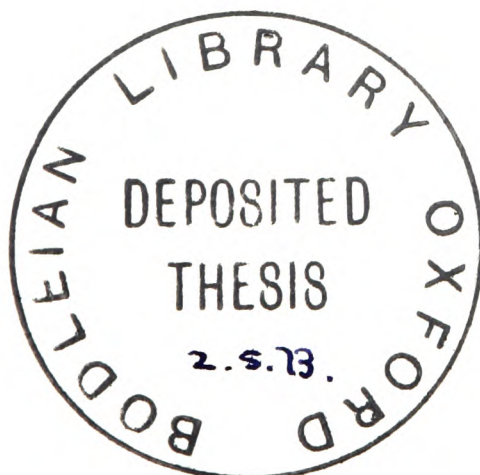


November 1972 [ie 1973] ^{HT}

F A C T S and V A L U E S

A THESIS submitted for the degree of
Doctor of Philosophy
by



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ACKNOWLEDGEMENTS

I wish to acknowledge with thanks the encouragement and advice offered by Professor Basil Mitchell in the preparation of an earlier draft of this thesis.

I wish also to acknowledge with thanks the assistance of Professor Richard Hare who has demonstrated to me by example the value and appeal of philosophical dialogue. Others have assisted me in various ways including Ralph Walker and Andy Brook whose comments and criticisms have added much to the development of my ideas. Finally, I wish to thank my wife Mary for her assistance and encouragement.

ABSTRACT

Chapter I

The thesis begins with a brief introduction in which I set out a number of the major questions which I intend to consider. I indicate that the focus for discussion will be functional words. Two questions regarding functional words are asked. First, do they have descriptive content? Second, do they have evaluative content? After a brief discussion, I attempt to set out the significance of these two questions. I point out that both are potentially significant relative to recent controversies over how description is related to evaluation. I indicate, however, that my chief concern will not be with the prescriptivist/naturalist controversy; rather, my chief concern will be with attempting to discover the role played by functional words in both descriptive and evaluative contexts. The purpose of the discussion will be to discover whether an analysis of functional words can shed any light on the nature of the fact/value relationship.

After raising a number of subsidiary questions, which, it is hoped, will aid the reader in following the argument, I introduce some terminology of which the notion of an F-word is central. A definition of 'F-word' is provided in Chapter II. The 'definition' with which the notion is introduced is simply that an F-word is any word which is like functional words in relevant respects.

has a use is an F-object only if qua an object having that use it serves a recognizable purpose; and (v) C-descriptions do entail evaluations.

Chapter IV

In Chapter IV the discussion turns to a detailed examination of a suggestion of Hare in The Language of Morals. I find it necessary to reconstruct his suggestion and find it contains three elements. Of these three elements I argue that Hare is correct in thinking that in F-inferences, a standard of evaluation is introduced by the use of an F-word. I then argue that Hare is incorrect in thinking that, as in inferences from pure descriptions to hypothetical imperatives, the standard of evaluation in F-inferences is introduced via the conclusion of the inference. Finally, I argue that Hare is incorrect in his view that both hypothetical imperatives and F-conclusions are analytic qua their imperative or evaluative content. I then point out that F-conclusions and hypothetical imperatives are dissimilar in this important respect, namely, that unlike hypothetical imperatives, evaluations entailed by F-descriptions are genuine evaluations.

Chapter V

Chapter V is a summary of the conclusions which follow from the arguments of the first part of the thesis. I conclude that F-words do have both descriptive and evaluative content.

Further, that their descriptive and evaluative content derive from the same source, namely, the fact that F-words identify objects by reference to their function. Because of this, the descriptive content of F-words cannot be separated off from their evaluative content and expressed in descriptive sentences which have no evaluative content. In this sense, F-words and F-descriptions cannot be eliminated. The chapter closes by asking whether there is a second sense in which F-words cannot be eliminated. I ask, 'Are F-words such that to eliminate them from one's descriptive vocabulary is to eliminate the possibility of using descriptive language?'

Part II

Chapter VI

The over all purpose of Part II is to answer the question posed at the conclusion of Part I. I begin that task with a two chapter examination of the relation between perception and goal directed behavior. The basis of the argument is the proposition that if the ability to engage in goal directed behavior is a necessary condition of perception, then the purposes or goals which guide human conduct will be reflected in the ways we identify things. The discussion in Chapter VI and VII revolves around three questions: (i) is perception a necessary feature of goal directed behavior? (ii) is perception itself a form of goal directed behavior? (iii) is there a necessary relation between perception and agency such that it

is logically necessary that perceivers are agents? The first two questions are discussed in Chapter VI, the third in Chapter VII. The first question finds a positive answer. A thing which is incapable of perception is incapable, as a consequence, of goal directed behavior. The second question is answered negatively. I point out, however, that perception does exhibit a number of characteristics whose possession suggests that perception has much in common with goal directed behavior.

Chapter VII

This chapter considers the question 'Is there a logically necessary relation between perception and agency such that only agents are capable of perception?'. I argue that: (i) it is logically necessary that something be an agent if it is to be determined that it is a percipient thing; (ii) only if a percipient thing is an agent can it be determined what it is capable of perceiving; (iii) there is convincing empirical evidence which demonstrates that perceptual skills are acquired in the context of goal directed behavior and further that this does have an important bearing on what someone does in fact perceive; but (iv) the kinds of arguments which attempt to show that percipient things logically must be agents are unconvincing.

Chapter VIII

The next two chapters turn to a discussion of the relation between description and goal directed behavior. I argue that the

use of descriptive language for communication is possible only to agents. Descriptive uses of language can be taught only if it is possible to establish publicly what the words in the language mean. A number of arguments are used to show that this is a genuine problem and one which cannot be overcome by non-agents. From this it is seen to follow that for communication to be possible, at least some of the objects about which communication takes place must be identified as objects of manipulation. I argue that it follows from this that for descriptive language users, a fundamental and non-eliminable way of identifying objects is as objects of manipulation.

Chapter IX

This chapter is devoted to an attempt to develop and illustrate the conclusions of Chapter VIII through the use of a model. In the course of the discussion, I show that an object of manipulation is an F-object.

Chapter X

Chapter X is the concluding chapter of Part II. I conclude that to communicate using descriptive language, an individual must be able to identify at least some of the F-objects which those with whom he wishes to communicate are able to identify. I suggest that this constitutes a second sense in which F-words are not eliminable.

Part IIIChapter XI

This chapter comprises Part III of the thesis. Its purpose is to sum up in a brief way the conclusions of the previous two parts. It also suggests in a highly speculative way some possible implications of the position arrived at in the course of previous argument.

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SECTION I

CHAPTER I: AN INTRODUCTION

I.1 Functional words

It is undeniable, I think, that functional words have played a significant part in much recent discussion of the relation between facts and values. It is equally undeniable, I think, that the significance of functional words for an understanding of the relation between facts and values remains unclear, in spite of the many discussions in which functional words have made an appearance.

According to R.M. Hare, (The Language of Morals, Oxford University Press, 1952, p. 100) 'a word is a functional word if, in order to explain its meaning fully, we have to say what the object it refers to is for, or what it is supposed to do'. This definition can serve as starting point. But it does leave a number of questions unanswered. It is the purpose of this introduction to outline some of these questions.

I.2 Do functional words have descriptive content?

I take the question which heads this section to mean 'Do sentences which employ functional words have descriptive content by virtue of their use of a functional word?'. To give this question concrete application, do the sentences 'This is an auger' or 'This auger will not bore holes in wood'

convey information simply by virtue of their use of the word 'auger'? At first glance, a person might be inclined to say that they do. To call something a tree is to say something about it; presumably to call something an auger is also to say something about it. Further, there seems *prima facie* to be a difference between 'This is an auger' and 'This is a good auger'. At first glance, the first of these two sentences would appear to be a description and the second an evaluation.

However, first glances can be misleading. As we shall see at a later stage, there are suggestions made in The Language of Morals which imply that the superficial glance offered above is mistaken. These suggestions will be examined at length in Chapter IV below.

I.3 Do functional words have evaluative content?

I take this question to mean, 'Do sentences employing functional words have evaluative content by virtue of their use of functional words?'. This question is not an easy one to answer. The term 'evaluation' is regarded by some philosophers to be a technical term whose use requires a careful definition. I do not wish to attempt such a definition. Yet I think that most people would agree that there is a difference between offering a description of a given state of affairs and offering a value judgement about a state of affairs as, for example, the judgement that a particular action would be good or harmful or beneficial and so on. Further my guess is that most would think

that to pick out something using a functional work like 'auger' would resemble describing the thing in question more closely than it would resemble offering a value-judgement about it. On the other hand, even assuming my guess to be correct, it is common knowledge that value-judgements often pass for descriptions in everyday conversation. Consequently whether most would regard a particular kind of judgement as a description rather than a value-judgement is perhaps irrelevant.

