particular. Another conclusion concerns the principle of Extrinsic Determination. This latter principle is true, according to Broad, should the qualities and relations of things be particular rather than universal. In this chapter I will argue that qualities and relations are, in fact, particular; and that, as a consequence, both of the above-mentioned principles are defensible against the often-cited objection that qualities and relations are universal.

230. In a paper entitled, "The Nature of Universals and Propositions", and in a subsequent series of articles, G.F. Stout argued that the qualities and relations of particular entities are particular, rather than universal. Stout is not, of course, the first, or the only, philosopher to take this view. Among past philosophers, it has been ascribed to Aristotle, St. Thomas Aquinas, and Spinoza. And it has been explicitly held by Locke, Berkeley, and Hume. More recently it has been advocated by Brentano, Meinong, and Husserl among continental philosophers; and by D.C. Williams and Keith Campbell.

The theory that the qualities and relations of things or substances are particular, I will call particularism. The
theory that the qualities and relations of things or substances are universal I will, following an established convention, call realism. Realism, thus understood, is opposed to particularism; and it should be distinguished from that version of realism which claims that there are universal entities — namely types or kinds — but that it is only particular instances or tokens of these types or kinds, and not the types or kinds themselves, which characterise or relate existent entities. This last version of realism was advocated by H.W.B. Joseph and Edmund Husserl, and it is obviously compatible with what I have termed "particularism".

The order of this discussion will be as follows. Firstly, I will attempt to clarify the meaning of, and where possible to define, the key terms 'quality', 'relation', 'particular' and 'universal'. Secondly, I will consider some of the main reasons for believing that particularism is true. And thirdly, I will discuss some recent attempts to refute particularism.

231. What do we mean by a quality of a thing? And what do we mean by a relation? I believe that these terms are indefinable. This is not to say that we are unable to understand what is meant by these terms. Nor does it imply that we cannot provide any satisfactory criteria for determining what kinds of entities count as qualities, and what count as relations. We can understand what a quality is by providing examples of qualities; such as the red which characterises my pencil, or the blue which characterises the unclouded sky. And we can understand what a relation is by providing examples of relations; such as the relation taller than, which exists between Mt. Everest and Mt. Kosciusko.
Some suggestions have been made concerning possible criteria for qualities and relations. It is sometimes suggested, for example, that any universal entity is either a quality or a relation - qualities being one-term, or *monadic* universals; and relations being many-termed or *polyadic* universals. But this criterion is unacceptable for a number of reasons. In the first place, it begs the question as to whether or not qualities and relations are, in fact, universal. And, if combined with what Armstrong has described as *a posteriori* realism, it leads to the absurd conclusion that it is an open question whether or not there are any qualities or relations at all. Secondly, there are a number of entities which would generally be considered to be qualities, such as omnipotence, or being the most virtuous person in Australia, which, in virtue of their very nature, cannot be predicated of more than one thing and therefore, by most standards, cannot be considered to be genuinely universal. Thirdly, it leads to the view that there cannot, by definition, be any monadic relations; and yet there is a whole class of entities - called *reflexive* relations - which are generally considered to be both genuine relations, and genuinely monadic. This class of relations would need to be rejected *a priori*, as spurious, should we accept the criterion in question.

A more satisfactory criterion has been proposed by McTaggart.² He suggests that anything which is *true of* some entity, is a quality of that entity. And we may distinguish qualities from relations by stipulating that, although qualities are qualities of entities, relations are not relations of entities, rather, they are relations *between* entities.¹⁰ The notion of
'betweenness' is not, of course, to be understood as having exclusively spatial connotations; even though we might speak of a 'logical' space which relations occupy between entities.

A more fundamental criterion for qualities might possibly be found in Bradley's distinction between the \textit{that} and the \textit{what}. All real entities, according to Bradley, combine these two fundamental and irreducible features. A quality might thus be understood to be any distinct element or constituent of the whatness of entities. There are, however, difficulties with this criterion. In the first place, as we argued in Chapter 5, the \textit{that} is understood by Bradley to be existence, and existence, I have claimed, is itself a quality. But secondly, even though this criterion might prove satisfactory for determining what kinds of entities count as qualities, unless we deny the ultimate irreducibility of relations to qualities, I do not see that it could be accepted as providing a criterion of relations; and we ought, I think, to accept McTaggart's criteria for both qualities and relations as the most satisfactory.

232. Both qualities and relations, then, I consider to be both indefinable and ultimate. But what are we to understand by the adjectives 'particular' and 'universal'?

We should perhaps begin by pointing out that these terms are generally considered to be contraries - so that an entity cannot be both particular and universal, although it may be neither; and sometimes contradictories - so that an entity cannot be both particular and universal, but it must be one or the other. At this stage we may assume that there is nothing in the notion of a quality as such, or that of a relation as
such, which determines that they are essentially either par-
ticular or universal; and, when applied to qualities or relations, the adjectives 'particular' and 'universal' might, for the present, be understood to be contraries only.

233. Various definitions of the adjective 'universal' have been proposed by philosophers. I have listed what are probably the more commonly cited and interesting definitions. An entity $X$ is said to be universal if:

(a) it is predicable of, or true of, more than one entity;
(b) it is shared by, or is common to, more than one entity;
(c) it is repeatable — (c1) there is, or might be, more than one instance of its kind;
   (c2) there is, or might be, more than one instance of $X$;
(d) it is identical in diverse contexts;
(e) it is a quality or a relation.

And, by way of contrast, $X$ is said to be particular if:

(a) it is not predicable of, or true of, more than one entity;
(b) it cannot be shared by, or be common to, more than one entity;
(c) it is unique — (c1) there is not, and cannot be, more than one instance of its kind;
   (c2) there is not, and cannot be, more than one instance of $X$;
(d) it is not identical in different contexts;
(e) it is a substance or a substantive.

234. Among these definitions, some may be rejected from the outset; and almost all are in need of further clarification. We may reject, for example, the fifth definition of
'universal'. The proposition that qualities and relations are universal would, according to this definition, be equivalent to the analytic truth that qualities and relations are either qualities or relations. But the former proposition, if true, is clearly a synthetic truth.

For a similar reason we can, I believe, reject the fifth definition of 'particular'. The proposition that qualities and relations are particular is not equivalent to the proposition that qualities and relations are either substances or substantives. To equate qualities and relations with substances is to commit what has been termed a "category" mistake. And to insist that all qualities and relations are substantives, is to assert little more than would be admitted by most realists as an obvious truth; namely that qualities and relations are the bearers of further qualities. But it is clear that if realism is true, and qualities and relations are universal, then we would seem to be committed, by accepting this definition of particularity, to the conclusion that qualities and relations may be at once particular and universal - in which case the contrariety of the terms 'particular' and 'universal' is destroyed.

235. Concerning the remaining definitions, we may reject one version of definition (c), namely (c1), as being compatible with particularism. The fact that there may be more than instance of one and the same kind of quality or relation is compatible with the fact that each instance of the kind is particular in any of the senses (a), (b), (c2), or (d). The view that the instances of a universal kind are particular is, in fact, the view of Stout - who is often cited as a leading
exponent of particularism.

Definition (b) might be thought to be compatible with particularism depending upon (i) whether or not a part of one entity can be a part of, or be shared by, another entity; (ii) whether or not a relation which relates two or more entities can be said to be shared by, or be common to, those entities which it relates. With respect to (i), it is clear that if the qualities of a substance are - as Meinong, for example, held them to be - parts of that substance; and if one substance or a part of that substance can be a part of another substance, then, upon the assumption that the qualities of a substance are particular in accordance with (c2), it would be possible for one and the same particular quality to be shared by more than one entity, and therefore universal according to (b). And with respect to (ii) it is clear that if a relation which relates two or more entities can be shared, in the sense which I have described, by those entities, then relations which are particular according to definitions (c1) or (c2), may also be universal according to definition (b).

We are left, then, with (a), (d) and (c2). As a definition of the term 'universal' which could be applied univocally to both qualities and relations, we ought to reject (a). In the first place, the view that relations, as distinct from relational qualities, are strictly predicatable of the terms which they relate, in the same way that qualities are - i.e. as constituent elements of the terms or their natures - would find little support among philosophers. Relations, as I suggested earlier, are not strictly true of their terms in the same way that qualities are. Rather, they are between their
terms. And secondly, even if relations can be said to be predicable of their terms, the fact that all except reflexive relations have more than one term would imply that most relations are predicable of more than one term. All relations, then, with the exception of reflexive relations, will satisfy the definition of 'universal' given in (a) — although they will be particular according to (c) and (d).

Of definitions (c2) and (d), I think that the latter is the more fundamental, although (c2) does seem to capture at least part of what is usually meant when it is said that an entity is 'universal'. In accordance with (d), strict numerical identity is, I think, almost unanimously thought to be an essential feature of universal entities. But, at the same time and in accordance with (c2), it is also generally held that, not only do such entities have diverse instances (this view, we have seen, is compatible with particularism), but that they are identical with these diverse instances. In other words, a universal entity is an entity which is at once, numerically one and many. This definition is, I believe, fundamental; and it can be seen to be so by the fact that it is compatible with each of the other definitions of 'universal' that I have listed.

235. Concerning a definition of 'particular', I suggested earlier that the terms 'universal' and 'particular' are contraries. In keeping with the above definition of 'universal', and with this principle in mind, we may define a 'particular' entity as an entity which is essentially one and not many.

236. The definition of a universal entity which we have arrived at is, of course, self-contradictory. And this is, I
a perfectly good reason for denying that there are, or can be, any universal entities in general, and any universal qualities or relations in particular. That the notion of a universal entity does involve such a contradiction is rarely, if ever, admitted by realists. Rather than acknowledge that the notion of an universal entity is self-contradictory, realists often use language which appears to be entirely consistent. Universals are said, for example, to have instances, or to be instantiated by particular entities. Or else, particular entities are said to participate in, to exemplify, or to be tokens of, what is universal. In this way a prima facie distinction is established between that which is one and that which is many, and an explicit contradiction avoided. In the next part of this chapter I will consider some arguments in favour of particularism. And I think that what will emerge from this discussion is that most of these arguments amount ultimately to a more or less explicit recognition of the fact that any genuine realism is, despite appearances to the contrary, committed to the above-mentioned contradiction.

237. Before discussing the arguments for particularism, it will be helpful to firstly distinguish the different versions of realism.

The view that universal entities are literally in their diverse instances, so that, as Joseph puts it, "there would be no squareness unless there were squares"\textsuperscript{11}, is the doctrine of universalia in re, or what Armstrong has called "immanent realism".

The view that universal entities are eternal, or timeless, and exist independently of their instances, is the doctrine of
universalia ante rem, or what Armstrong has called "transcendental realism".

The view that there are no strictly universal entities, but that we are able to have "universal" knowledge about an indefinite number of particular entities by means of concepts or ideas which correspond to, or represent, more than one particular entity, is the doctrine of universalia post rem, or conceptualism.

238. Both conceptualism, and transcendent realism, are, I suggest, spurious realisms. Neither is committed to the view that there are genuinely universal entities in the sense which I have described. The fact that one and the same concept or idea may correspond to more than one particular entity does not imply that the concept itself is other than a particular entity; and it does not imply that such concepts are universal in accordance with our definition. Most conceptualists, in fact, consider such concepts or ideas to be particular.

And the view that there are eternal entities which are related - by the relation of participation, for example - to many particular entities does not imply that these eternal entities are genuinely universal. All existent entities are related to more than one other entity; but this does not mean that they are, in virtue of this fact, universal. The only way in which transcendent realism might appear to qualify as a species of genuine realism would be if it were stipulated that the relation between the eternal entity, and the instances to which it is related, is a relation of numerical identity. But there are two problems with this view. In the first place, it is extremely doubtful whether numerical identity can be
construed as a relation proper. But secondly, and more importantly, it would reduce transcendent realism to a species of immanent realism— with the qualification that all instances of the universal must be eternal.

The only version of realism that might qualify as a genuine realism is, I suggest, the doctrine of *universalia in re*, or... immanent realism. If an entity is literally in more than one entity, then it follows, I believe, that the former entity must be universal according to our definition—i.e. literally one and many.

239. In arguing that particularism is true, I will not, then, be concerned to show that conceptualism is false; since I am only attempting to show that there are no universal qualities or relations. Conceptualism, as such, is obviously compatible with the view that qualities and relations are particular.

Nor will I be concerned to show that there are no transcendental 'universals', since it is clear that it is possible for there to be eternal entities which are related to qualities and relations, even though these qualities and relations are particular.

This leaves us with the doctrine of immanent realism to be considered. According to this theory, when applied to qualities and relations, all qualities and relations are universal entities. It is also commonly held that the only universal entities are qualities and relations. But the fact that only qualities and relations are universals does not, of course, imply that all qualities and relations are universals.

So, the view that all qualities and relations are particular...
follows, I suggest, directly from the conclusion that immanent realism is false.

240. What reasons are there for believing particularism to be true? The most obvious, and most important reason is, of course, the claim that immanent realism is committed to the self-contradictory view that qualities and relations are at once one and many. As I suggested before, this is, I believe, a conclusive reason for believing that any genuine form of realism is false. But I will now consider some more concrete arguments for particularism; and I hope to show that most, if not all, are species of this general objection to realism.

241. If I look at my desk I can see two red pens. Now, although I am unable to discern any qualitative difference between their respective colours, I am nonetheless capable of pointing to, and distinguishing between this red, and that red. According to any normal criterion, this fact would imply that this red, and that red, are not one and the same entity — i.e. that they are diverse entities. Stout makes this point in the following way.

When I see two oranges on the table before me, however similar they may be, I perceive them as two distinct things each occupying its own distinct place and separated by a distance. In just the same way I perceive the shape of each as distinct from that of the other, as occupying its own distinct place, and separated from other shapes by an intervening distance. There is no reason for asserting the oranges to be distinct particulars which is not also a reason for asserting their
shapes to be distinct. Indeed I could not perceive the
two oranges as distinct if I did not perceive the shape
of each as distinct from that of the other.13

The underlying premiss of Stout's argument is that if
spatial distance is a sufficient condition for numerical
diversity, then a quality which is spatially distant from
another quality is thereby numerically distinct from that
other quality; i.e. they cannot be one and the same quality.
Elsewhere14, he explicitly states that one and the same colour
cannot, at the same time, be in two places. To deny this pre­
miss is, in other words, tantamount to admitting that an entity
can be one and many. The only way to avoid this conclusion is
to either deny that spatial distance is a sufficient condition
for numerical diversity; or to deny that the shapes or colours
in question have any spatial location.

Now, if we deny that spatial distance is a sufficient con­
dition for numerical distinctness, then, according to Stout,
we can have no genuine reason to admit that there are, in the
case of the above example, two oranges; or, in my example, two
pens on the table, rather than one orange, or one pen.

And if we deny that the qualities in question have any
spatial location, then it follows, according to Stout, that
(i) there is no sound reason to assume that the oranges or the
pens have any spatial location; since, unless we adopt the
unacceptable view that a substance may exist independently of,
and apart from, its qualities, it is impossible to perceive a
substance as having a spatial location except in virtue of
perceiving its sensible qualities — e.g. its colour or shape —
as having a spatial location.

Stout's argument against realism, then, is simply that if qualities in particular, and all entities in general, are spatially distant, then they are, in virtue of this fact, numerically distinct or diverse. The realist, according to Stout, is committed to the view that qualities which are spatially distant, may be numerically identical. That is to say, the realist, according to Stout, is committed to the self-contradictory view that a quality may be at once one and many.

It is clear that this argument is a species of the general objection to realism mentioned in §240.

242. The next argument for particularism which we will consider is based upon an assumption that is accepted by a number of philosophers—predominantly 'empiricist'. The argument is as follows.

(1) Whatever exists is particular.
(2) Qualities and relations exist.

Therefore,

(3) Qualities and relations are particular.

The cogency of this argument is, of course, debatable. But it is based upon two premisses which are both widely accepted—often as being self-evident truths. Both premisses have, however, been denied to be true. Immanent realists, such as Blanshard, are prepared to accept the second premiss, although they would deny the first. And transcendent realists, such as Russell in *The Problems of Philosophy*, would accept the first, but deny the second premiss. Both, however, would accept the further premiss:

(4) Substances or things exist, and they are particular.
Is it possible, then, to accept (4) and to deny either (1) or (2)? I don't think that it is. Consider, firstly, the view of Russell. Now, the only way to accept (4), and to deny (2) is to accept the view that substances may exist independently of their qualities, or that a substance is something apart from its qualities. But in Chapters 4 and 5 we argued that such a view is untenable. A substance, we concluded, is simply a unity of various qualities. And in so far as we deny that a substance or thing is independent of its nature, our views are in accordance with those of Stout and Meinong; although they differ from the former's in that Stout considered the unity of a substance to be constituted by a relation of consciousness, and from Meinong's in that he believed that the unity of various qualities to form a substance is constituted by a part/whole relation.

But if we accept, as a further premiss:

(5) A substance is a unity of various qualities.

and the premiss:

(6) The parts of an existent entity are existent.

which latter I consider to be an evident truth, then it is impossible to accept Russell's view that both (1) and (4) are true, and that (2) is false. On the other hand, by accepting (5) - which we have argued to be true - the initial argument in favour of particularism becomes quite cogent as concerns qualities. However, since relations are not generally considered to be parts or constituents of substances, the argument does not show that relations are particular; and I will, at a later stage, propose a separate argument to show that relations are particular.
243. If we now consider Blanshard's view, we are faced with further problems. Unlike Russell, Blanshard accepts premisses (2) and (5), although he does not accept (1). But in order to establish (4), Blanshard commits himself to the principle of the Dissimilarity of the Diverse. But this principle is not, I would suggest, compatible with the view that all qualities are universal. For consider, if a substance is a unity of various qualities — say $A, B, C$ and $D$ — and if each of these qualities is universal, then we can draw two conclusions. The first is that if the principle of the Dissimilarity of the Diverse is true, then $A, B, C$ and $D$ must comprise a sufficient description of that substance; there cannot accordingly, be another substance with that description. The second is that if $A, B, C$ and $D$ is a sufficient description of the substance, then it is a complex quality which is unique. And from these two conclusions we may draw the further conclusion that $A, B, C$ and $D$ is a complex quality which is particular — because unique. But this conclusion contradicts Blanshard's initial premiss that all qualities are universal. So, we may say that Blanshard is committed to the view that every substance must have a sufficient description — in keeping with his acceptance of the principle of the Dissimilarity of the Diverse; and that no sufficient descriptions can exist — since all qualities are universal.

To avoid a contradiction Blanshard must either deny that all qualities are universal, or deny the truth of the principle of the Dissimilarity of the Diverse. The first leads inevitably to Particularism, and the second involves a rejection of premiss (4).
It would seem, then, that if we accept (4), (5), and (6), and either (1) or (2), then the conclusion that qualities and relations are particular (3) is established.

244. A different argument for Particularism was put forward, at one time, by Meinong. It has also appeared, in a slightly different form, in an article by Keith Campbell. Let us consider, once again, the two red pencils on my table. Now if, as the realist supposes, the red of the first pencil is one and the same quality as the red of the second pencil, it follows that, should one pencil be destroyed, one and the same quality would both exist and not exist. Meinong concludes that this shows that the red of one pencil is not numerically identical with the red of the other pencil.

Once again, this argument is clearly an example of the general objection to realism. An entity can only both exist and not exist if it is at once one and many - which is impossible.

245. Each of the arguments discussed so far has professed to show that qualities are particular; but it is not clear that any can be applied to relations. Are there any arguments which might show that relations are particular? There is one argument which I believe to be conclusive in establishing that relations are particular.

Let us assume that John is the father of George, and that he is also the father of Mary. In other words, John is related to George by a relation being the father of. He is also related to Mary by a relation being the father of. Does one and the same relation exist between George and John, and between Mary and John? The realist would claim that it does. But this
is impossible. The relation between George and John has the quality of having George and John as its terms, and the relation between Mary and John has Mary and John as its terms. The relation between George and John therefore has a quality which is not possessed by the relation between Mary and John; which means they are dissimilar, and therefore diverse.

It might be suggested that this argument simply begs the question against the realist. The realist, it might be pointed out, would reply by saying that one and the same relation has both of these qualities; and that the conclusion that the relation between George and John is numerically distinct from the relation between Mary and John will only follow if the above-mentioned qualities are incompatible.

The reply to this objection is fairly obvious. The qualities are, in fact, incompatible. And they are incompatible in the following way. The relation between George and John is a two-term, or dyadic, relation; as is the relation between Mary and John. In this respect the relations are similar. But if it is to be one and the same relation that relates George and John, and Mary and John, then that relation has three terms. That is to say, the realist is committed to the contradictory view that one and the same relation is at once a dyadic, and a triadic relation.

It is interesting to apply this argument to the case of resemblance relations. For example, if there are four entities A, B, C, and D; and A resembles B, and C resembles D, but A does not resemble either C or D, and B does not resemble either C or D. Now the relation between A and B is symmetrical, as is the relation between C and D. But if the realist i
correct, then not only does it follow that one and the same relation is at once dyadic and tetradic, but the relation also has the contradictory qualities of being both symmetrical and not-symmetrical among its terms. And if it is one and the same resemblance relation which exists between A and B, as exists between C and D, then A, B, C, and D are all terms of a single resemblance relation. But since neither A nor B resembles C or D, the relation will have the quality of not relating some of its terms - which is clearly absurd. The resemblance relations between A and B, and between C and D must, therefore, be numerically distinct.

We may generalise our initial objection to a realist theory of relations in the following way. For any n-term or n-adic relation, there are, by definition, only n terms. But if realism is true, then any n-term relation will have at least n + 1 terms - which is impossible. So, no relations can be universal.

246. We have considered some specific arguments in favour of particularism, and found that they are convincing enough to at the very least establish a presumption in favour of the truth of this doctrine. But if particularism can be shown to be an inherently inconsistent view, then we might be prepared to accept the reality of self-contradictory universal entities as a more ontologically economical theory. I will now consider some attempts to show that particularism is inconsistent.

247. In Chapter 1 of his recent book on the philosophy of Meinong, Reinhardt Grossmann puts forward a number of criticisms of the view, held at one time by Meinong, that qualities and relations are particular. According to Grossmann, realists
and particularists are both offering theories which profess to explain a common feature of ordinary experience. Suppose, for example, that we are presented with two red billiard balls; and, that these two balls resemble each other exactly in respect of their colours.

According to the realist's view, one and the same property is then exemplified by the two balls. On Meinong's view, however, each ball has its own colour. If, for the sake of brevity, we call the respective shade of red simply 'red', then it would not be accurate to say, according to Meinong's view, that both the ball A and the ball B are red. Instead, we should have to say, describing the ontological situation more perspicuously, that A is red₁, while B is red₂. Red₁ and red₂ are thus not properties in our sense of the term (i.e. universal qualities). I shall from now on call these entities instances.¹⁹

The problem for Meinong, according to Grossmann, is that of how to account for the fact that some qualities belong to different groups or classes; and for the fact that some qualities are members of the same group or class. Grossmann mentions two possible answers to this problem which he believes are compatible with particularism. The first, which he ascribes to Husserl, is a form of transcendent realism. According to this view, qualities are members of the same group or class if they are particular instances of a single 'property' which is distinct from its instances. But this theory is, as
I suggested at the beginning of this chapter, a spurious realism, since it is not committed to the reality of genuinely universal entities. The 'properties' in question are themselves one-and-not-many, and thus particular according to our definition - although they are related to their many instances by 'instantiation' relations.

248. The second view - attributed to Meinong - is that particular instances are classified together because they are related by a relation of equality between them. By equality, we might understand what is commonly known as exact similarity. It differs from the relations of similarity or resemblance, in that it is a transitive relation. If, for example, red₁ is equal to red₂, and red₂ is equal to red₃, then red₁ is equal to red₃. Guido Kün ²⁰ adds that the relation is, more precisely, what Carnap described as altottransitive, which is a qualification introduced to exclude the possibility of reflexivity, and is expressed formally in the following way:

\[(x)(y)(z)(Rxy.Ryz.x\#z \rightarrow Rxz)\]

Red₁, for example, is equal to, but not identical with, red₂. And it is in virtue of this fact that they are said to be members of the same class. On the other hand, red₁ is not equal to, i.e. it is unequal to blue₁, and that is why red₁ and blue₁ belong to different classes.