How then does one set about determining whether sentences employing functional terms have evaluative content? I think one way of doing so is to determine whether sentences employing functional terms entail evaluations, that is judgements which make explicit use of terms like 'good', or 'bad'.

I.4 What is the significance of these questions?

A good deal of interest has been generated over the past few years by the naturalist/non-naturalist controversy. The non-naturalist view which has been most prominent in this regard, namely prescriptivism, would appear to be premised on the rule so-called that no evaluative conclusion can be validly drawn from a set of premises which does not contain at least one imperative (cf. LM, p.28). Some philosophers have argued that there is no such rule and that as a consequence the prescriptivist account of evaluative language is mistaken. They have sometimes argued that sentences employing functional words are descriptive sentences which at the same time entail

value-judgements and as such constitute counter-examples to those accounts of evaluative language which adopt the rule stated above as part of their account.

In light of this controversy, the answer to the question, 'Do sentences employing functional words entail value-judgements?' assumes considerable importance. However, even on the assumption that sentences employing functional words do entail value-judgements, it does not follow that inferences of this sort constitute counter-examples to the prescriptivist account of evaluative language. Before determining that they do constitute a counter-example one would have to determine whether such sentences do have descriptive content by virtue of their use of a functional word, whether the functional word used in the sentence actually plays a part in such inferences, and finally, whether the value-judgements entailed by such sentences are what a prescriptivist might call analytic qua their evaluative content.

As just indicated, it is clear, I think, that the questions posed in the first section of this introduction are significant relative to recent controversies about how description and evaluation are related. However, it is not my intention in what follows to focus primarily on that controversy. Rather, my chief concern is to determine the role which functional words play both in descriptive contexts and in evaluative contexts. Further, can a study of functional words shed any light on the relation between description and evaluation? No

doubt, some of the view developed in pursuit of this goal will have some relevance for the recent naturalist/non-naturalist controversies mentioned above. And where this is the case I shall attempt, as a secondary objective, to draw out those implications.

I.5 Some further questions

I have already suggested that determining first whether sentences employing functional words do have descriptive content by virtue of the fact that they do employ a functional word and at the same time establishing that such sentences do entail value-judgements does not necessarily tell us anything about the relation between facts and values. Let us assume for the moment that sentences employing functional words do have descriptive content by virtue of their use of a functional word. Let us call such sentences F-descriptions. Let us assume further that F-descriptions entail evaluations or value-judgements (I intend to use these terms to mean the same thing). We must then determine whether the functional word employed by the F-description plays any part in the inference and further whether functional words introduce into F-descriptions an evaluative as well as a descriptive element. Finally we must determine the nature of the value-judgements entailed by F-descriptions. Are they normal evaluations having substantial evaluative content or are they what a prescriptivist might describe as *qua* evaluations analytic.

There are additional questions which arise assuming that F-descriptions do entail value-judgements. Let us assume that F-descriptions are not pure descriptions. Can the descriptive element in the meaning of F-descriptions be separated out from the evaluative element and conveyed in the form of a pure description? If so, all F-descriptions can be analysed into their descriptive and evaluative components which would then be seen to be logically independent of each other. Presumably, also, the prescriptivist rule about the deduction of evaluations from purely descriptive premises would apply only to the descriptive element of F-descriptions. If, on the other hand, it can be established that the descriptive and evaluative meaning of an F-description cannot be separated out into logically independent components, it would seem to follow that there exists a type of description which is necessarily evaluative.

The significance of most of the questions posed above is no doubt not entirely clear. Yet, as I shall attempt to show, in the next three chapters, these are important questions; further, they can be answered. I shall first examine whether and in what sense F-descriptions can be said to entail value judgements. In so doing I shall attempt to determine whether F-descriptions have evaluative content simply by virtue of their use of functional words. In Chapter III, I shall attempt to determine whether and in what sense F-descriptions have descriptive content simply by virtue of their use of a functional word. In Chapter IV,

I shall consider a comparison between inferences from descriptions to hypothetical imperatives and inferences from F-descriptions to value judgements, a comparison suggested in The Language of Morals. The remaining chapters will attempt to determine whether F-descriptions can be eliminated.

I.6 Terminology

In what follows, I intend to make use of some technical terms. I think this terminology is best introduced prior to the discussion in which it will be used. However, I shall not attempt initially to offer ultimately satisfactory definitions of the technical terms I shall be using; one of the purposes of these chapters is to work out more adequate definitions.

Much of the discussion will focus on what I propose to call F-words. The only kind of F-word referred to in the discussion thus far is functional words. I am suggesting the term 'F-word' to avoid begging the question whether functional words are the only words which can be appropriately called F-words. For present purposes, an F-word will be any word which picks out objects in a way which is relevantly similar to the way in which functional words pick out objects. I shall attempt a more adequate definition at a later stage. Sentences which employ F-words without at the same time employing any (other?) value word like for example 'good' I shall call F-descriptions. In Chapter III below I shall argue that I am justified in referring to such sentences as descriptions. I shall argue in Chapter II below that it is characteristic of

F-descriptions that they entail evaluations. Evaluations entailed by F-descriptions I shall call F-conclusions. An example of an F-conclusion is 'This is not a good auger'. An inference from an F-description to a F-conclusion I shall call an F-inference. An example of an F-inference is

This auger will not bore holes

This is not a good auger

Finally, I shall call objects picked out by F-words F-objects.

In Chapter III, I shall be discussing descriptions which ascribe causal properties to objects. I shall call such descriptions C-descriptions. I shall argue that C-descriptions do sometimes entail evaluations and I shall call inferences from C-descriptions to evaluations C-inferences.

In the final chapter of the first part of the thesis I shall be discussing inferences from descriptions to hypothetical imperatives. I shall call inferences of this sort H-inferences.

The justification for the use of this terminology will emerge in the course of the discussion.

CHAPTER II

II.1 F-descriptions and F-inferences

Do sentences which employ F-words entail value judgements? There would seem to be wide-spread agreement that they do. There are two examples of inferences from F-descriptions to evaluative conclusions to which I wish to pay particular attention. The first is found in The Language of Morals (Oxford University Press, 1952), the second in Alan Montefiore's "Fact Value and Ideology" (British Analytical Philosophy, Ed. Bernard Williams and Alan Montefiore, Routledge and Kegan Paul, 1966).

In The Language of Morals, Hare offers the following comments:

To know what an auger is for is to know the end that augers are supposed to fulfil; it is to know that being able to bore holes is a necessary condition of being a good auger or that if any auger will not bore holes it is not a good auger. But if we define 'auger' in such a way that this major premiss is analytic, then by including the word 'auger' in the conclusion 'This is not a good auger' we make this conclusion derivable from the indicative minor premiss alone, 'This auger will not bore holes'. (p. 100-101)

In "Fact Value and Ideology", Montefiore offers the following example of an inference from an F-description to a value judgement.

- | | |
|---|------------|
| (i) Augers are for boring holes | (analytic) |
| (ii) If an auger does that for which
it has been made it is well | (analytic) |
| (iii) This object is an auger | (factual) |
| (iv) This object bores holes | (factual) |
-

(v) This object, being an auger, is well
 (apparent
 value judgement)

II.2 Why do F-descriptions entail F-conclusions? -- Hare

Hare offers two hints as to why this type of inference works. First:

In this sentence we are handed on a plate,
 in virtue of the meanings of the words used,
 one of the necessary criteria of a good auger;
 but we are handed it by the word 'auger', not
 by the word 'good'. (p. 100)

Second:

We saw above that it is possible to construct
 'hypothetical imperative sentences which are
 derivable from indicative minor premisses
 alone, and that this is done by including
 the required imperative major premiss as
 part of the conclusion inside an 'if'-clause.
 We have here a somewhat similar operation.
 (p. 100)

The first suggestion implies that by using the word 'auger' in the inference, we introduce into the inference a necessary condition of being a good auger which can be made explicit in the form of a major premise of an expanded version of the original inference. Because this premise is analytically true, by adding it to the original inference nothing of substance is contributed to the inference. The expanded version of the original inference reads as follows:

To bore holes is a necessary condition of
 being a good auger
 This auger will not bore holes

 This is not a good auger

The second suggestion made by Hare and quoted above goes beyond the first as I hope to show in a later chapter. The suggestion points to a similarity between what I am calling F-inferences, i.e. inferences from F-descriptions to evaluative conclusions, and inferences from pure descriptions to conclusions which are hypothetical imperatives. This second suggestion is on at least one interpretation (exactly how the suggestion is to be interpreted is not altogether clear as we shall see) incompatible with the position I intend to set out in this chapter. I therefore intend to set it aside for discussion in a later chapter (see Ch. IV below).