Grossmann's objection to this view is that it can only explain the supposed unity of the class if the relation of equality is itself a universal entity.
Otherwise we can ask what there is in or about two or more instances of the similarity (i.e. the equivalence) relation that makes them all instances of this particular relation. 21

But this objection involves a simple misinterpretation of Meinong's position. He is not arguing that two qualities belong to the same class in virtue of a relation of equality between them, but that they belong to the same class because they are equal. If two entities are equal, then they are related by a relation of equality. But they are not equal simply because they are related by a relation of equality. In the same way, two distinct equality relations are members of the same class of relations because they are equal, and not because they are related by a relation of equality. And it is clear that such an explanation of the basis for class-membership does not generate any vicious infinite regress. To argue, as Grossmann does, that two qualities are equal in virtue of some single, common, feature; or, that two particular relations are equal in virtue of some common relation, is to simply beg the question against the particularist.

249. Grossmann next considers, and subsequently rejects, the argument for particularism which we considered in §244. This argument, it will be recalled, is that if there are two red pencils on the desk, and if these two pencils are exactly similar, or equal, in respect of their colours; and if one is subsequently destroyed, then the redness of one cannot be numerically identical with the redness of the other, since this would imply that one and the same entity may at once
exist and not exist. Grossmann claims that this argument is valid only upon the assumption that the qualities of a substance are parts of that substance.

On the other hand, if we think of properties as being exemplified by individuals, then it does not follow at all that the destruction of the individual leads to the destruction of its properties. The property of being a triangle, for example, is exemplified by the triangle A. If A is destroyed, then A no longer stands in the exemplification relation to this property, but the property itself is not at all affected by the destruction of A.

The reply to this criticism is that it is based upon a theory of substances, and upon a theory of universals - both of which we have rejected as unsound. Grossmann is committed, firstly, to the view that a substance is distinct from, and independent of, its nature; and this is a theory which Meinong rejected, and which in Chapters 4 and 5 we argued was untenable. Secondly, Grossmann escapes Meinong's criticism of the realist theory only by appealing to the doctrine which we rejected when first considering Stout's argument for particularism; namely, the doctrine that the qualities of spatially located substances do not, themselves, have a spatial location. Thirdly, his argument is based upon the tacit acceptance of the theory of transcendent realism; and this theory, I have suggested, is not a genuine form of realism.

Concerning this last point, if the 'property' of triangularity does not literally inhere in triangular particulars or...
substances, if it is simply related to many substances, then there is no need to assume that it is both one-and-many. But as we have seen, if the property of triangularity is one-and-not-many, it is particular. Grossmann's argument, even if we accept his premisses, shows only that one version of particularism is false. It does not show that particularism in general is false, or even implausible.

250. The next argument in favour of particularism which Grossmann considers is the following.

The entity triangularity of A is different from the entity triangularity of B, because it has the property of being the triangularity of A, even though the entity triangularity or the property triangular is identical in both.23

Grossmann claims that this argument is unsound, since the same type of argument would, if sound, prove that the quality son of John cannot belong to the same entity as the quality son of Mary. In other words, Grossmann is suggesting that Meinong has simply assumed that the qualities triangularity of A and triangularity of B are incompatible in the same way that the qualities son of John and son of Paul are incompatible. But the realist, according to Grossmann, would deny that the qualities are incompatible in the same way; and so Meinong's argument does not present any genuine problem for him.

However, if we accept two premisses - which Meinong did accept - namely (i) that the triangularity of A is a part of A (since A is simply a complex unity of various qualities);
and (ii) that two distinct entities cannot have common parts; then the qualities *triangularity* of $A$, and *triangularity* of $B$ are incompatible qualities - assuming, of course, that $A$ and $B$ are distinct substances. Meinong's argument, in this case, would appear to be sound.

251. The fourth argument considered by Grossmann is attributed to Brentano. Brentano argues - according to Grossmann - in a way which resembles the general objection against the reality of universal entities which we have put forward, that the notion of a universal entity contains a contradiction. He suggests that if we believe that there are universal qualities then we must believe that two distinct entities can agree in every respect. And this is said to imply that two entities, say the redness of $A$, and the redness of $B$, are identical, i.e. one entity.

Grossmann claims, quite correctly, that the realist would deny that there are two entities involved. However, if we begin with the assumption that there are two entities involved, then the realist is committed to the self-contradictory view that two entities are one entity. To avoid this contradiction, the realist must assume that there only appear to be two entities involved.

What we see is not the same property in two different places, but - accurately speaking - the same property as exemplified by different individuals in two different places. 24

In other words, if two pencils $A$ and $B$ are spatially
distant, then even though the redness of A appears to be in
the same location as A, and the redness of B appears to be in
the same location as B, they do not, according to Grossmann," actually have any spatial location at all. And even though we
seem to receive two reds, we do not, he claims, actually per-
ceive two reds.

I am prepared to suggest that this admission amounts to a
*reductio ad absurdum* of Grossmann's theory. But apart from
this, his theory is open to the objection which Stout has
raised against similar views; namely, that it is only possible
to perceive particular substances as having a spatial location
if their sensible qualities are perceived as having a spatial
location; and if we do, in fact, perceive the substances as
having distinct spatial locations, this can only be in virtue
of perceiving their respective qualities as having distinct
spatial locations. From this it follows, if we accept the
premiss that spatial distance is a sufficient condition for
numerical diversity, that the sensible qualities of spatially
distant substances must be diverse, and hence particular.

252. The final argument for particularism which Grossmann
considers is an argument which he attributes to Stout. The
argument in question can be found in Stout's original article
on particularism, "The Nature of Universals and Propositions". Grossmann's reconstruction of the argument is as follows.

Stout starts with the assumption that we may perceive
two perceptual objects as distinct, even though we do not
perceive any difference in their respective 'properties'
(their shapes, sizes, colours, etc.). He assumes,
secondly, that a perceptual object is a complex of 'properties'. Hence, if one perceives two perceptual objects as distinct, one perceives two complexes as different. But complexes differ only in their parts. Hence we must in this case perceive a difference in at least one part between the two perceptual objects. We must perceive that object A contains at least one part which object B does not contain, or conversely. Now, if the parts of A and B were really properties, then we could not perceive the two objects as distinct. Therefore, the 'properties' of the two objects must really be particular. They must be instances rather than properties. 25

Grossmann begins his criticism by suggesting that there is an apparent contradiction in Stout's argument since he starts with the assumption that the 'properties' are perceptually indistinguishable, and yet he reaches the conclusion that they must be perceptually distinguishable.

Now, as a reconstruction of Stout's actual argument, the above is quite inaccurate. There is, in fact, no such apparent inconsistency in Stout's actual argument. The assumption with which he actually begins is, that if two objects are perceived as distinct, and if the distinction is not preconditioned by any discernible dissimilarity between the qualities, the qualities must primarily be known as separate particulars, not as universals 26. In other words, Stout does not assume that we may perceive two objects as distinct even though we do not perceive any difference in their qualities; only that we may perceive two objects as distinct even though we we perceive no
dissimilarity between their qualities, i.e. even though we perceive their qualities as exactly similar or equal. The conclusion that the qualities must be particular is not, however, incompatible with the assumption that they are perceived to be exactly similar - since two particular qualities may, according to Stout, be exactly similar and yet distinct, i.e. numerically diverse.

After admitting that Stout may not be committed to any genuine contradiction, Grossmann then admits that, if perceptual objects are, as Stout insists that they are, complexes of qualities, then it is plausible to assume that these qualities are as particular as the objects themselves. His whole case against Stout, and particularism in general, rests upon an assumption that Stout rejected - that substances or things have qualities, although these qualities are not constituent parts or elements of these substances.

Grossmann seems to admit, in other words, that the only way to avoid the truth of particularism is to assume that transcendent realism is true. But we have already seen that transcendent realism is, in fact, compatible with particularism - as long as it is not combined with immanent realism. And, since Grossmann rejects immanent realism, we may conclude that he has not shown that particularism is either false or inconsistent.

253. We have considered some arguments against particularism from the point of view of transcendent realism. We will now consider the case against particularism as presented by an immanent realist.

254. In Chapter 8 of *Universals and Scientific Realism,*
D.M. Armstrong argues that the view that qualities and relations are particular is false. His critique of particularism is divided into three stages. In the first stage he considers, and subsequently rejects as inconclusive, some arguments in favour of this doctrine. In the second stage he argues that the particularist is unable to give a satisfactory solution to what he calls the "problem of universals". In the final section he argues that particularism is actually an incoherent doctrine.

255. We have already mentioned most of the arguments for particularism which Armstrong considers, so we can concentrate upon his specific criticisms of these arguments.

The first argument which he considers is actually a conflation of two different arguments. The first of these is Meinong's argument that the realist is committed to the view that one and the same entity may at once exist and cease to exist. The second is Stout's argument that one and the same quality cannot, at the same moment of time, occupy two or more distinct spatial positions. Armstrong describes the latter as the problem of "multiple location". The fact that Armstrong does not offer any specific reply to Meinong's argument would seem to suggest that he erroneously considers it to be a species of the multiple-location argument. And his reply to the latter is that he considers it to simply beg the question by assuming, against the realist, that identity of substance is the same as identity of quality or property.

A particular (or substance) cannot be wholly present in a multitude of different places and times. But a property
can. This is to say no more than: a number of different particulars can all have the very same property. 27

Unfortunately, Armstrong does not explain why it is impossible for a particular to be wholly present in a multitude of different places and times. Presumably it is because it would imply that a particular may be what we have described as a universal entity - an entity which is one-and-many, and therefore impossible. But if properties may be wholly present in more than one place at the same time, they must also be what we have called "universal", hence contradictory, entities. The particularist is not arguing that substances and qualities do not have different 'identity conditions'; but that neither, under pain of contradiction, can be genuine universal entities. Furthermore, to say that a property or quality can be wholly present in more than one place and at more than one time is, as we have just seen, to say considerably more than that a number of different substances can all have the same property - since the latter view is held by transcendent realists such as Grossmann, who deny that properties can have any spatial or temporal location.

256. The second argument for particularism which Armstrong considers is based upon the fact that there are expressions such as "His poor condition led to his collapse", which ostensibly refer to particular, i.e. unique, qualities. The particularist argues that such expressions cannot be translated into realist terminology without a significant and appreciable loss in meaning. For example, it is not the poor condition of Harry which is the cause of Paul's collapse, even though both Harry
and Paul are in poor condition. So the poor condition of Harry must be numerically distinct from the poor condition of Paul.

Armstrong attempts to reply to this argument by introducing the notion of a state of affairs, or what McTaggart and others have called a fact. A state of affairs is defined as "a particular's having a certain property, or two or more particulars standing in a certain relation"\(^{28}\). The introduction of states of affairs is said to provide an account of the truth-conditions for expressions such as the one mentioned above, which account does not involve any reference to particular properties. It is the state of affairs, constituted by a particular and a property, or a set of properties, which is referred to by the expression "his poor condition". And it is this state of affairs which, Armstrong claims, is responsible for the person's collapse.

Now, it might be true that the introduction of states of affairs gives us a satisfactory account of the truth-conditions for such expressions. But it does not, I suggest, avoid the problem of multiple location. Nor does it avoid Meinong's argument concerning the possible existence and non-existence of one and the same quality at a single moment in time. For example, if the state of affairs to be considered is that of a pencil having the quality of redness; what are we to understand that happens when this state of affairs ceases to exist — for example, if the pencil is painted blue? It can only be that either or both of the constituents of the state of affairs in question ceases to exist. But it cannot be the pencil (i.e. the particular) which ceases to exist, so it must be the quality (i.e. the redness). But if the redness of the pencil
is one and the same red as the red of my chair, for example, this would imply that the red of my chair ceases to exist when the red of the pencil ceases to exist - which is clearly untrue. To avoid this conclusion we must either accept that the red of the pencil is particular; or, adopt the theory of transcendent realism - according to which a state of affairs is constituted by a particular having a relation to a transcendent property or quality, and according to which a state of affairs ceases to exist when a particular ceases to be related to a transcendent quality, i.e. when the relation between them ceases to exist. But neither solution would be accepted by Armstrong. So, we may conclude that his answer to the particularist's argument is ultimately unacceptable.

257. The third argument for particularism considered by Armstrong is directly attributed to Stout. It is stated briefly in the following way.

The propositions:
(1) A particular is nothing but the sum of its properties;
(2) Two particulars can resemble exactly;
(3) The identity view of properties is correct.
form an inconsistent triad. Not all three can be true. But (1) and (2) must be accepted. So (3) must be rejected. 29

We have considered this argument already in relation to Grossmann's critique of particularism. And, like Grossmann, Armstrong claims that the only way to avoid inconsistency is
to reject (1). But whereas Grossmann rejects it in favour of a relational, transcendent realism; Armstrong rejects it in favour of a non-relational, immanent realism. Now, we have seen that Grossmann's reply does not refute particularism. Can the same be said of Armstrong's? I think that it can.