II.3 Why do F-descriptions entail F-conclusions? -- Montefiore

In his discussion of F-inferences, Montefiore suggests that F-inferences work because they employ words, what I have called F-words, which are "criteria-setting words" of which functional words proper would form a mere sub-class (op. cit. p. 192). Montefiore goes on to say:

I have inherited an old paper-knife inscribed with the motto 'Every tool, if it does that for which it has been made, is well'. Most people might agree that this assertion can be taken as analytic. It would follow that any assertion obtained by substituting the name of a particular tool for the general term would also be analytic. (Ibid, p. 192)

The suggestion is, then, that for all F-descriptions (where what is described is a tool) one can add to the description the assertion 'If the tool in question does that for which it has

been made it is well' without adding to the substance of the description. This allows arguments of the sort quoted earlier to be set up.

II.4 Hare and Montefiore: the common element

What these two accounts have in common would seem to be the suggestion that by using a word like 'auger' one introduces into one's assertion a criterion of evaluation by reference to which the object in question can be evaluated. Because of this it is possible to derive an evaluation of an F-object from a description of that object without the addition of evaluative premises.

In this chapter, I wish to examine and develop the view that by using an F-word in an assertion one introduces into one's assertion a criterion of evaluation. It is perhaps worth noting before beginning this task that what I have attributed to Hare takes into account only his first suggestion and not his second. In fact, as I shall argue below, if Hare's first suggestion is interpreted in light of his second suggestion, that F-inferences are similar to inferences from pure descriptions to hypothetical imperatives, the resulting account of why F-inferences work is likely to be radically different from the one which I intend to offer in this chapter. As I have already indicated, the alternative which may lie behind Hare's comments will be examined at length in a later chapter.

II.5 Do F-descriptions entail negative evaluations?

The first example of an inference from an F-description to a negative evaluation above was as follows:

This auger will not bore holes

This is not a good auger

An expanded version of the above argument was then put forward namely:

To bore holes is a necessary condition of
being a good auger

This auger will not bore holes

This is not a good auger

The difference between these two inferences is simply that the second includes a major premise which is added simply by virtue of the meaning of 'auger'. That being the case, the second inference contains nothing of substance not included in the first inference.

However, all the moves in the inference from the F-description 'This auger will not bore holes' to the F-conclusion 'This is not a good auger' are not yet explicit. 'To bore holes is a necessary condition of being a good auger' is not a definition of 'auger'. Rather, it is entailed by the definition of 'auger'. According to the O.E.D., an auger is a contrivance for boring holes in wood. It is because an auger is a contrivance for boring holes in wood that it follows that a necessary condition of being a good auger is the ability to bore holes. If we make this an explicit part of our inference we have the following result:

- (i) This auger will not bore holes
- (ii) An auger is a contrivance for boring
holes in wood
- (iii) To bore holes is a necessary condition
of being a good auger
- (iv) This is not a good auger

Premise (i) is the F-description which generates the inference. Premise (ii) is a definition of the meaning of the F-word used in premise (i). Premise (iii) is entailed by premise (ii). And the conclusion (iv) follows from the three premises.

The above inference makes all the steps in the original inference explicit. The inference is valid. That being the case, I take it that F-descriptions do entail negative evaluations.

II.6 Do F-descriptions entail positive evaluations?

The inference offered by Montefiore (op. cit. p. 192) moves from an F-description to a positive evaluation. The chief difference between the inference offered by Montefiore as opposed to the one offered by Hare and examined above is that Montefiore's inference includes the premise 'If an object does that for which it is made it is well'. A premise of this nature is not required by Hare's inference. Montefiore argues that its conclusion is justified on the grounds that it is analytic and therefore adds no substance to any F-description with which it is conjoined. Is Montefiore justified in adopting this view? I think not for reasons offered by Hare in The Language of Morals. Hare points out that to 'know what an auger is for to have no more than a very rudimentary

knowledge of the criteria of a good auger' (p. 101). Boring holes is, according to Hare, only a necessary condition of being a good auger and not a sufficient condition.

It seems to me that Hare is correct on this point. Axes are for cutting wood. Yet is it possible to find axes which do that job but which are not good axes perhaps because the handle is brittle and inclined to shatter under a heavy blow? It would seem therefore that in the case of axes an axe must both cut wood and do so without excessively endangering anyone who might happen to use it. Similarly, augers are for boring holes. But no doubt an auger which did bore holes but did so badly or required excessive expenditure of energy would not be regarded as a good one. It would follow that it is not always the case that a tool is a good tool simply if it does what it was made for.

I take it then that Montefiore has not provided us with an illustration of an inference from an F-description to a positive value judgement. Are we to conclude from this that F-descriptions do not entail positive value judgements? I think not.

II.7 Do F-descriptions entail comparative evaluations?

Comparative evaluations are positive or at any rate can be made in either a positive or negative form. I can say either 'X is better than Y' or 'Y is not as good as X'. I take it then that if F-descriptions entail comparative evaluations it follows that they entail at least one kind of

positive evaluation.

It follows from the fact that F-descriptions entail negative evaluations that they also entail positive comparative evaluations. If the ability to drill holes in wood is a necessary condition of being a good auger, it follows that of two augers, if one satisfies a necessary condition of being a good auger and another one does not, then the first auger is better than the second. If a person wanted an auger and had to choose between one which did drill holes and one which did not, he would in all probability choose the one which did drill holes. If I am correct in this view, then the following inference is valid:

A and B are augers

A drills holes in wood

B does not drill holes in wood

Any object which fulfils its function
is better than an object of the same
type which does not fulfil its function.
An auger's function is drilling holes
in wood

A is a better auger than B

I take it then that F-descriptions do entail positive value judgements of a comparative variety.

II.8 Do F-descriptions entail positive evaluations?

This still leaves unanswered whether F-descriptions do sometimes entail positive non-comparative value judgements of the form 'This is a good X'. However, I think that it is possible to show that F-descriptions do on occasion entail positive evaluations of this variety as well as the following

illustrates. In most Canadian department stores it is possible to find light bulbs which are guaranteed to cast 100 watts of non-glare light for 1000 hours. These light bulbs come under various trade names and as a consequence are not always referred to as non-glare light bulbs. However 'non-glare light bulb' is their generic designation. The function of such light bulbs is to generate a certain amount of non-glare light for at least 1000 hours. I think that any non-glare light bulb which did fulfil its function would be a good one. Take for example the following conversation. A person walks into the electrical department of a department store and asks for a 100 watt Shadow-ban light bulb. 'Why that brand?' asks the sales lady. 'Well', replies the customer, 'The last one I bought from you was a good one. It did exactly what a non-glare light-bulb is supposed to do. It generated 100 watts of non-glare light for at least 1000 hours. So I want another light bulb of the same sort! I am assuming that it will be a good one too'.

What is the difference between the light bulb example and the auger example? First, the function of a non-glare light bulb is clearly delimited in the definition of what a non-glare light bulb is. This is not true of augers. There are various ways in which holes can be bored and, more important, various reasons for wanting to bore holes. The job a person has in mind may be a very simple one which requires neither expertise nor great care. For such a person any auger will be good enough if

it does the job; never mind whether the resulting hole is cleanly cut or the auger rusty. On the other hand, the job might be a difficult one requiring care and time. Because the job requirements are different what would constitute a good auger for the job is different. None of these considerations are catered to by the definition of 'auger'. But equally none of these considerations are relevant in the case of non-glare light bulbs. This is one reason why, in the case of non-glare light bulbs, a bulb which fulfils its function is a good light bulb.

There is a second consideration. Boring holes in wood is not something which, to put it crudely, is an end in itself. People who want to drill holes in wood are complex individuals with complex objectives many of which will have a bearing on the single objective of getting a particular hole or set of holes drilled. A person setting out to drill a hole would be doing so for some further reason. So presumably such a person would not wish to spend more time than necessary over the drilling operation. No doubt such a person, being a normal human being, would want to accomplish his objective with a minimum of pain and effort. And he would want the resulting hole to serve the purpose for which it was intended. All of these considerations would enter into a person's evaluation of a given auger. Once again the contrasting example of the non-glare light bulb is interesting. While generating light also finds its place within

a family of related objectives, nevertheless the use of a light bulb is relatively unaffected by the other purposes a person might have in mind in using a light bulb. Further, the use of a light bulb requires little more than fitting the bulb into a socket and turning a switch. Hence, unlike augers, light bulbs can be evaluated without reference to the family of objectives to which generating light is related.

As a general rule, I think it is safe to conclude that an F-description will entail a positive evaluation if the function which the object in question is intended to serve is carefully specified. The sort of specifications I have in mind is the kind which is likely to be attached to a supersonic plane like the Concorde, or a water-bomber of the sort used to fight forest fires or a 1000 hour non-glare light bulb. In such cases, the specifications for the thing in question can be said to function as a definition of the thing in question such that if an object meets all the specifications it is a good one. My point then is that descriptions employing F-words entail negative and positive evaluations. Which any given F-description will entail will depend on a complex of factors which includes the care with which the function of the F-object in question is specified and the nature of the 'job specification' for F-objects of the sort in question.

If the preceding argument is correct, then the following is a valid inference.