Armstrong first of all suggests that it is an "intelligible possibility" that two particulars should have exactly the same nature, and that the realist can therefore accept (2) and (3) without being committed to the untenable doctrine of a Lockean "substratum" which is distinct from, and independent of, its qualities. But what does Armstrong mean by the phrase "exactly the same"? And is (2) an intelligible possibility for an immanent realist theory?

If the phrase "exactly the same" means "one and the same", then Armstrong is faced, once again with the problem of multiple location - if the two distinct particulars in question have distinct spatial locations (which Armstrong claims, at a later stage, that all particulars have), and if immanent realism is true, he must admit that one and the same nature can... be, at a single moment of time, in two distinct spatial locations. But if spatial distance is a sufficient condition for numerical diversity, then Armstrong is committed to the self-contradictory conclusion that one and the same nature is two. He cannot; for this reason, deny (1) and accept (2) and (3) if either immanent realism is true; or if particulars may have distinct spatial locations.

If, on the other hand, "exactly the same" means only "exactly similar but numerically diverse", or "equal", then (3) is false, and Armstrong's theory is indistinguishable from
particularism. In other words, contrary to Armstrong's claim, propositions (2) and (3) are not compatible either with each other, or with immanent realism.

258. Our discussion of Armstrong's replies to the particularist's arguments shows, then, that none is conclusive; and that his own theory is not a genuine alternative to particularism.

259. The second stage of Armstrong's critique of particularism concerns the particularist's reply to what he calls the "Problem of Universals". What the exact nature of the problem is, however, is not entirely clear. It would seem to be that of explaining the fact of the One-over-Many. But if this is the nature of the problem, then the particularist should reply that there is no such problem to be resolved if particularism is true. For, if particularism is true, then there is, in fact no One which is over, or in, the Many. There is simply the Many.

This does not amount to a denial that things are, as a matter of fact, classified together. It is simply a denial of the view that they are classified together in virtue of any single common feature. For example, the many reds can be classified together because they are equal, and this equality between them is an ultimate fact incapable of further explanation. The fact that many reds are classified together does not, furthermore, imply that they are therefore, in some sense, one entity, namely a class. To talk of the class of reds is, rather, an elliptical way of saying that many reds are, in fact, classified together. It follows that, to a very real, and perhaps bewildering extent, the basis for classify-
ing entities together is arbitrary; and determined by the persons who do the classifying, rather than by any objective feature of the entities which are classified. It also follows that there can be no classes which have only one member; since to say that a class has only one member is, according to our view, simply an elliptical way of saying that one entity is classified together with itself - which is nonsense.

We can also agree, with Armstrong, that the relation of equality between two terms is determined by the nature of the terms, i.e. in virtue of the terms being equal, rather than vice versa; since we do not claim that the relation of equality between the two terms is the basis for them being classified together (i.e. for them being members of the same class).

Particularism, then, is not committed to finding a solution to the problem of universals; since, if particularism is true, there is no such problem to be resolved.

Armstrong concludes his critique of particularism by attempting to show that it is positively incoherent. He offers two arguments in support of this contention.

The first argument is based upon the premiss that a particular cannot instantiate a property more than once.

To say that \( a \) is \( F \) and that \( a \) is \( F \) is simply to say that \( a \) is \( F \).

Armstrong considers this proposition to be self-evidently true. And he claims that its truth is incompatible with the truth of particularism.

But rather than being self-evidently true, the proposition
is demonstrably false. If it were true, then it would be impossible for a cubic entity to instantiate the quality of being square-sided more than once, which it clearly does.

261. In his second argument, Armstrong argues that particularism must be supplemented with immanent realism to explain how particular qualities and relations can be classified and sorted; from which it is supposed to follow, in a way which is not entirely clear, that the original, particular qualities are not, in fact, particular but universal. But since the desired conclusion rests upon the premiss that particular qualities cannot be classified or sorted except in virtue of their possessing universal qualities, we can undermine Armstrong's criticism by showing that this premiss is false.

Now, if we are presented with the following particular qualities: \( \text{red}_1, \text{red}_2, \text{blue}_1, \text{blue}_2 \), upon what basis can they be sorted and classified? Why, for example, should \( \text{red}_1 \) and \( \text{red}_2 \) be classified together, and \( \text{blue}_1 \) and \( \text{blue}_2 \) be classified together; but \( \text{blue}_1 \) and \( \text{red}_1 \) be sorted apart? Armstrong claims that it is only if \( \text{red}_1 \) and \( \text{red}_2 \) have the universal quality redness; and if \( \text{blue}_1 \) and \( \text{blue}_2 \) have the universal quality blueness; and if neither \( \text{red}_1 \) nor \( \text{red}_2 \) has blueness, and if neither \( \text{blue}_1 \) nor \( \text{blue}_2 \) has redness. But this claim is clearly false. \( \text{red}_1 \) and \( \text{red}_2 \) should be classified together because they are equal; and \( \text{blue}_1 \) and \( \text{blue}_2 \) should be classified together because they are equal. On the other hand, \( \text{blue}_1 \) and \( \text{red}_1 \) should be sorted apart because they are unequal. This does not mean that \( \text{blue}_1 \) and \( \text{blue}_2 \) should be classified together because they have a common or universal quality \( \text{being equal} \). It does imply that \( \text{blue}_1 \) has the quality of being equal.
to $\text{blue}_2$; and, that $\text{blue}_2$ has the quality of being equal to $\text{blue}_1$. But neither of these qualities is universal, and neither is a necessary basis for classifying $\text{blue}_1$ together with $\text{blue}_2$.

262. Neither of the above arguments establishes that particularism is incoherent. And since none of Armstrong's earlier replies to the various arguments in favour of particularism is conclusive, we may conclude that he has failed to show that particularism is false.

263. We may conclude this chapter by briefly pointing out the relevance of the truth of particularism to the principle of the Dissimilarity of the Diverse. If particularism is true, then it follows that it is impossible for two substances to have one and the same nature; and if this is what is meant by the principle, then it is a necessary truth. But it is sometimes understood to mean that any two substances must have unequal natures; in which case the truth of the principle does not follow from the truth of particularism. But it might still be true; and it might be capable of being proved to be so on quite different grounds.

Notes
2. This type of objection was raised by Nicholas Rescher. I have replied to Rescher's criticisms in "McTaggart's Logical Determinism - A Reply to Professor Rescher", *Idealistic Studies*, (Forthcoming).
3. G.F. Stout, "The Nature of Universals and Propositions"


8. Husserl, *ibid*.

10. McTaggart, (N.E.), §80.
16. A sufficient description of a substance is a description (i.e. a complex quality) which is (a) exclusive - applicable to only one substance, so that the substance is absolutely identified by the description; (b) contains no undescribed substances, i.e. is exclusively in terms of qualities and relations. See McTaggart, *op.cit.* §102.
17. K. Campbell, *op.cit.*
Appendix - Cresswell on F.H. Bradley

In his article, "Reality as Experience in F.H. Bradley", (Australasian Journal of Philosophy, Vol. 55, 1977, pp. 169-188), Professor Cresswell has defended the following thesis concerning the philosophy of F.H. Bradley.

the doctrine that reality is experience is the foundation and presupposition of his whole metaphysics and...
the anti-relational and anti-pluralistic arguments which occur earlier in AR can only be understood on the assumption that we already hold the view that reality is experience.¹

The establishment of this thesis is presupposed in Cresswell's later article on Bradley's theory of judgement (Canadian Journal of Philosophy, Vol. 9, 1979, pp. 575-594), and reference will not be made to this article except where it is directly relevant to the article under discussion.

In this paper I will argue that Cresswell has failed to establish his thesis. I will argue that the doctrine that reality is experience is neither a presupposition of, nor a self-evident axiom within, Bradley's philosophy; and, that the 'anti-relational' arguments are both intelligible and defensible, regardless of such a doctrine. In contrast to Cresswell, I believe that if the above thesis could be established, it would render the greater part of Bradley's arguments and conclusions more problematic, and less challenging, than they in fact are.

I have divided my paper into three sections. In the first,
I discuss Cresswell's account of Bradley's view of the nature of experience, including the explanation he offers for Bradley's denial of the infallibility of judgements about immediate experience. The second section is concerned with Cresswell's interpretation of the arguments in the first three chapters of Appearance and Reality. In this section I reject Cresswell's contention that the arguments in these three chapters presuppose the acceptance of the doctrine that reality is experience, and offer my own interpretation of these arguments and their conclusions.

In the final section I discuss some further aspects of Cresswell's paper with which I disagree - in particular, his account of Bradley's theory of degrees of truth and its basis.

1. In the first section of his paper, Cresswell discusses Bradley's views on the nature of experience. A number of features of his discussion suggest, however, that he has failed to fully appreciate the significance and uniqueness of Bradley's position.

(a) On page 172, Cresswell, following Wollheim, describes Bradley's view of experience as essentially "presentational". The sense in which the term "presentational" is to be understood remains, however, unclear. Wollheim used the term to describe a theory of experience according to which ideas, images, etc. are "passively entertained" by the mind.

Its principal use was inside a more general psychological theory which conceived of the mind somewhat as a screen or tabula rasa on which are projected the inert pictures of events, inner or outer.²
He then adds that Bradley used the expression much as anyone else who would have subscribed to this "cabinet" theory of mind. When Cresswell informs us, on page 172, that, according to Bradley, experience is something that "comes to us", or is "given to us", he seems to be using the term "presentational" in much the same way as Wollheim does.

This description of Bradley's views on the nature of experience is, I believe, incorrect. Taken literally, it would imply that all experience is experience for a subject - whether this subject be some sort of transcendent Ego, or analogous to an empty cabinet or *takula rasa*. Such a view is, I believe, implicit in Cresswell's claim, on page 171, that Bradley considered all experience to be conscious experience. Secondly, such a view would seem to presuppose the existence of a substantial self as the owner of the experiences; and, further, that this self is, or can be conceived of as being, something distinct from, and transcending its experiences.

But none of the above views was accepted by Bradley. In the first place, he denied that his view of experience involved any relation to a subject or Ego. When he speaks of experience as *given*, this does not mean that experience is presented to a subject. In a number of places he explicitly rejected any such implication. In his unfinished essay on relations, for example, he writes:

And if we mean by 'given' here to imply a relation of object to subject, then we must certainly avoid the word 'given'. For immediate experience, taken strictly, is free from every kind of relation.
Secondly, he denied that all experience is conscious experience - if conscious experience is to be identified with consciousness.

Consciousness is not co-extensive with experience. It is not original, nor at any time is it all-inclusive, and it is inconsistent with itself in such a way as to point to something higher. (ETR, p. 192)

The sense in which Cresswell uses the expression "conscious experience" is unclear, and it is possible that, when ascribing the view to Bradley, he would not wish to identify conscious experience with consciousness. On the other hand, it is difficult to understand how any experience could be a conscious experience if it did not involve a relation to a subject. The being of an object for a subject is, I suggest, the mark of consciousness; and, as I have suggested above, Bradley rejected the view that experience is co-extensive with consciousness. To say that, for Bradley, all experience is conscious experience is, for this reason, if not incorrect, at best misleading.

Thirdly, Bradley denied the reality of a substantial self. The conclusion he draws as a result of his inquiry into the status of the self is that it is at best a construction, and hence neither fundamental nor ultimate in experience. The self, according to Bradley, has an adjectival rather than a substantial mode of being. This conclusion is probably one of the better known features of Bradley's philosophy, and it is incompatible with a presentational view of experience, and with the view that all experience is conscious experience.

(b) There is yet another feature of the presentational view
of experience which is incompatible with Bradley's actual views. A presentational account of experience typically effects a division, in the manner of Kant, not only between subject and object, but also between thought and sensation and their respective faculties. It is a prevalent preconception - shared, to an extent, by Cresswell (notably on pages 170-173, when describing the 'levels' of experience) - that, according to Bradley's views on the relation between thought and experience, the former somehow operates on, and subsequently dismembers, what is initially given as an harmonious and self-consistent whole or Gestalt. This view may have gained some credence from Wollheim's use of the passage from Valéry as an epigraph to his book on Bradley. Thinking, accordingly, is understood to be an impeachable activity which somehow falsifies the merely given. The resultant implication being that if we can refrain from thought, and simply contemplate the given, then we will have reality in its true character as immediate experience. Furthermore, this falsification of the given is understood to be the work of an active subject or Ego upon passive material - it is we, as finite subjects, whom, it is alleged, are responsible for corrupting what would otherwise remain unblemished.