This non-glare light bulb has generated
 the specified amount of non-glare light
 for at least 1000 hours
 The function of a non-glare light bulb
 is to generate a specified amount of light
 for at least 1000 hours
 Any non-glare light bulb which fulfils its
 function is a good one

This light bulb is a good one

Premise one is an F-description. Premise two is a definition of a non-glare bulb. Premise three follows from premise two if previous argument is correct. And the conclusion follows from the three premises.

I take it then that there is no logical peculiarity attaching to F-descriptions such that they entail only negative evaluations. On the other hand, since the definition of most F-words does not meet the requirements set out above, most F-descriptions will not entail positive non-comparative evaluations. That is to say that it seems to be the case that only rarely is the job which an F-object is supposed to do sufficiently well specified that descriptions of that F-object will entail positive non-comparative evaluations. But as we have seen this restriction is a practical one and does not have implications for our analysis of F-words.

II.9 Further considerations

One of the primary objectives of this chapter is to determine the range of objects which can be said to be F-objects. With this in mind, previous discussion raises three issues. First, all discussion to this point has in fact focused on

artefacts. Is it the case that only artefacts are F-objects? Second, each of the preceding inferences from F-descriptions to evaluative conclusions has turned on the fact that the definition of the meaning of the F-word employed included a reference to what objects of the sort picked out by the F-word in question were for. Under what conditions can an object be said to be for something. Third, are F-objects objects with a single use only?

II.10 Are all F-objects artefacts?

The short answer to this question would appear to be 'No'. The class of words which are F-words certainly includes at least those words which are functional words. And not all functional words designate artefacts. For example, 'book-marker' is a functional word; but not all book-markers are artefacts. Further, as Montefiore points out (op. cit., p. 193-4) what something is designed to do is in one sense irrelevant to its being an F-object. What is relevant is what people use a particular object for. The use to which something is put may or may not coincide with the use intended for an object by its manufacturer. For example, airplane glue is designated to facilitate the construction of model airplanes. However, it is now used by some members of the so-called drug culture for glue sniffing. The meaning of 'airplane glue' has now shifted at least for those who are part of the drug culture to reflect its newly discovered use. It is almost certainly true that those who manufacture airplane glue never intended it to have

that use.

What this indicates is that in F-inferences, reference to what a particular object is made for is irrelevant to the inference. What is relevant is what the object in question is for. And as we have seen, what an object is for may or may not coincide with what it was made for.

II.11. Under what conditions can an object be said to be for something?

In his discussion (op. cit. p. 193 ff.) Montefiore suggests that what is important in order for a word to be what he describes as criteria-setting, is that the use of the object which the word designates be socially determined. I am not sure exactly what it is for the use of something to be socially determined. Part of the difficulty with the phrase is that 'socially determined' sometimes suggests a kind of restraint. We might speak of polite behavior as something which is socially determined. This in turn carries the implication of sanctions. I assume that this is not what the phrase 'socially determined' is intended to convey in this case. Rather, what seems to be intended is simply that the use of the object in question be recognized. That being the case, it is worth determining what kind of recognition is required for an object to be said to be an F-object

There are two features of this notion of recognition which are worth noting. First, to say that an F-object is an object which has a recognized use is not simply to say that it is an object which can be used in a particular way. An auger could

no doubt be used as a weapon. But in saying that an auger is an F-object we are not saying that an auger is an object a recognized use of which is as a weapon. Rather, to say that an auger is something with a recognized use is to say that it is something which is identified or picked out by reference to a use which it has. In the case of augers, this is drilling holes in wood.

The second feature of the notion of recognition which is worth noting is that to say of something that it has a recognized use in the sense in which I am using the term is not to say that the use in question is socially sanctioned or widely known or widespread. Of course, the use of an object may be all of these things but it need not be. There are F-objects whose recognized use is such that to put them to their recognized use would be socially unacceptable or perhaps immoral. H-bombs would fall into this category. There are F-objects whose recognized use is the performance of a highly specialized and infrequently performed task. Such objects are none the less F-objects for that. But what is to be made of the suggestion that an object might be an F-object even though its use was not widely known? An appeal to the technical language of e.g. one of the sciences would indicate that the suggestion that this might be the case is a sound one. It is possible that a scientist might invent an apparatus of whose existence he alone knows. He might also give that apparatus a

name. An apparatus of this sort because it is identified by its use would thereby have a recognized use, recognized to be sure by only one person but recognized none the less. Furthermore, the use which it had would be one which others could come to know if they were given the opportunity.

II.12 Are F-objects objects with a single use only?

Hare, in his discussion of commending and choosing (LM, p. 133) points out that in the case of at least one type of F-object, i.e. a car, the function of that F-object is not limited to the performance of a single task. Cars can be used for family transportation, for racing, for status symbols, for taxis, for commuter vehicles and so on. Each of these is a distinct use to which cars can be put. Cars, then, are F-objects which at the same time have a variety of uses.

What is true of cars is equally true of a wide range of F-objects. Electric motors, for example, have a wide range of uses. Wood, defined as a building material, has a wide range of uses. One could provide innumerable examples.

I take it then that F-objects may have, but need not have, a single use.

One final comment. I think that it is the case that only F-descriptions which employ F-words whose meaning includes a reference to an F-object having a single use only will entail positive non-comparative evaluations. That is, only single-use F-objects will be likely to have a sufficiently well

defined function to allow a positive evaluation to follow simply a description which indicates that they do perform their function.

II.13 F-objects: a summary and definition

I think that we are now in a position to offer a series of definitions of the various technical terms introduced in the introduction (see chapter I above). Over the past few pages, I have argued that an object is an F-object if it has a recognized use; that is, if it has a use by which it is identified. To borrow a term used by Philippa Foot, ('Moral Beliefs', Mind, 1958), an F-object is an object for which it is true to say that there is an internal relation between it and some use or uses which it has.

It might be suggested that the notion of an internal relation is one which is best restricted to a description of words. However, this would be a mistake in the case of F-objects. For, as I shall argue below, the ability to identify or pick out objects is not restricted to language users. Further the ability to identify objects according to their uses is equally not restricted to language users. If I am correct in my view that it is possible for non-language users to identify things by reference to the uses which those things have, then it follows that non-language users are capable of identifying or picking out F-objects as F-objects. Of course, there are other ways of describing the logical features of non-linguistic acts

of identification. We could, for example, speak of the existence of an internal relation between the concepts of food and eating rather than speaking of an internal relation between food and eating. But having recognized alternative possibilities, I shall continue to speak of the things being internally related to their uses.

We are now in a position to offer a definition of an F-object. An F-object is any object which has a recognized use which is internally related to that object.

II.14 F-words: a definition

One way (I shall show later that it is not the only way) of identifying or picking out things is through the use of language. As I have already argued, if an object is picked out by reference to a use or uses which it has, then that object is an F-object. It follows that if a word is used to pick out an object, and if the word picks out an object by reference to a use or uses of that object, then the object thus identified is an F-object. To use a word to pick out an F-object as an F-object is to use a word whose definition includes a reference to the use of the object which the word serves to pick out. Such a word is an F-word. An F-word can be defined then as any word whose definition includes a reference to one or more of the uses of the object which the word serves to pick out.

It follows from this definition of an F-word that all objects picked out by F-words are F-objects. It does not follow from either the definition of an F-object or the definition of an F-word that the class of objects which are F-objects consists only of things picked out by F-words. As I have already suggested, at a later stage in the argument I shall attempt to show that in fact the class of objects which are F-objects is not restricted in this way. For the moment I am content to point out simply that neither of the definitions carry with them the implication that the class of objects which are F-objects is restricted in this way.

It follows from the definition of an F-object that a sufficient condition of an object being an F-object is that there should exist in a language an F-word which serves to pick out that object. To put this another way, it follows that a particular use of an object is a recognized use if there exists an F-word which serves to pick out that object by reference to the use in question. This would hold true no matter how technical the language.

II.15 Further considerations

There remains a certain vagueness about the concept of an F-word. I think the reason for this lies in the fact that the notion of a definition has been used but not itself defined. What, that is to say, counts as being part of a definition of a word? Is it sufficient that a reference to an object's use

be included as part of the account (in a reputable dictionary) which follows mention of the term in question? But even this poses a problem. It has been pointed out to me (by Prof. Hare) that dictionaries sometimes provide not simply definitions of terms but also provide on occasion what might be regarded as encyclopedic accounts of the thing being defined. Thus a reference to a dictionary will not necessarily be decisive in deliniating clearly what is and what is not an F-word, as later examples will show.

I am not sure that this is a crucial difficulty. Neither am I sure that it is a difficulty with a definitive solution. However, what I propose to do is to offer a list of the sorts of things which might be thought to be F-objects, look at the definitions offered and then attempt to work out what might lead one to conclude that the things in question either were or were not F-objects after all. While I do not think that this will lead to a definition of 'definition' or a definition of the notion of an internal relation, for this notion too is involved, it will perhaps clarify what I intend to convey by 'F-word' and 'F-object'.

II.16 F-words and F-objects: some examples

The range of objects which I propose for examination are objects which have what might be called an economic relevance. I do not suggest that all F-objects do have economic relevance. Neither do I wish to suggest that what

I offer below is an exhaustive list of F-objects having an economic relevance. But the list to be offered does suggest an interesting gradation and can be used to illustrate what is meant by 'F-object' and why the task of determining that an object is an F-object or an F-word is not always a straightforward one.

If we look at the range of things having an economic relevance we find at one end of the range artefacts manufactured to detailed and often exacting specifications, objects which are sometimes used for a single well defined purpose. Highly specialized machinery would fit into this category as, for example, the equipment used by the astronauts in their expeditions to the moon. Of things like a space suit, or a 'moon buggy', it seems uncontroversally true that there is an internal relation between such things and the uses made of them. That is to say, a person would not know what a moon buggy was if he did not know that it was vehicle used by astronauts for moon walks.

Of course, there are artefacts which have much less well defined uses than those mentioned above. Words like 'vehicle', 'toy', 'machine', 'house', 'record', and 'car' serve to designate objects of this sort. Each is an artefact; each has a use or uses; and in each case the uses are not particularly clearly specified in the definition of the object in question. However, I think that for each of the things mentioned, the definition of the thing would include a reference to what it was for. And

in each case, if one did not know what the thing was for, one would not know what the thing in question was.

The matter seems less clear cut when one comes to deal with semi-manufactured things like lumber or pulp, or nickle, or cotton, or bricks or asphalt and so on. Are all of these things F-objects? The dictionary is not necessarily decisive here. Let us take a look at the things mentioned with a view to working out whether each is an F-object. Lumber is defined (S.O.E.D.)¹ as timber sawn into rough planks or otherwise roughly prepared for the market.² Timber is in turn defined as 'building material', applied to the wood of growing trees capable of being used for structural purposes, hence collectively to trees themselves'. Taking these two definitions together, it seems that 'lumber' is an F-word. A person would not know what 'lumber' meant if he did not know how lumber was used. Brick is defined as 'a substance used in building'. On this definition, 'brick' too would be an F-word.

Cotton is defined as 'the white fibrous substance which clothes the seeds of the cotton plant'. The definition then proceeds after a semi-colon, 'used for making cloth and thread etc'. Would a person know what a person who grew cotton meant by 'cotton' if he did not know that it was used for making cloth and thread? To put it otherwise, is 'used for making cloth and thread' a part of the definition of 'cotton', or is this an

1. All definitions are taken from The Shorter Oxford English Dictionary.

2. The O.E.D. marks this use as North American.

example of the dictionary fulfilling the function of an encyclopedia? For my part, I would have thought that knowing that cotton was used for making clothes and thread was essential to knowing what cotton was. A person who knew only that cotton was the substance which clothed the seed of a cotton plant would not in my view know what cotton was or alternatively what 'cotton' meant. I am not sure I would know how to prove my view the correct one on the matter however.

The word 'asphalt' offers another interesting example. Asphalt is defined as 'a composition of bitumen, pitch and sand or made from natural bitumiuous limestones; used to pave streets'. Does the use of a semi-colon here serve to differentiate between the definition proper and additional information which is of interest but not required for the definition of 'asphalt'? If asphalt's being used to pave streets is just an empirical fact about the way in which the substance asphalt is used then 'asphalt' is not an F-word! But if it is the case that a person cannot be said to know what asphalt is unless he knows it is used to pave streets, then 'asphalt' is an F-word. The interesting thing about this case, it seems to me is, that 'asphalt' is very likely an F-word for those who have always encountered asphalt only under conditions where it is being used to pave streets. On the other hand, for a person who had encountered asphalt in a natural state and only secondarily where it was being used for paving purposes, 'asphalt' would probably not

be an F-word. Such a person would probably accept that another could be said to understand what he meant by 'asphalt' though the other person did not know that asphalt was used for paving. For my part, I think 'being used for paving streets' is part of the meaning of 'asphalt'.

The meaning of terms designating semi-manufactured items then can constitute a problem in attempting to determine whether semi-manufactured items like those mentioned above are F-objects. Natural resources pose similar problems. The fact that we refer to natural resources as resources suggests that they are identified at least in part by reference to their uses. But if we look at the definitions of particular natural resources the matter becomes more clouded. For example, are 'oil', 'gas', or 'land' F-words? Oil is defined as 'a substance having the following characteristics (or most of them): viz being liquid at normal temperatures, of a viscid consistence and characteristic unctuous feel, lighter than water and insoluble in it, soluble in alcohol and ether, inflammable, chemically neutral'. It is undeniable true that it is because oil has these characteristics that it has the uses with which it is identified in the minds of many people. It could be argued, however, that the relation between oil and its uses is an indirect one. It would follow from this that a person could know what oil was without knowing any of its uses. It is unlikely, however, that a person learning English in an industrialized country like Great Britain

would understand what people whom he encountered on an everyday basis meant by the word 'oil' as they used that term in everyday conversation unless he knew that oil was a substance which was used in a number of related and important ways. It is interesting to contrast the definition just given of 'oil' and the definition of 'gas' which like oil is a natural resource which furthermore is often found where oil is found. Gas is defined as 'for heating and lighting'. By this definition, gas is clearly an F-object where oil is apparently not if we are to go simply by the dictionary. However, if one were to go to Alberta in Canada where both gas and oil are mined in large quantities, I doubt that one would find that it was possible to understand what an Albertan meant by 'gas' or 'oil' if he did not know that the one was used for heating and the other for making motor oil and gasoline.

'Land' provides an interesting last example. It is defined to mean 'ground or soil especially as having a particular use or particular property'. It seems to me that good argument could be mounted to the effect that land has not been thought of as an F-object by most people in the past. Further, it might be argued that this is perhaps the reason why its use has been so ill-considered. Perhaps if it had been defined functionally it would have been developed more carefully. Today, though, in a large North American city like Toronto, land is being defined by some at least as a resource. And special values are being attached to it in that capacity. If I am correct in this, it

would seem that the term 'land' is gradually becoming an F-word for at least a part of the urban population of large North American cities.¹

II.17 F-inferences

The chapter began with a discussion of F-inferences and why they work. I should like to conclude the chapter on the same topic.

I have argued that F-descriptions in conjunction with premises which are purely descriptive can entail three kinds of evaluations, negative evaluations of the form 'this is not a good X', comparative evaluations of the form 'this F-object is better than that F-object' (where the two F-objects are of the same sort), and positive noncomparative evaluations of the form 'this is a good X'. I have argued that F-descriptions entail evaluations because they employ F-words which include as part of their meaning a reference to one or more uses which the object picked out by the F-word has. Because F-words do include as part of their meaning a reference to a use, it is possible to conjoin a definition to the F-description without any addition of substance to what is already contained in the F-description. The definition then plays the role of a premise in an inference which generates an evaluative conclusion. In fact the definition provides a standard in terms of which the F-object picked out by the F-word employed in the F-description can be evaluated without going beyond what is offered by the F-description.

1. It is perhaps worth noting that there is nothing to stop a word having some F-word uses and some non-F-words uses.

CHAPTER III

The purpose of this chapter is to examine the relevant differences and similarities between picking out something through the use of an F-word and ascribing causal properties to an object. (As I pointed out in the introductory chapter, I intend to refer to descriptions which ascribe causal properties to things as C-descriptions.) To be more specific, the purpose of this chapter will be to attempt to answer three questions. First, do F-descriptions entail C-descriptions? Second, are objects which are picked out by reference to causal properties which they possess thereby F-objects? Third, do C-descriptions entail value judgements?

III.1 C-descriptions and F-descriptions

The first point to be made about the relation between C-descriptions and F-descriptions is that if we were incapable of attributing causal properties to things we could not use F-words. This seems to be what is involved in saying (as for example Sprigge does in 'Final Causes', P.A.S. Supplementary Volume, 1971, p. 149) that there could be no final causes without efficient causes. Seeking to achieve one's ends necessarily involves working out how to manipulate things in one's environment so as to bring about the desired state of affairs. And this cannot be done unless one knows what responses to expect from objects given the satisfaction of various

conditions. Classifying things as F-objects of particular sorts is simply classifying them by reference to their usefulness in bringing about particular ends or objectives. If one did not know how things would respond under various conditions, then one would be incapable of determining their uses and hence equally incapable of identifying them using F-words.

III.2 Do F-descriptions entail C-descriptions?

If, in calling something an F-object of a particular sort, one thereby attributes causal characteristics to that object, then it follows that F-descriptions entail C-descriptions. It would seem that it is indeed the case that when one calls something, e.g. an auger, one thereby attributes certain causal properties to it. An object could not be used to drill holes in wood unless it had certain causal characteristics. It is, of course, a matter of fact and not a matter of logical necessity that things have the causal characteristics which they do have. On the other hand, it is not simply a matter of fact that an object has to have particular characteristics if it is to be correctly called an object of a particular sort. It is this latter which provides the basis for the claim that for something to be an F-object of a particular sort, it must have those causal characteristics which are required if it is to have a particular use.