This view may have attractions, and it is not without philosophical precedent, but as a strict account of Bradley's views it is quite inaccurate. Its acceptance would involve, for one thing, the introduction of something like a faculty theory of the mind - a view which Bradley found neither appealing nor consistent. Secondly, it would imply that thinking alone is responsible for the felt discord involved in the process of what Bradley called ideation - the loosening or disjunction of the what from the that, of content from existence.
As against a faculty theory of the mind, with its emphasis upon the exclusivity and discontinuity between the various faculties, Bradley constantly stressed the continuity and interdependence of all aspects of our mental life. And, as against the related tendency to see thought as the merely subjective and spontaneous activity of isolated and self-enclosed monads, Bradley considered it to be an activity of the Universe in and through finite centres of experience as its primary differentiations. In stressing the continuity of these finite centres with the rest of the Universe, judgement and inference are described as being the ideal self-development of the Absolute.5

As for the responsibility for the disruption of the immediate unity of experience involved in ideation, this must be shared. We read, for example, that "the immediate unity in which facts come to us, has been broken up by experience, and later by reflection." (AR p.19). And, when explaining the concept of ideation, he adds:

It is not manufactured by thought, but thought itself is its development and product. (AR p.148)

It is clear, then, that although, on Bradley's view, all thought involves ideation, he does not hold that all ideation is the result of thought alone. In so far as Cresswell fails to emphasise, or even to acknowledge, this point, he accordingly fails to capture a significant feature of Bradley's views on the levels of experience. In keeping with the presentational view, Cresswell describes the level of immediate experience as "what is presented to us before any reflection
has taken place" (p. 171); and, as "the level at which experience comes to us before the mind has put it into a relational framework" (p. 171).

But Bradley did not maintain, as might be inferred from Cresswell's account, that the level of immediate experience is transcended at the relational level in the sense that the aspect of immediacy is completely lacking in the latter; or, that the first two levels are mutually exclusive. Immediate experience, according to Bradley, "is not a stage which may or may not at some time have been there and now has ceased to exist." (ETR p. 178). In a later note he adds:

We never in one sense do, or can, go beyond immediate experience. Apart from the immediacy of 'this' and 'now' we never have, or can have, reality. The real, to be real, must be felt. Distinction and separation into substantives and adjectives, terms and relations, alienate the content of immediate experience from the form of immediacy which still on its side persists. (ETR p. 190n)

The three levels of experience should not, then, be understood as being distinct stages in an hierarchical structure. They are better understood, instead, as indicative of a shift in emphasis or attention from the immediate to the mediated aspect, which together are said to characterise all experience. The notion of levels of experience, like that of degrees of reality cannot, accordingly, be taken as being ultimate - a point which Bradley himself elsewhere admits.

The doctrine is a difficult one to grasp, and possibly even more difficult to explain without recourse to misleading
metaphors. But it does have some advantages. It is, for example, perhaps the one view which allows us to understand how the distinction between experience and what is experienced, or between feeling and what is felt, can be more or less valid, without being ultimate.

(c) Cresswell's account of Bradley's view of experience as strictly presentational, and his apparent failure to appreciate the essentially relative nature of the distinction between the levels of experience has also, I believe, led to his misunderstanding the basis for Bradley's denial of the infallibility of judgements about immediate experience. According to Cresswell (p.171), the reason why Bradley thought that such judgements are, in principle, subject to error, was that he took immediate experience \textit{qua} object of knowledge, to be different from immediate experience \textit{per se}.

The problem with immediate experience is that we cannot use it as it stands because the moment we use it in Bradley's view, we change it. The experience becomes in his terminology, the object of experience and therefore changes its character. This is the reason he believes that although immediate experience itself is infallible, no judgement about immediate experience is infallible. (p.171)

Now, it might be the case that, as Cresswell suggests, immediate experience \textit{qua} object of knowledge is different from immediate experience \textit{per se}. But we have no right to simply assume that it is; and if Bradley's argument did rest upon such an assumption it would not, as such, be sound. Furthermore
there is nothing in the passage cited by Cresswell to support his contention that this is, in fact, the basis of Bradley's argument.

A more satisfactory basis for the denial of the infallibility of judgements about immediate experience is to be found, I believe, in Bradley's theory of the essentially conditioned, and conditional, nature of all judgements. According to this theory, all judgements, including judgements about immediate experience - or what, in *The Principles of Logic*, are termed "analytic judgements of sense" - are at once conditioned and conditional, and, for this reason, subject to error. Unlike the view put forward by Cresswell it does not rest upon any intuitive appeal to what is merely given in experience, Nor does it presuppose the acceptance of the premiss that reality is experience.

Although the theory of the conditioned and conditional nature of judgement is discussed in Cresswell's later article, I don't see that he anywhere acknowledges the connection between this theory and Bradley's denial of the infallibility of judgements about immediate experience. Cresswell's statement on page 581 of the later article, that Bradley's principal reason for denying the infallibility of such judgements "is the familiar one that experience comes to us as a whole and not split up into parts", confirms my belief on this point.

2. I will now consider Cresswell's interpretation of Bradley's arguments in the first three chapters of *Appearance and Reality*.

In Section II of his paper, Cresswell attempts to show that the arguments in Chapters 1 to 3 of *AR* presuppose the
identification of reality with experience. I will now argue that this contention is unjustified; that the arguments used by Bradley are both intelligible and defensible regardless of this assumption.

Parts (a), (b) and (c) of this section of my paper deal respectively with Cresswell's interpretations of Chapters I, II and III of Appearance and Reality.

(a) Cresswell's discussion of Bradley's arguments against the soundness of the distinction between primary and secondary qualities is, I believe, based upon a confusion. He assumes that the arguments are designed to show that neither the primary, nor the secondary qualities are real. Bradley's intention is, however, quite different. His arguments are intended to show not that both primary and secondary qualities are unreal, but that the distinction between primary and secondary qualities, and the subsequent attempt to uphold the reality of one type, the primary, to the exclusion of the other, is ultimately indefensible. My interpretation is supported by Bradley's own conclusion at the end of the chapter, where he writes:

"We have found then that, if the secondary qualities are appearance, the primary are certainly not able to stand by themselves. (AR p.15)"

The argument to show the unreality of the secondary qualities in Chapter I (AR pp.9-11) is not, as Cresswell assumes, a statement of Bradley's own views. It is, rather, as is pointed out on page 9, a restatement of the view, which he attributes to the 'materialist', that the secondary qualities are in
some way derivative, or that they are mere appearances of the primary qualities which are alone considered to be real.

Bradley's own distrust of the distinction between the primary and secondary qualities of a thing is based upon the belief that the argument used by the materialist to show that the secondary qualities are unreal is equally forceful, if applied consistently, in demonstrating the unreality of the primary qualities. In addition to this problem, the materialist is also, according to Bradley, faced with the problem of explaining how, if the secondary qualities are unreal, they can be related to the primary; and, why, if they are derivative, it is the case that we can neither conceive, nor image, the primary qualities apart from the secondary.

Accordingly, the four arguments found on pages 12 to 15 of AR are not, as is alleged by Cresswell (p.174), intended to prove that the primary qualities are unreal. Rather, they are directed against the materialist who takes the primary qualities to be the only real qualities of things. The first of these four arguments is based upon an alleged inconsistency in the term/relation schema, and as such does not receive an adequate treatment until Chapters II and III.

The second of the four arguments highlights the difficulties inherent in any attempt to explain the relation between the secondary or merely apparent qualities, and the primary or real qualities. If the primary are understood to be the only real qualities of a thing, then an account must be given of the ontological status of the secondary qualities. To grant them apparent existence is said to be meaningless. And to deny them any existence whatsoever is said to be fatal to the validity of the distinction in question. For, if the secondary qualities
do not, as such, exist, then it is not strictly correct to say that they are the secondary qualities of anything. The dilemma which, according to Bradley, is faced by the materialist, might be expressed in the antinomy that the secondary qualities must belong, and yet cannot belong, to the primary.

If, on the other hand, we attempt to avoid this contradiction by granting both the primary and the secondary qualities independent existence, then it is absurd to say that either is a mere appearance of the other; and we are left to affirm a relation between the two classes of qualities which, in terms of the theory, remains unexplained and inexplicable. Furthermore, to say that the secondary qualities are genuine qualities and then to insist that they are merely apparent qualities, is to affirm a contradiction. So, whether we adopt the view that the secondary qualities are mere appearances of the primary, or whether we consider them each to have an independent mode of existence, the distinction between primary and secondary qualities remains unacceptable.

The third of the four arguments is largely an application of the materialist's own argument against the reality of the secondary qualities, to show that it is equally valid against the primary qualities. Bradley's point is, that the argumentation used by the materialist to prove that the secondary qualities are mere appearances, i.e. because they do not exist except in relation to a sentient being, will equally prove that the primary qualities are mere appearances. The quality of spatial extension, for example, in so far as it is a perceived quality of things, is no better off with respect to its ultimate reality, than the secondary qualities. Our awareness of the spatial extendedness of things is, as in the case of their
colour, taste, texture, etc., related to, and consequent upon, the affection of sensory organs which, themselves, have no spatial extension except in relation to another sensory organ (AR p. 13). We do not, as Bradley remarks, seem to have any "miraculous intuition" of spatial extension apart from sense experience. But, if not, extension, as a so-called "primary" quality, ranks with the secondary qualities and shares their ontological fate.

The fourth of Bradley's arguments follows Berkeley, to an extent, by denying the conceivability of primary qualities apart from the secondary. The persuasiveness of this type of argument is debatable, and the assessment of its merits would involve a discussion of principles beyond the scope of this paper. The point is well made, however, if it places the onus of proof of the possibility of the existence of independent primary qualities on the side of the materialist. In so far as we do not, as a matter of fact, perceive the primary qualities thus isolated, I think it achieves the required shift in the onus of proof. The very least that needs to be shown, on the materialist's behalf, is that what he takes to be real is not little more than the illegitimate offspring of a process of vicious abstraction - a point which Bradley makes on pages 14 and 15.

None of Bradley's arguments in Chapter I of AR, thus understood, depends upon the premiss that reality is experience. Cresswell's thesis remains, thus far, unsubstantiated.

(b) Before discussing Bradley's arguments in Chapter II of AR, we should note that it is not his intention, in this chapter, to criticise specifically the concept of a substance. The distinction between a substance and its attributes or qualities
is only one instance of the more general distinction between substantive and adjective criticised by Bradley. The notion of a substance, and the consequent distinction between the substance and its qualities, often has a narrower, and more technical application than that of a substantive. For example, it is *prima facie* possible for a quality to be a substantive - as the bearer of further qualities - although it is, by most definitions of a substance as that which has qualities without being itself a quality, impossible for a quality to be a substance. This distinction is important for a number of reasons. Firstly, if the substantive/adjective schema, rather than the substance/quality schema is shown to be untenable, then it will be impossible to consistently ascribe any relational qualities to a quality; and this, as I hope to show, has a significant bearing upon Bradley's arguments in Chapter III. Secondly, if the substantive/adjective schema is shown to be untenable, then there will be a basic inconsistency in the view, considered below, which takes a thing to be simply various qualities in relation.

Cresswell's brief discussion of Chapter II of AR is rather difficult to follow. His interpretation seems to be based upon the understanding that Bradley subscribed to the logical theory that the copula in a predicative judgement of the form "Sugar is white", affirms the ungrounded identity of the subject and the predicate terms (p.175). Wollheim takes a similar view when he attempts to show that Bradley believed all subject-predicate type judgements to be concealed or implicit identity statements; and, ultimately, reducible to tautologies⁷. According to this theory, the judgement "Sugar is white" is to be read as "Sugar = Whiteness". Such a judgement, whether read
in intension or extension, is clearly false; and, according to Cresswell, gives rise to a contradiction.