It might be argued, however, that it is a mistake to think

that in order for an object to be correctly called e.g. an auger it must have a particular (set of) causal characteristic(s). What is in fact the case, it might be argued, is that in order for an object to be e.g. a good auger it must have a particular (set of) causal characteristic(s). If this were not true, the argument might continue, from 'This auger will not bore holes' would follow 'This is not an auger' rather than what does follow namely 'This is not a good auger'. But since it is the latter which follows from 'This auger will not bore holes' it follows that an object need not have a particular (set of) causal characteristic(s) for it to be correctly called e.g. an auger. This being the case, it follows that F-descriptions do not entail C-descriptions.

The objection, while an interesting one, is, I think, invalid. It does not follow from the view that F-descriptions entail C-descriptions that therefore if an object does not do what e.g. augers are supposed to do that it is therefore not an auger. Of course, it might follow from the fact that a particular thing could not bore holes that it was therefore not an auger; but at the same time it might not. Whether it did or did not follow from the fact that a particular object could not bore holes that therefore it was not an auger would depend entirely on why it could not bore holes. The reasons are as follows. For something to bore holes in wood certain things must be true of it. It must have a shaft which is able to take

the twisting strain which occurs when drilling takes place. It must have a point or bit which is capable of biting through wood. It must have a handle without which the proper leverage could not be obtained. Thus to attribute the characteristic of boring holes to something is to attribute to it those additional characteristics which a thing must have if it is to be capable of boring holes. Now, if something has those secondary characteristics which a thing must have if it is to have a primary characteristic like boring holes in wood but yet does not have the primary characteristic in question e.g. does not bore holes in wood, it may still be correct to call it e.g. an auger. For, because it has the required secondary characteristics, or at least most of them, it could probably be brought about that the thing in question was able to do what it was supposed to do. That is, it could be fixed. It might, for example simply need to be sharpened; or the handle might need to be repaired. If either of these two things were the problem the thing in question could be fixed so that it could then be used to bore holes in wood. On the other hand, if an object had none of the required secondary characteristics, that is, if e.g. it did not bore holes because it was made of wax, then it would be incorrect to call it an auger.

If this is correct, it follows that for something to be correctly called an F-object of a particular sort it must be at least potentially capable of doing what objects of that sort are used to do. And it could not be even potentially capable

of so doing unless it had at least some of the characteristics which F-objects of that sort must have to do what they do do.

I suggest that it is by determining whether something has the secondary causal characteristics which it must have if it is to have the primary characteristic required to do the job it is supposed to do that we determine whether a particular object is a e.g. bad auger (e.g. an auger which does not bore holes but could if it were repaired) and an object which is not an auger at all. Further, I suggest that it is on the same basis that we distinguish between e.g. a bad auger and e.g. pictures of augers, or toy augers, or imitation augers.

If this account is correct (a more detailed account could of course be given of why and how we distinguish between bad members of a class of F-objects and non-members of that class) it follows that to say of something that it is an F-object of a particular sort is to attribute to it certain causal characteristics such that the thing in question is at least potentially capable of doing what things of that sort are supposed to do. From this it follows that F-descriptions do entail C-descriptions; and from this it follows that F-descriptions do have factual or descriptive content by virtue of their use of an F-word.

As we shall see below, (see Chapter IV below) this conclusion is an important one for our analysis of F-words.

III.3 Are all C-objects F-objects?

I take it that a C-object is any object which has a particular causal attribute. Any object which is a C-object does have a use. The use which it has is simply bringing about that which it is capable of bringing about by virtue of the fact that it has the causal attribute which it has. For example, a light bulb generates heat; and by virtue of the fact that it generates heat it has a use, namely, generating heat. A stone which by virtue of its size, shape and weight skips along the water when thrown across the surface of water in a particular way can be used for skipping and as a consequence has a use.

However, to say that every object which has a causal characteristic has by definition a use is to say very little. For example, the proposition that every object which has a causal property has thereby a use does not imply that every object which has a causal property is an F-object; on the other hand it does imply that all such objects are potentially F-objects. Two things are required for this potential to be realized. First, the object in question must be picked out by reference to the causal attribute which it has if it is to be an F-object. That is to say, there must be an internal relation between that object and the causal attribute which it has if it is to be an F-object. But second and equally important, the object in question, by virtue of the fact that it does have a particular causal property, must serve some purpose; that is, its use must be a recognized one. Neither of these two conditions is satisfied by e.g. light bulbs qua heat generating objects. The relation between being

a light bulb and being heat generating is not an internal one. And light bulbs qua their heat generating properties have no recognized use. Of course, this might easily change. It might come about (and perhaps already has, for aquariums, for example) that a particular kind of light bulb was discovered to have growth stimulating effects when used in green houses simply because of its combination of light and heat generating properties. Being heat generating might as a consequence come to be a defining property of that kind of light bulb. And because qua its heat generating properties, it had a recognized use, it would be, qua heat generating, an F-object.

III.4 Do C-descriptions entail evaluations?

C-descriptions do entail the same sorts of evaluation which are entailed by F-descriptions, namely, negative, comparative and positive evaluations. However the structure of such inferences is different. The following three inferences should serve as illustrations:

- A) (i) Steel beams do not float in water
- (ii) A raft is a collection of logs, casks etc. fastened together in the water for transportation
- (iii) A necessary condition of being a good raft building material is being able to float in water.
- (iv) Steel beams are not a good raft building material
- B) (i) Steel beams do not float in water; wood beams do float in water
- (ii) A raft is a collection of logs, casks, etc., fastened together in the water for transportation
- (iii) A necessary condition of being a good raft

building material is being able to float
in water

- (iv) Wood is better for building rafts than steel
- C)
- (i) Styrefoam is a material which is very buoyant in water, light in weight, easily shaped and cut, does not absorb water and is durable when used with a structural material like wood.
 - (ii) A raft is a collection of logs, casks etc., fastened together in the water for transportation
 - (iii) A sufficient condition of being good raft building material is being buoyant in water, easily cut and shaped, light in weight and durable
-
- (iv) Styrefoam when used with a structural material like wood, is a good raft building material

Each of these inferences is valid. Each begins with a C-description. In each case the second premise is a definition and thus is analytic. In each case, the third premise follows from the second premise. And in each case, the conclusion follows from the preceding three premises.

The chief difference between each of the above three inferences, let us call them C-inferences, and the F-inferences discussed above (see chapter II), is that there is no internal relation between the substances described in each of the first premises and being building material for building rafts. Another way of putting this is that premise (ii) in each case is not derived from a definition of a word in premise (i). Thus the C-description does not generate the inference in the way in which F-descriptions generate F-inferences. The connection

between being an auger and being for drilling holes in wood is an analytic one. The connection between being styrefoam and being useful for raft building is a contingent connection. It is possible for a person to know the meaning of the term 'styrefoam' and not know that styrefoam has a use as a raft-building material. The same is not true for the term 'auger'.

III.5 The practical significance of C-inferences versus F-inferences

I have suggested that the chief logical difference between C-inferences and F-inferences is that in the one case the inference works because there is an internal relation between a particular object and a use or uses which that object has whereas in the other case the inference works because of an external or contingent relation between being a particular sort of object and having a use. This difference does have practical significance. The practical value of F-inferences is slight simply because the inference makes explicit something which is already implicit in the description of the F-object in question, namely, that it is useful for something and hence because of the properties it has, good or bad relative to other things of the same sort. Hence F-inferences convey little new information to someone who is familiar with the language in which the inference is expressed.

This is not the case with C-inferences. In fact it might be argued that the function of applied science is to generate instrumental evaluations via C-inferences. For what applied

science is concerned to do is to work out the practical applications of scientific knowledge... Medical research might offer a good example of this process. Take the following type of assertion. 'Because chemical A has the property ϕ , it will arrest cancerous growth in lung tissue under specifiable conditions and with specifiable side effects. It is therefore a good drug for this purpose'. Such an assertion would be significant in a way in which a similar formulation about augers would not be. And its significance would not derive from the importance of cancer research. Rather its significance would derive from the fact that it brings to light the empirically discovered fact that a particular chemical possess particular properties which give it a certain usefulness in combatting cancer. I venture to suggest that most instrumental evaluation has the function of bringing to light the existence of previously unknown uses of things. That being the case most instrumental evaluations are probably generated by C-inferences rather than F-inferences.

To use one final analogy to illustrate what I take to be the difference between C-inferences and F-inferences, the difference between these two types of inference is similar to the difference between the kind of reasoning which would lead one to the realization that the evening star is the same as the morning star as opposed to the kind of reason which would lead one to the realization that a triangle and a figure bounded by three straight lines are the same.

III.6 External relations and internal relations

How does an internal relation between an object and a property of that object come to be an internal relation. This is like asking why words come to have the meanings which they do have. I do not know what the detailed answer to this question is. But I think that it is clear that the existence or non-existence of an internal relation between a particular object and one of its properties is a matter of definition or stipulation. For example, a person could, if he wished, stipulate, that he would in future include 'for building rafts' in his definition of 'styrefoam'. Others might not wish to follow his lead in this matter. But at least for that one person there would exist an internal relation between styrefoam and being for building rafts.

If what I have just said is accurate¹ then it seems difficult to see how the existence of internal relations between objects and uses of those objects could have the significance which some philosophers have in the recent past attached to it. For, if, as I have suggested, the existence or non-existence of an internal relation between objects of a particular sort and a use or uses of those objects is a matter of deciding simply what the words we use shall mean, it seems difficult to see how what appears to be a decision easily made and equally easily rescinded could have the philosophical importance attached to it by e.g. recent naturalists.

What then are the implications of what I have argued for

1. I think that the best description of how the relation between an object and one of its properties might gradually become an internal rather than an external relation is offered by A.J. Ayer in 'What is a Law of Nature' which is found in *The Concept of a*

above, for the naturalist/prescriptivist controversy? Unless I am mistaken, the position of Philippa Foot, one of the major proponents of naturalism in the naturalist/prescriptivist controversy, is based in large measure on the fact that some things are internally related to uses which they have. The existence of internal relations between some objects and their uses is then used to argue that evaluations of objects can be derived simply from descriptions of those objects at least in some cases. Again unless I am mistaken, inferences similar to what I have called F-inferences have been appealed to to show that evaluations do sometimes follow logically from descriptions of objects.

The prescriptivist counter argument would seem to be that the existence of internal relations between objects and uses which those objects have is simply a matter of the meaning given to words. All that is required is that one disentangle the descriptive and evaluative elements of such words and express the two logically distinct elements separately.

What I have argued above supports the prescriptivist view that the difference between an object's being related internally to a use which it has rather than being related externally to a use which it has is simply a matter of what we want our words to mean. This may be thought to suggest in turn that prescriptivists are correct in thinking that it should be a relatively easy matter to replace F-descriptions with descriptions which convey the same information but which have no evaluative

implications. However, appearances can be deceiving. And the fact that C-descriptions which themselves make no use of F-words also entail evaluations suggests that while recent emphasis by naturalists on the notion of an internal relation may be mistaken, the basic contention that there are descriptions which entail evaluations may nevertheless be correct.

In fact, I think the correct conclusion to be drawn from the argument thus far relative to the naturalist/prescriptivist controversy is that it serves to establish neither of these two views. The reasons are simply this. While previous argument has established that F-descriptions do entail evaluations, it has not established that F-descriptions cannot be eliminated in favour of descriptions which have the same descriptive content as any given F-description but which do not have any evaluative implications. Hence the mere fact that F-descriptions do have descriptive content and do entail evaluations is not decisive. That C-descriptions also entail evaluations also fails to confirm the naturalist thesis. For in each of the three inferences used as examples of C-inferences, reference was made to F-objects in the second premise. Thus if it could be established that F-words could be eliminated from descriptive discourse without at the same time limiting one's ability to describe his environment, then C-inferences, too, could be eliminated simply through an elimination from one's descriptive vocabulary of F-words. It follows that none of the conclusions arrived at above counts decisively in favour of the naturalist

position.

It is equally true, however, that none of the conclusions arrived at thus far count decisively in favour of prescriptivism either. It is true that the argument supports what I take to be the prescriptivist contention that the fact that some objects are related internally rather than externally to their uses is largely a matter of what definitions we attach to the words we use to pick out those objects. But at the same time it remains unclear whether all F-words can be eliminated from descriptions of the world without a consequent impoverishment or even elimination of one's ability to describe that world. And until that question is worked out the implications of the arguments of this chapter for the prescriptivist view of the fact/value relation will remain unclear.

Thus, from the point of view of the prescriptivist/naturalist controversy, the argument thus far is indecisive.

CHAPTER IV

In chapter II above, we have already examined one aspect of the account given by Hare in The Language of Morals of functional words and inferences from descriptions employing functional words to evaluations. There is, however, a second aspect of Hare's account which we have yet to examine in any detail. The second aspect of Hare's account of the nature of functional words turns out to constitute a major objection to the account of F-words and F-inferences offered above, though, as we shall see this is not immediately obvious.

The aspect of Hare's account to which I have just referred is contained in the following passage:

In this sentence we are handed on a plate in virtue of the meanings of the words used, one of the necessary criteria of a good auger; but we are handed it by the word 'auger', not by the word 'good'. We saw above that it is possible to construct 'hypothetical' imperative sentences which are derivable from indicative minor premisses alone, and that this is done by including the required imperative major premise as part of the conclusion inside an 'if'-clause. We have here a somewhat similar operation. (LM, p. 100)

In the second part of the passage quoted above, Hare is referring the reader to the account he gives of how it is possible for a pure description of the form 'Grimbly Hughes is the largest grocer in Oxford' to yield a hypothetical imperative of the form 'If you want to go to the largest grocer in Oxford, go to Grimbly Hughes'. He suggests that the inference (what I

shall in future call an H-inference)

Grimbly Hughes is the largest grocer in
Oxford

If you want to go to the largest grocer in
Oxford, go to Grimbly Hughes.

is based on an inference of a simpler form, namely,

Go to the largest grocer in Oxford
Grimbly Hughes is the largest grocer
in Oxford

Go to Grimbly Hughes

Hare suggests that the major premise of this latter inference is found in the conclusion of the former inference inside the 'if'-clause of the conclusion of that former inference.

It is not immediately clear which aspects of his discussion of inferences from pure descriptions to hypothetical imperatives Hare has in mind in referring the reader (in the passage quoted above) to his account of hypothetical imperatives. However, if we look at his account of hypothetical imperative three suggestions emerge:

suggestion I: In inferences from pure descriptions to hypothetical imperatives, the standard of evaluation which is required for any inference from a description to an evaluation¹ is provided

1. It should be noted that the use of the word 'evaluation' here is not strictly correct if we are concerned to offer an account of Hare's position. The word 'prescription' would be more appropriate. Strictly speaking an imperative is not an evaluation but rather a prescription. However, the term 'prescription' is now so identified with Hare's view that it is difficult to use it and not imply that evaluations are prescriptions. I do not accept Hare's view on this matter and as to avoid implying that I do, I have avoided the use of the term 'prescription'. The resulting inaccuracy does not affect the substance of my account of Hare's position; neither does it affect my later criticisms of that position.

by the 'if'-clause in the hypothetical imperative (LM, p. 36);
suggestion II: In H-inferences, the required evaluative premise
 is included as part of the conclusion;
suggestion III: the imperative content of a hypothetical
 imperative is analytic.

Of these three suggestions, the first points most clearly
 to a similarity between H-inferences and F-inferences. The
 inference

Grimbly Hughes is the largest grocer in
 Oxford

If you want to go to the largest grocer
 in Oxford go to Grimbly Hughes

appears to lack an evaluative premise. Similarly, it might be
 argued, the inference

This auger will not bore holes

This is not a good auger

appears to lack an evaluative premise. But in both cases the
 appearance is deceiving. In the first inference, the evaluative
 premise is introduced into the inference via the use of a
 hypothetical clause in the conclusion. In the latter inference,
 the evaluative premise is introduced into the inference via the
 use of an F-word. The similarity lies in the fact that the role
 played by the hypothetical clause in the first inference is similar
 to the role played by the F-word in the second inference.

If the account of F-inferences offered in Chapter II above
 is correct, the similarity just suggested does exist. However,
 while this similarity might be regarded as interesting, by

itself it does not point to a very important parallel between H-inferences and F-inferences. It seems quite likely therefore that in suggesting that there are similarities between H-inferences and F-inferences, Hare had more in mind than simply the suggestion referred to above as suggestion I. It will prove valuable to determine whether similarities other than the one just examined do exist as Hare seems to suggest.

Suggestion II

The second point of resemblance which Hare may have in mind in the passage from LM quoted above may lie in the observation (LM, p. 34) that in the inference

Grimbly Hughes is the largest grocer in
Oxford

If you want to go to the largest grocer
in Oxford, go to Grimbly Hughes

the evaluative premise is included as part of the conclusion inside an 'if'-clause. This suggestion has a superficial resemblance to suggestion I which is that in H-inferences the role played by the 'if'-clause in the conclusion is, in F-inferences, played by the F-word. Suggestion two goes further than this. It may be taken to suggest that in both H-inferences and F-inferences the necessary evaluative premise is introduced into the inference via the conclusion. It perhaps also suggests that the conclusion of F-inferences is in fact a disguised hypothetical imperative.

It is not immediately obvious that the similarities

suggested immediately above do in fact exist. While it is not difficult to see why it might be thought that in the inference

Grimbly Hughes is the largest grocer in
Oxford

If you want to go etc.

the evaluative premise is introduced via the conclusion of the inference, it is not clear why one should conclude that in the inference

This auger will not bore holes

This is not a good auger

the evaluative premise is introduced into the inference via the conclusion. For in this latter inference the evaluative premise is introduced via the use of the word 'auger'; and the word 'auger' appears both in the single explicit premise and in the conclusion. Why then should one focus on the occurrence of the F-word in question in the conclusion of the inference rather than in the single explicit premise? It is equally unclear why one should regard the conclusion 'This is not a good auger' as a disguised hypothetical imperative. And, it is unclear what the hypothetical imperative is of which 'This is not a good auger' is a disguised form.