Consider the case of a red apple. When presented with this in immediate experience we are only presented with one thing. In experience, the redness and the apple are one. On the other hand we do not yet have, Bradley would I think rightly claim, the apple as a thing apart from its qualities. It is as if we were presented with two qualities, appleness and redness. But, and this for Bradley is the important point, at the lowest level, the level of immediate experience, these two are one. Put as baldly as this of course the assertion is blatantly contradictory. And its contradictoriness is precisely the reason why we move to the next level up. (p.175)

This interpretation is unsatisfactory for a number of reasons. Firstly, it fails to point to any internal inconsistency in the substantive/adjective distinction. At best it shows that this schema is inappropriate when applied to the level of immediate experience. Given the additional assumption that reality is immediate experience, it would, perhaps, lead to the conclusion that the substantive/adjective schema is inappropriate when applied to reality. But the argument, in this form, neither supports Cresswell's overall thesis, nor does it faithfully present Bradley's actual views. Cresswell's overall thesis is that the arguments in Chapter II presuppose the doctrine that reality is experience; but the argument, as stated above, is based upon the premiss that reality is immediate experience. The distinction is significant in so far as
Bradley explicitly denied that immediate experience can be taken as a criterion of reality.  

Secondly, Bradley does not, at any point in his argument in Chapter II, make any claims about what is, or is not merely given at the level of immediate experience. Nor, as I hope to show, need any assumptions about what is given at the level of immediate experience be made to render his arguments plausible or intelligible.  

Thirdly, it is incorrect, or at best misleading, to suggest that Bradley is here, or elsewhere in his work, committed to the view that the copula in a predicative judgement affirms the identity of the subject and predicate terms. Cresswell himself, earlier in his article admits, somewhat inconsistently, that Bradley explicitly rejected such a reading when considering the analysis of predication. It is also against the whole spirit of the discussion in Chapter II to commit Bradley to a predetermined view on the significance of the copula. What significance, if any, is to be attached to the copula; and whether or not there is any consistent theory of inherence or predication, are the precise questions at issue in this chapter. And it would be simply question-begging by Bradley to base his criticisms upon the assumption that the is in a judgement such as "Sugar is white", is always the is of identity.  

Bradley’s actual reasons for rejecting the soundness of the substantive/adjective distinction can, I believe, be shown to rest upon quite different grounds to those put forward by Cresswell. There are, according to Bradley, two ways in which the substantive/adjective distinction might be understood. In the more concrete example of a thing and its qualities, the
'thing' might be considered to be distinct from, and independent of, its qualities; or, the thing might be considered to be its various qualities in relation. The discussion of the latter view is continued in Chapter III.

According to the first view, the thing is not to be identified with one or more of its qualities. To say that sugar is white, hard, and sweet, is not to say that it is merely whiteness, hardness and sweetness. The simple conjunction of the diverse qualities does not, according to Bradley, constitute a genuine unity; and we cannot simply unite the diverse qualities without stipulating a ground for their being united. Thus, it is maintained, the 'thing' must be postulated as a distinct and unifying ground. According to this view, the thing is not identical with its qualities; it simply has them. The copula in a predicative judgement is to be understood, accordingly, as signifying a relation of 'ownership' between the entity denoted by the subject term, and the entity denoted by the predicate term. But to say that a thing 'has' its qualities does not, according to Bradley, resolve the initial problem of inherence. It only introduces a new, and unexplained metaphor to disguise the difficulty. The thing might be said to have or to own its qualities, but an explanation must then be given of what it means to say that a thing 'owns' its qualities - and I don't think that this is a problem for jurisprudence.

It might also be pointed out that if the copula is understood to signify a relation of ownership between the thing and its qualities, not only are we faced with the need to give an intelligible account of the meaning of this relation; but, in making such a distinction between the thing and its qualities, we seem to have thereby granted a measure of independence to
the respective terms of the relation. We are then faced with the problem of explaining in what way a thing can be said to be independent of its qualities.

Whether or not it is possible for a thing to exist independently of its qualities is an important question. And, although Bradley does not explicitly discuss this problem, there are, I believe, perhaps conclusive reasons for denying that it is possible. If each is granted an independent existence, then to say that they are united to form a thing, or substance, can only mean that they stand in some relation which unites them. And this is to assume that relations do, in fact, unite, rather than simply relate, their terms - an assumption which is, I believe, false; or at best, highly contentious. Furthermore, if it is in principle possible for a thing to exist apart from its qualities, then it must be possible for it to exist independently of the quality of existence - which is absurd. And if it is suggested that existence is not universally admitted to be a quality of things, we might still argue that a thing cannot exist independently of the quality of thinghood or substantiality - and to deny this, once again, is absurd.

It might be suggested, however, that to speak of trying to explain the relation between a thing and its qualities is to beg an important question; namely, whether there is, in fact, any such relation. In support of this contention, it might be pointed out that a non-relational unity between the thing and its qualities is what we are given in experience, and any attempt to understand this non-relational unity in terms of a relational re-construction is bound to lead to difficulties.

It seems to me that there are two possible replies to this suggestion. The first is to point out that such a unity would
seem to preclude the existence of a relation of difference between the two terms; and this, in turn, would involve sacrifici

The second way of construing the distinction between a thing and its qualities which Bradley considers is that which takes the thing to be nothing more than its various qualities in relation.

An obvious criticism of this view is that it is unable to offer any satisfactory account of predication or inherence - which is the basis of the substantive/adjective distinction. If we reject the notion of a distinct thing, of which the qualities may be predicated, or in which they inhere, then it becomes strictly incorrect to say that the qualities are the qualities of anything; and the more general substantive/adjective distinction becomes meaningless. We might, however, uphold the distinction by a kind of licence. Although the qualities do not literally belong to a distinct and independent thing, they might still be said to comprise a thing when related in a particular fashion. The plausibility of this view rests ultimately upon the assumption that the quality/relation schema is internally consistent; and in Chapter III, Bradley argues, of course, that it is not. But for the moment we can, I think, reject this view on quite different grounds.
Bradley considers three possible interpretations of the view that a thing is simply its various qualities in relation. The first is to take the relations to be further qualities of the original qualities of the thing; i.e. to reduce relations to qualities of the terms which they relate. The second attempts to reduce the qualities to relations. The third takes relations and qualities to be distinct and mutually independent entities. Bradley argues that none of the above views can give a satisfactory account of the assumed unity of the thing.

The difficulties with the first of these views are set out by Bradley on page 17 of AR. Two qualities, A and B, which stand to each other in the relation r, are said to comprise a thing. The relation cannot, however, be a quality of only one of these terms; since it would not, then, unite both terms, and the unity which is said to be constituted by the two terms A and B in relation would be dissolved into two independent terms - one with the relation as a quality, and one without. Nor can the relation be predicated of the two terms taken severally. If I say that A is larger than B, the relation larger than is not equally a characteristic of both A and B. To say that A has the relation larger than, and B has the relation larger than, is not equivalent to saying that A is larger than B. If the relation is to be a characteristic of the two terms taken severally, they are simply not related.

A different criticism can be made against the second view - that qualities are ultimately reducible to relations. If we deny the irreducibility of qualities to relations, then we would seem to be committed to the view that it is never true that a relation has the quality of being a relation; or, that any one relation differs from another - since relations can
only, presumably, differ from each other by means of their different qualities. But I don't think that it is necessary to press criticisms of this view. I don't believe that it has ever been genuinely advocated, and I don't see that it possibly could be.

The third, and probably the most plausible, alternative open to the view which equates a thing with its various qualities in relation, is that which takes the qualities and the relations to be independent existents. Bradley's discussion of this view pre-empts, to an extent, the discussion of the quality/relation distinction given in the next chapter. His conclusion, at this stage, is simply that if qualities and relations are distinct and independent existents, and if we are unable to consistently predicate the one of the other, then they can be united only by stipulating a distinct and independent ground for their being united. Having rejected the possibility of this ground being an independent substance or substratum, the only other ground for their being united would appear to be a further relation, r', itself an independent existent. But this relation, in turn, requires an independent ground for its being united with the original qualities A and B, and the original relation, r. This further ground can only be provided by another relation, r''; and so on indefinitely. The regress of relations thus precipitated is vicious, however, since there must be a last term in the series in order that there may be a genuine unity between the original qualities, A and B; and yet, because of the nature of the terms involved, and because of the nature of the regress generated, there cannot be a last term in the series. In the end we are left with a plurality of qualities and relations, each independently
real, without any genuine unity between them. And this, of course, fails to provide a solution to the question of the basis for the supposed unity of the thing.

It should be noted, at this stage, that Bradley does not assume that relations are independently real. On page 18 of AR he explicitly rejects this view. Nor does he assume that they are of the same ontological type as qualities. He merely points out that if either of these assumptions is made to be the basis for an explanation of the nature of a thing, then inconsistencies will arise which oblige us to either abandon these premises, or dismiss the supposed unity of a thing as a fiction. According to the latter conclusion, there are no 'things' as such, only simple qualities and relations. Whether or not such a view is ultimately tenable is further discussed in Chapter III of AR. But even at this point, there are, according to Bradley, reasons to doubt that such a view could be consistently held. For, if these simple qualities are truly simple, they cannot, themselves, have further qualities. It would, for this reason, never be literally true to say that they have the quality of being related to each other - which seems to be a *reductio ad absurdum* of the attempt to explain the unity of a thing in terms of independent qualities and relations.

Once again, Bradley's arguments, thus interpreted, do not rest upon the assumption that reality is experience. And I don't see that they would be rendered any more plausible if this assumption were to be included as a premiss.

(c) On page 176 of his article, Cresswell states that the arguments in Chapter III of AR are intended to prove that relations are unreal. But this contention is not, strictly
speaking, correct. In a number of places (e.g. AR pp.21 & 28), Bradley points out that it is his intention to show that there is a problem with the more general quality/relation schema. His ultimate conclusion is that both qualities and relations ought to be rejected, not just relations. The failure to appreciate this fact has led some critics and commentators to believe that Bradley was a proponent of the doctrine of internal relations - according to which relations are either ultimately reducible to characteristics of their terms, or else determined by the nature of their terms. In rejecting the entire quality/relation schema, he thereby rejected both the doctrine of internal, as well as that of merely external relations; although he considered the former doctrine to be less misleading with respect to the ultimate status of relations than the latter.

Bradley's argument has four main stages. The first is to show that qualities presuppose relations; the second that they are incompatible with relations. The third and fourth stages profess to show that similar difficulties arise from the side of relations, i.e. that they at once presuppose, and are incompatible with, qualities. Cresswell's discussion is confined mainly to the first two stages.

Apart from the attempt to show that Bradley's argument is more easily explained if the assumption that reality is experience is used as a premiss, Cresswell's treatment of the first stage is not very contentious. He himself admits, on page 177, that he has failed to show that the argument does rest upon this assumption.

The upshot of the remarks made in the discussion of the
first argument is that while perhaps we are not given absolutely conclusive evidence that Bradley is here depending upon the assumption that reality is experience yet its length and complexity are I believe considerably more easily explained by that assumption.

The actual basis of Bradley's argument is, as Cresswell earlier would seem to admit (p. 176), to be found in the contention that all difference implies a relation; and that, since there are no qualities, as such, where there is no difference or distinctness, there can be no qualities without relations. Bradley's supports this conclusion with two lines of argument. The first attempts to show that the conclusion is justified from an empirical standpoint; the second is based upon metaphysical considerations and, as such, is the most important.

The first line of argument points out that, as a matter of fact, qualities are never found independently of relations. To the possible objection that we are nonetheless capable of thinking of them independently, and that it is therefore possible that they may exist independently, Bradley replies that this argument rests upon what he considers to be the unjustifiable separation of the product of a process of abstraction from the process itself.

This is not, however, a conclusive refutation of the view that qualities may exist independently of relations. At best it achieves a shift in the onus of proof. What is needed is a proof that qualities cannot exist independently of relations. This is, I think, provided by Bradley's second line of argument.

The proof is quite straightforward, and can be set out in
the following way.

Premiss 1: There are no qualities, as such, where there is no
diversity.

Premiss 2: There is no diversity where there is no difference.

Premiss 3: There is no difference without a relation.

Conclusion: There are no qualities, as such, without relations.

The only premiss which might be doubted is, perhaps, the
third. Cresswell (p. 176) states that the common-sense view on
the matter is that "of course there cannot be a plurality with­
out a relation". To my mind, the premiss is evidently true.
Bradley apparently thought otherwise, and offered the following
argument in its favour.

We are asked to consider two distinct qualities, A and B.
Bradley argues that if the difference falls anywhere 'outside'
or 'between' the two qualities, then we have a distinct re­
lation between them. The difference, on the one hand, cannot
be a quality of A, since A would then have a diverse nature -
it would, in fact, be two qualities in relation, and the prob­
lem of inherence would arise once again. The same difficulty
arises if we take the difference to be a quality of B. The
difference between the two qualities cannot, accordingly, be
identified with a quality of either, or of both terms. It must,
if it is real, fall between A and B. But this sense of an
irreducible 'betweenness' is precisely that which is understood
by some philosophers to be a definitive feature of relations.
Wherever there is a diversity or difference, there is, accord­
ingly, a relation.

It might be suggested that the difference, as such, arises
only as the result of a mental process of comparison; and, that all relations are thus dependent upon a mind which compares the various terms. This is essentially the view of both Green and Lotze\textsuperscript{10}. But even if this theory is true, it does not undermine our conclusion that all difference implies a relation between the different terms. It only obliges us to maintain that relations are mind-dependent. The relation is still understood to be 'external' to, or 'between' its terms.

This feature of Bradley's argument is significant for the additional reason that it undermines the basis for the belief that, following Lotze and (according to some interpretations) Leibniz, he attempted to reduce all relations to qualities of their terms.

Having shown that all difference implies a relation between the different terms, Bradley once again stresses the fact that where there are no differences, there are no qualities proper, "since all must fall into one" (AR p.25). His overall conclusion being that the notion of a quality existing independently of any relations is absurd.

The second stage of Bradley's argument against the quality/relation schema is intended to show that qualities are incompatible with relations. Cresswell's analysis of this stage of Bradley's argument is, at times, difficult to follow. On page 177, for example, he suggests that \textit{lying under a tree} is a relation; he then proceeds to argue as if it is a relational quality. In a footnote to that page he deliberately conflates the two, and suggests that, "for present purposes", the distinction is unimportant. But the failure to acknowledge the importance of the distinction between relations and relational qualities has, I believe, left his argument in this section of
his paper (pp.177-179) both inconclusive and confusing. As an example of the confusion generated by the conflation of relations and relational qualities, I will cite an argument found on pages 177 through 179.

Suppose that an apple is lying under a tree. In this case the quality is appleness and the relation is the relation of lying under a tree. Now if we had retained our substance and quality view of things there would be no problem. For it is the very same thing which is the apple and which is lying under a tree. And the identity of the substance provides a ground of connection between the quality appleness and the relational property of lying under a tree. But of course in Chapter 2 qualities are left dangling with no substance to attach to, and so our ground of connection has been removed and there is nothing to hold the quality and the relational property together.

Now it is quite a different thing to say that a substance provides a ground of connection between a quality and a relational quality, and that it provides a ground of connection between a quality and a relation. The former view is, I think, widely accepted as true. The latter view, however, as Russell repeatedly stressed, implies the truth of monism - the theory that there is only one real substance. But, unless we assume that relations and relational qualities are identical - which Bradley does not - then the above analysis of his argument is quite irrelevant to the main point at issue; namely, the way in which a relation stands to a quality. And, although Cresswell may have shown, on page 179, that a problem arises when
we attempt to understand the way in which a quality stands to a relational quality, he has not, thereby, shown that there is a problem in understanding the way in which a quality stands to a relation. For this reason, I believe that Cresswell's interpretation of Bradley's argument is unsatisfactory, and I will now offer my own interpretation.

Bradley's overall contention, at this stage of his argument, is that qualities are incompatible with relations. In support of this contention he first of all argues that qualities cannot be resolved into relations. This point was discussed previously, and I don't see that it can be genuinely denied or queried. Bradley claims that we can only resolve a quality into a relation by rendering the concept of a relation meaningless. A relation which relates nothing but relations is claimed to be ultimately absurd.

Secondly, he insists that any existent quality must stand in some relation. This is based upon the conclusion of the first argument to the effect that qualities presuppose relations. This premiss is said, however, to lead to the further conclusion that any quality is internally diverse.

Each (quality) has a double character, as both supporting and as being made by the relation. (AR p. 26)

The quality is made by the relation in the sense that no quality can exist, as such, independently of a relation. And it supports the relation in the sense that it determines the relations it enters into in virtue of its intrinsic nature. Since all qualities have this diverse nature, all qualities, according to Bradley, must be complex.
At this point a difficulty arises. Having rejected the substantive/adjective schema, we are unable to ascribe this diverse nature to a single substantive - in this case the original quality. It is therefore strictly incorrect to say that the quality has a diverse nature. This, in turn, forbids us to say that the quality is complex; which contradicts our earlier conclusion that all existent qualities must be complex.

The only meaning which might be given to the view that a quality is complex, and which would avoid the above difficulty, is that what is believed to be a complex quality is, in fact, two or more qualities in relation. But this approach leads to an infinite regress. Any quality in relation must be complex; and yet, as we have seen, it cannot be complex. In order to explain the apparent complexity of the quality we must introduce two or more qualities in relation to account for the original 'complex' quality. But each of these further qualities is itself a quality in relation, and therefore 'complex'. The apparent complexity of these further qualities can only be explained by the introduction of further qualities in relation, and so on ad infinitum.

This argument is, I think, conclusive, so long as we accept the premiss that all qualities in relation (since all qualities presuppose relations, all qualities are qualities in relation) are complex. Even if Bradley's own, somewhat obscure reasons for accepting this premiss are questioned, it can, I believe, be established by a slightly different argument. The argument is as follows.

Every quality, we have seen, stands in some relation. In virtue of this fact, every quality has the further quality of standing in this relation. Each relation thus determines, in
the terms which it relates, the occurrence of a relational quality. The original quality therefore has a diverse or complex nature - it is the bearer of relational qualities. This is also true of the generated relational qualities.

We might try to avoid this conclusion by denying that relational qualities are really qualities at all. But such a view is hardly defensible. Our conclusion is, rather, a trivial truth. But the fact that it is trivially true does not make it any the less true.

The above argument is, I believe, in keeping with the spirit of Bradley's own approach to the problem, and it allows us to share his conclusion:

Every quality has, in consequence, a diversity within its own nature, and this diversity cannot immediately be asserted of the quality. Hence the quality must exchange its unity for an internal relation. But, thus set free, the diverse aspects, because each something in relation, must each be something also beyond. This diversity is fatal to the internal unity of each; and it demands a new relation, and so on without limit. (AR pp.26-27)

The third stage of Bradley's argument is similar in approach to the previous arguments, and is intended to show the incompatibility of qualities and relations when approached from the side of the relations. Cresswell does not discuss this argument in detail; and, since it is similar in principle to the arguments already discussed, I will ignore it and pass to the final section of my paper.

Before doing so, it is important to once again stress the
fact that the arguments used by Bradley up to this point are not based upon the assumption that reality is experience. If, as Cresswell maintains, the arguments are compatible with this assumption, then this might serve to strengthen our conviction that they are true. But this is not to say that the arguments are based upon this assumption.

3. In conclusion I will discuss some issues raised by Cresswell's treatment of Bradley's doctrine of degrees of truth. Cresswell's discussion of Bradley's theory of judgement in his initial article is, as he points out, subject to revision and expansion in his later article. There are, however, some rather questionable interpretations of Bradley's views made in the first article which recur, without revision, in the second. On page 185, for example, Cresswell claims that, according to Bradley, all judgements express, or attempt to express, the unqualified identity of the subject and predicate terms. For example, when I judge that the apple is red, I am, according to Cresswell's account, implicitly affirming that the apple is identical with redness. And this affirmation, he claims, is clearly false.

as Bradley very quickly realized, not only are other things beside the apple red but they and it have all sorts of other properties as well; and so we must also incorporate all other concrete universals in our attempt to arrive at a true judgement which includes the original subject and predicate. At each stage we will have more truth than before, but at no stage will our truth be
complete until we end up with the assertion that the whole universe is identical with itself. (p.186)

As I understand Bradley's theory, this is not what he means to assert. According to his views on the nature of thought, the content of all judgements is confined to universals. The universals used in judgement are abstract, and are identified with the judgement's ideal content - the *what* disjoined from the *that* - of which he elsewhere speaks. These universals do not, as such, exist. The connection of content within the judgement is said to be a "marriage" of universals. The judgement that the apple is red is thus restricted, with respect to its content, to affirming a connection between appleness and redness. Having made this point, a distinction is then drawn between the logical and the grammatical subject of the judgement. The logical subject is, as Cresswell would seem to acknowledge, reality - albeit, in general, some restricted sphere of reality. In the case of the judgement in question, the logical subject is not 'the apple', but rather the concrete reality in which appleness and redness are united.

The next step is to point out that any attempt to unite distinct qualities without stipulating a ground for their being united is, on Bradley's view, a contradiction. In the case of our judgement, if we merely conjoin appleness and redness, and fail to state the ground for their being united, we are, according to Bradley, affirming a contradiction.

Things are self-contrary when, and just so far as, they appear as bare conjunctions, when in order to think them you would have to predicate differences without an
internal ground of connexion and distinction, when, in other words, you would have to unite diversities simply, and that means in the same point. This is what contradiction means, or I at least have been able to find no other meaning. (AR p. 505)

The only way to avoid a contradiction is to stipulate the ground for their being united within the judgement itself. Any judgement which fails to supply these conditions, in total, is said to affirm the connection of its content subject to unstated conditions - which renders the judgement conditioned. And, because the conditions are never, according to Bradley, completely knowable, or completely statable, the judgement is essentially conditional.

This theory of the conditioned, and conditional nature of all judgements is the basis for the theory of degrees of truth. That judgement is absolutely true which stipulates all the conditions which ground the unity of the diverse elements which comprise the content of the judgement. The greater the extent to which the conditions are made explicit in the judgement, the greater its degree of truth or, what Bosanquet called its "logical stability".

There are a number of passages which might be cited in defence of my interpretation of Bradley's views. But his theory is perhaps nowhere more explicitly stated than in the following passage from Essays on Truth and Reality.

Every partial truth therefore is but partly true, and its opposite also has truth. This of course does not mean that any given truth is merely false, and, of course also, it
does not mean that the opposite of any given truth is more true than itself. These are obvious, if natural, misunderstandings of our view. But surely it should be clear that you can both affirm and deny \( R(x)a \) so long as \( x \) remains unspecified. And the truth on one of these two sides surely becomes greater in comparison, according as on that side, whether of affirmation or denial, you are able to make the conditions more complete. But, as long and so far as the conditions remain incomplete, the truth is nowhere absolute. 'It is possible to produce sparks by striking flint' is, I understand, offered as an instance of unconditional truth. But the opposite of this truth surely is also true. The thing clearly, I should have said, is possible or not possible according to the conditions, and the conditions are not sufficiently expressed in the judgement. You have therefore a truth which can at once be affirmed and denied, and how such a truth can be absolute I fail to perceive. The growth of knowledge consists in getting the conditions of the predicate into the subject. The more conditions you are able to include, the greater is the truth. But so long as anything remains outside, the judgement is imperfect and its opposite is also true. (ETR pp.232-233 - my emphasis)

The length of this quotation is, I think, justified by the light it sheds upon the question of the basis for Bradley's theory of degrees of truth. The sense in which all judgements affirm an identity between subject and predicate can be explained in terms of an identity of content and existence - of the what and the that. The judgement both affirms the ideal
content of reality, and affirms it, as such, to be real. But there is always a discrepancy in a judgement between content and existence; and, unless this discrepancy or disjunction is maintained, judgement and thought will lose an essential characteristic. Judgement at once presupposes the 'loosening' or disjunction of content from existence, and yet is the attempt to unite these two aspects of reality. It is this inconsistent, even contradictory, character of judgement and thought which, I believe, gave Bradley his reason for claiming that it must be transcended in the Absolute.

Bradley's characterisation of thought and judgement is, of course, disputable. But the above interpretation is, I believe, a faithful, if brief, account of the essential features of his analysis.

In so far as all judgements are, in the sense explained above, implicit identity statements, they are not reducible to tautologies; and the ideal of truth, according to Bradley, is not to be found (as Cresswell suggests on p.186) in the bare tautology that the Universe is identical with itself. The ideal of thought is, rather, the ideal expression of the Universe as a systematic and coherent unity, including the complete sum of conditions of its own expression as truth. But, according to Bradley, thought always falls short of its ideal because it never is what it means. Truth is essentially ideal; and yet, whilst it remains ideal it is not, as such real. In this sense alone, I believe, can the following passage quoted by Cresswell (p.186) be understood.

Truth should mean what it stands for, and should stand for what it means; but these two aspects in the end prove
incompatible. There is still a difference, unremoved, between the subject and the predicate, a failure which, while it persists, shows a failure in thought, but which, if removed, would wholly destroy the special essence of thinking. (AR p. 319)

The unremoved difference of which Bradley speaks is not, as Cresswell implies, the difference between the two sides of an identity sign. It is, rather, the difference between content and existence, between the what and the that.

Finally, on page 177, Cresswell claims that Bradley held a possible worlds view of truth; and, later (p. 187), that he was a realist about possible worlds. I have already dealt with the basis for Bradley's doctrine of degrees of truth, and I have, I believe, shown that the introduction of possible worlds is irrelevant to the understanding of this doctrine. Concerning the contention that Bradley was a realist about possible worlds, I don't see that there is any evidence for this contention in Bradley's writings. It would be more correct to say that he was a possibilist about the real world. Judgements which are not true of the world co-extensive with my body in waking consciousness might, according to such a view, nevertheless be true of the various worlds of imagination, dreams, fiction, etc. Any restriction of the real world such as to exclude these realms is, according to Bradley, ultimately quite arbitrary. In keeping with this view, statements about possibilities can be analysed along the lines suggested by McTaggart, as statements about implication relations between actual characteristics; or else, as statements grounded in categorical judgements about the existent. What Bradley did
argue for was not the proliferation of merely possible worlds, but rather the extension of the boundaries of the real world.

Notes

6. ETR, pp.176-177, 239.
12. Cf. AR, Appendix, Note A: "Contradiction and the Contrary"
13. I am not here concerned to defend this view of the nature of contradictions; only with pointing out its relevance to Bradley's theory.
15. It is in this sense that we can, I think, understand Bradley's view that all judgements are, in principle, existential.

16. See ETR, Chapters III, XIV and XVI.


18. In this respect Bradley was I think, influenced by Bosanquet and William James. See the former's Knowledge and Reality, Chapters 1 and 3; and the latter's The Principles of Psychology, Chapter XXI.
Bibliographical Note

A comprehensive bibliography on Bradley can be found in, Richard Ingardia, "Francis Herbert Bradley - A Research Bibliography" [May 8, 1981], Philosophy Research Archives, Vol.VII, 1981, pp.223-274. The following list includes only works on Bradley published since the appearance of this bibliography.

Timothy Sprigge, "Russell and Bradley on Relations", in Bertrand Russell Memorial Volume, Edited by George W. Roberts,
George Allen & Unwin, London, 1979, pp.150-170. [This important work is unfortunately not included in Ingardia's bibliography.]

Addendum

Spatial Signal Resolution in Coherent Communication Systems

1 INTRODUCTION

In Section 3.3 of this thesis, a direct angular resolution method of the incident signals on a linear antenna array is described. In this method, the physical cophasal requirement of the incoming signals is tacitly assumed. The purpose of this Addendum is to explicitly discuss this cophasal requirement and to provide a plausible implementation of such a system.

2 ASSUMPTIONS AND ANALYSIS

In this Section we considered a special situation where there are identical signal sources transmitting narrow band signal of the same frequency. These sources are in different spatial directions with respect to a receiving antenna array as shown in Figure 1.

The signal sources are assumed highly correlated in phase and the signals are assumed to propagate through the same spatial medium. The incident signal wavefronts are therefore also highly correlated in phase at the antenna array. This coherent communication [1,2] situation is common in the star connected satellite/terrestrial communication networks [3,4] where the transmit oscillator of the remote terminals are phase synchronised to the master clock of the transmitting hub [5,6,7] in a multiple access protocol such as TDM protocol. The two main advantages of this configuration are that the remote terminals can assume the high frequency stability offered by the precision master oscillator of the hub. Such frequency standard is usually extremely expensive and it would not be cost effective to instal one in each of the hundreds maybe thousands of the remote terminals in the network. Secondly, the phase locking configuration increases the signal coherence and thus degrades the overall probability of error signal.

Under this phasal relationship, therefore, whenever a remote terminal gains access to the hub, it is possible for the remote terminal to maintain a constant phase at the hub receiver through a duplex resynchronisation stage in a similar manner as a conventional resynchronisation process [2]. As a consequence, a constant phase can be maintained by
Figure 1. The linear antenna array configuration

all the remote terminals through this process.

Figure 2 shows a conventional star connected communication network. Figure 3 shows
one of a number of conventional receiver to transmitter clock synchronisation schemes.

It is assumed that the received signals at the antenna array carry random phase noise
which arises from either the non-homogeneity of the atmosphere or the transmit/receive
hardware such as oscillator phase noise distribution [9].

The probability distribution function for the phase noise of this nature can be assumed
to be conformed to Tikhonov distribution [8].

Let $\beta_i$ be the phase noise [9] of signal $s_i$. Since $\beta_i$, i=0,1,2,... are identical and
independent random processes, they possess the same probability distribution function,
variance and mean.
The probability distribution function for the phase noise in question is,

$$\text{pdf}(\beta) = \frac{e^{\text{snr} \cos \beta}}{2\pi I_0 \text{ snr}}$$

where

- snr is the signal to noise ratio
- $I_0$ is the modified Bessel function of the $1^{\text{th}}$ kind.

Following the preceding assumptions, the physical signals model at hand yields the

$^{1}$Extract from ref.3 pp.275
Figure 3. One of the phase synchronisation schemes\(^2\)

results below:

- Expected value for \( \beta \) is zero for \( \beta \) being normally distributed within the range of \(-\pi < \beta = 0 < \pi\).

- Expected value of \( e^{i\beta_i} \) is non zero for all \( i \), if signal to noise ratio is non zero over the range of \(-\pi < \beta = 0 < \pi\).

- From the preceding result, \( E[e^{i\beta_i}] = E[e^{i\beta_0}] \), \( i = 1, 2, \ldots, m \).

Where \( E[.] \) denotes the expected value of.

Thus, Referring to Figure 1, the signal at the output of \( n \)th antenna array element is.

\(^2\) Extract from ref 5 pp.412 with modifications
\[ s_n = e^{-j\omega t} \sum_{m} a_m e^{j(\phi_m + \theta_m)} \]

where \( m \) is the number of incident sources

\[ \phi_m = \frac{2\pi d \sin \alpha}{\lambda} \]

\( d \) is the inter element spacing

\( a \) is the signal amplitude

\( \lambda \) is the wavelength

\( \alpha \) is the incident direction of the signal

Therefore, from results 2 and 3, the detected output after the sampling process is,

\[ <s_n> = k \sum_{m} a_m e^{j\phi_m} \]

where \( k \) is a constant.

Figure 4 shows a well known PSK demodulation scheme in which the QPSK phase information is extracted.

The follow-on analysis on the spatial angular resolution by a linear antenna array can be found in Section 3.3 of this thesis. The next section in this addendum is to describe a realistic application scenario.

### 3 SPATIAL RESOLUTION OF COHERENT ALOHA COLLISION SOURCES

This section describes a simple spatial resolution method of coherent signal sources on collision access to a central hub receiver in a radio ALOHA [1,2,3] network. The extra hardware investment in this approach allows an additional degree of freedom in the random access protocol.

In a multiple access communication system, the main concern is to utilise a common communication resource efficiently. When there are more than one signal sources wishing to transfer digital data packets to a single central hub receiver simultaneously, one can use one of a few well known multiple access strategies such as TDMA, FDMA or DAMA [2]. It is also not uncommon for a communication network to adopt ALOHA protocol under
certain multiple access conditions [10,11,12]. ALOHA or RTDMA allows signal sources to transmit data packets at random time slots. In the event an access collision occurs, data packets sent will be lost and the sender sources will not receive acknowledgement from the receiver. The sender sources will then retransmit the data packets at randomly selected time slots until a successful access is achieved. Under an overload situation, ALOHA access will eventually fail.

The purpose of this section is to introduce an additional degree of freedom in terms of hardware implementation to resolve the direction of arrival of the collision transmitting sources. Thus, a number of alternative priority access strategies are then open to the network. A possible hardware option is to use an additional beam forming antenna [13].

Figure 4. Phase Demodulator block diagram

3 Extract from ref. 1 pp. 367
A multiple access remote terminal in a modern coherent communication network generally uses the recovered receive clock to phase lock the transmit oscillator. The reason being that the remote terminals can assume higher frequency stability of the master clock at the central hub as well as achieve a higher signal coherence. This technique permits precise data packet capture window in the hub receiver. As a result, the accessing signal sources are generally correlated in phase with one another. Therefore, in a fixed site communication network, they can be arranged to be in phase at the hub if necessary. Diurnal path changes correction can be updated whenever an access is achieved. Under this assumption, a simple spatial signal resolution antenna system can be realized for a PSK type network.

To simplify the analysis, only a linear antenna array is considered.

Consider a linear antenna array with equally spaced isotropic elements as shown in Figure 1. The signals received by the \( n \) elements in the antenna array as a consequence of \( m \)-incoming PSK signals, ignoring the effect of mutual coupling between antenna elements, can be represented by a complex column vector \( X \) such that,

\[
X = [X_0, X_1, \ldots, X_{n-1}]
\]  

(1)

With the common carrier frequency implicitly expressed, \( X \) can be expressed as,

\[
X = \sum_{i=1}^{m} e^{j(\phi + \beta) s_i} + N
\]  

(2)

where,

\[
S_i = [1, e^{j\alpha_i}, \ldots, e^{j(n-1)\alpha_i}]^T
\]  

(3)

- \( a_i \) is the amplitude of the \( i \)th signal source.
- \([\cdot]^T\) denotes transposition.
- \( \beta \) is the readjusted fixed phase shared among the signal sources with gaussian phase noise.
• $\phi t$ is the fixed tone PSK preamble with Tikhonov phase noise.

• $\alpha = 2\pi dsin\theta_i/\lambda$.

• $\theta_i$ represents the bearing of the $i^{th}$ signal source with respect to the array broadside.

• $d$ is the inter-element spacing of the antenna array.

• $\lambda$ is the operating wavelength.

• $N$ is the random white noise vector.

Consider the expected value of both sides of the Equation (2) and taking consideration of the assumptions stated in Section 2,

$$<X> = c\sum_{i=1}^{m} a_i S_i$$

where $c$ is a constant and can be normalised. $<>$ denotes the "Expected value of".

Now define $Q$ matrix as,

$$Q =
\begin{pmatrix}
<X_0> & <X_1^*> & \ldots & <X_n^*>\\
<X_1> & <X_0> \\
\vdots & \ddots & \ddots \\
<X_n> & \ldots & <X_0>
\end{pmatrix}
$$

where $\{\}^*$ denotes conjugation.

To determine the number of signal sources $m$, the zero eigenvalue of the matrix $Q$ needs be found and its multiplicity is denoted as $r$. It is clear that the number of the signal sources is given by $m = n - r$. With $m$ known, the principal minor of $Q$ with order $m+1$ is used.
The new matrix is denoted by:

\[
\begin{pmatrix}
  \langle X_0 \rangle & \langle X_1^* \rangle & \cdots & \langle X_m^* \rangle \\
  \langle X_1 \rangle & \langle X_0 \rangle & & \\
  & \ddots & & \\
  \langle X_m \rangle & & \cdots & \langle X_0 \rangle
\end{pmatrix}
\]

Now the unique eigenvector \( V_0 \) corresponding to the zero eigenvalue of \( Q_{m+1} \) is computed as,

\[
V_0 = [p_0, p_1, \ldots, p_m]^T; \quad p_0 = 1
\]

Thus,

\[
\langle S_i \rangle \langle S_i^* \rangle V_0 = 0; \quad i = 1, 2, \ldots, m
\]

or equivalently,

\[
\langle S_i^* \rangle V_0 = 0; \quad i = 1, 2, \ldots, m
\]

Expanding Equation (9) into components of \( V_0 \) and \( S_i^* \), the following relationship is obtained,

\[
\sum_{k=0}^{m} p_k e^{-i k \alpha_i} = 0
\]

Clearly, the \( m \) roots of the polynomial \( P(z) \) provide the solution \( e^{-i \alpha_i} \), where,

\[
P(z) = \sum_{k=0}^{m} p_k z^{m-k}
\]
Thus, up to \( n-1 \) angles of arrival of the incident signals can be identified. This formulation also allows the amplitude of each signal to be determined as well.

However, if the arriving signals are not phase correlated then a signal covariance matrix needs be known. In this case, the hardware implementation is complicated, and the solution is well known [14].

**References**