The apparent dissimilarity between the two types of inference being discussed is sharpened by the fact that while hypothetical imperatives are entailed by pure descriptions, F-conclusions are entailed by descriptions which have an implicit evaluative content through their use of an F-word.

If the similarity pointed to by suggestion II above does exist, then it must be the case that F-conclusions, like hypothetical imperatives, are entailed by pure descriptions. It is equally true that if it is the case that in F-inferences the evaluative premise is introduced via the conclusion then it follows that the F-word in the F-description in the premise plays no part in F-inferences. What is necessary for F-inferences is the occurrence of an F-word in the conclusion. If what I have just said is true, then it is clear that there is a similarity between H-inferences and F-inferences.

For the purposes of argument, I shall assume¹ that Hare is indeed suggesting in LM (p. 101) that it is characteristic of what I have called F-inferences, that the evaluative premise is introduced into those inferences via the use of an F-word in the conclusion of the inference. Having assumed this, it is necessary to assume also what is entailed by this, namely, that Hare is implying that the F-word which occurs in the only explicit premise of F-inferences of the form

This auger will not bore holes

This is not a good auger

plays no part in the inference.

Before attempting to determine whether the suggested similarity between H-inferences and F-inferences does exist, it will prove worth while to outline suggestion III. As it turns

1. Professor Hare has assured me that this assumption is correct.

out, suggestion II and suggestion III are closely related.

Suggestion III

The third suggestion, namely, that the imperative content of a hypothetical imperative is analytic is extracted from the following passage.

'If you want to go to the largest grocer in Oxford, go to Grimbly Hughes' is not an indicative; it would not be intelligible to someone who had learnt the meaning of the indicative verb-forms but not that of the imperative verb-forms; and the latter do not have in it a special meaning. The best way of describing the matter has been suggested by Kant: the imperative element in the hypothetical imperative is analytic ('Who wills the end ... wills also the means') because the imperatives in the two parts, so to say, cancel one another out. It is an imperative, but qua imperative has no content; the content which it has is that of the indicative minor premiss from which it is derived. (LM, p. 37)

If this is what Hare has in mind when in his discussion of functional words he refers back to his discussion of hypothetical imperatives, it would seem to suggest that he considers F-conclusions of which 'This is not a good auger' is an example to be analytic qua their imperative or more properly evaluative content just as he considers a hypothetical imperative to be analytic qua its imperative content.

There are two reasons for thinking that Hare does intend to suggest that F-conclusions (e.g. 'This is not a good auger') are analytic qua their evaluative content. The first reason derives from the assumption that suggestion two which was

discussed above is one of the similarities which Hare thinks does exist between H-inferences and F-inferences. The second reason derives from an article entitled 'Geach: Good and Evil' (Analysis, 1959, p. 64). Let us take each in turn.

If, as I have suggested, Hare is suggesting (LM, p. 101) that the evaluative element in F-descriptions plays no part in F-inferences, the implication then is that conclusions of the form 'This is not a good auger' are entailed by pure descriptions just as is the case with hypothetical imperatives. However, if it is the case that F-conclusions which are explicitly evaluative in form are entailed by pure descriptions, then Hare must explain how this is possible in light of rule which prescriptivists suggest governs evaluative inferences, namely, no pure description by itself or in conjunction with other pure descriptions can entail an evaluation. In fact, Hare's discussion of hypothetical imperatives in The Language of Morals is designed to show how it is possible for pure descriptions to entail hypothetical imperatives. The entailment by pure descriptions of hypothetical imperatives does not constitute a breach of the 'no evaluations from pure descriptions' rule simply because hypothetical imperatives are analytic qua imperatives. Hence qua imperatives, hypothetical imperatives have no content. Although Hare does not say so in his discussion, the implication would appear to be that wherever one finds evaluations entailed by pure descriptions, the evaluation will turn out to be analytic qua its evaluative

content. This in turn implies that if F-conclusions are entailed by pure descriptions, then they too must be analytic qua their evaluative content.

The first reason then for thinking that the third suggested similarity between H-inferences and F-inferences holds is the assumption that the second similarity between H-inferences and F-inferences is correct.

The second reason for thinking that Hare regards F-conclusions to be analytic derives from his article entitled 'Geach: Good and Evil' (Op. cit.). In that article, he seems to suggest that if 'good' in moral contexts were always used with functional words, the synthetic content of 'good X' would be that of a description. This I take to be the implication of the passage which reads:

I am not sure what account is to be given of this expression; but fortunately I do not, for the purpose of this argument, need to maintain that in moral contexts 'good' is never used with functional words, but only that it is sometimes used with non-functional words. For I shall then have shown that, at any rate in those contexts, neither 'good' itself nor the whole expression in which it occurs, is purely descriptive. (Op. cit. p. 80)

Hare also comments in a footnote:

The explanation of the paradox that the expression 'good hygrometer' has a fixed descriptive meaning just because the two words composing it are both partly evaluative will be evident to anyone who compares LM pp. 100-102 ibid pp. 36-7; the two evaluations 'cancel one another out'. (Ibid, p. 80)

The implication of both passages would appear to be that 'good

hygrometer' is descriptive in the same sense that a hypothetical imperative is supposed to be descriptive; it has no synthetic imperative content.

It is perhaps worth noting that the account given in the Analysis article of why expressions of the form 'good X', where X is an F-word, are analytic qua their evaluative content is not independent of the account given in LM (see p. 36-7). Further, a close inspection of the relevant passage in LM (p. 36-7) leaves two things unclear. First, the passage in question leaves unclear whether sentences of the form 'This is not a good auger' are to be regarded as disguised hypothetical imperatives. Second, and more immediately important for our purposes, the reference to LM (p. 36-7) does not in fact argue that the synthetic content of e.g. hypothetical imperatives is that of a pure description. What Hare does argue in the relevant passage is that the synthetic content of a hypothetical imperative is that of the minor premise from which it is derived. The distinction may turn out to be important in view of the fact that the minor indicative premise from which F-conclusions are normally derived is an F-description which is partially evaluative because of its use of an F-word. Therefore, if he is to establish that the synthetic content of F-conclusions is that of a pure description, Hare must show that the evaluative element of F-descriptions, from which F-conclusions are derived, plays no part in F-inferences. If the evaluative content of F-descriptions does

play a part in F-inferences, then the evaluative content of F-conclusions like 'This is not a good auger' will be the evaluative content implicit in the F-description from which the conclusion is derived. Thus in order to show that the evaluative content of F-conclusions is analytic, it must be shown that F-conclusions are entailed by pure descriptions i.e. descriptions having no evaluative content.¹

A final comment on suggestion three; what the above discussion shows, I think, is that there is a good deal closer connection between suggestion II and suggestion III than might on first glance appear to be the case.

IV.1 Recapitulation

What has emerged from our discussion of possible similarities between H-inferences and F-inferences is as follows. First, it has been suggested that what I have referred to as F-conclusions are entailed by pure descriptions.

1. It does not follow from this that if F-conclusions are entailed by purely descriptive premises that F-conclusions are analytic qua their evaluative content. If this were so the anti-prescriptivist could not win. Rather the requirement to which this is a footnote is a condition which must be established if the prescriptivist account of F-inferences is to be accepted. But its establishment is not sufficient to prove the prescriptivist view that an evaluation entailed by a pure description(s) must be analytic qua its evaluative content. To establish this latter point, the prescriptivist must show by arguments which are independent of those being discussed here that the anti-prescriptivist is wrong in thinking that a non-analytic evaluation can be entailed by purely descriptive premises.

This in turn implies that where an F-conclusion is entailed by a description which employs an F-word, the F-word plays no part in the inference. If it did play a part in the inference it could not be argued that the standard of evaluation by reference to which the evaluative conclusion was arrived at was introduced via the conclusion of the inference. Second, it has been suggested that F-conclusions are analytic, qua their evaluative content.

Neither of these two suggestions has been argued for either in preceding pages or to my knowledge in The Language of Morals. It is necessary therefore to turn to an evaluation of these two suggestions.

IV.2 The significance of these suggestions

The significance of these two suggestions which I have attributed to Hare should not be underestimated either with respect to their implications for the argument of the preceding pages or with respect to their implications for the broader topic of the relation of facts and values. Their immediate significance for the argument of the preceding pages is as follows. I have argued (see Chapter II above) that F-descriptions entail evaluations. And while I have not said so explicitly, it has been assumed in previous argument that F-inferences are to be explained by reference to the occurrence of an F-word in the description from which the evaluation follows. However, if the second suggestion attributed to Hare

is sound, F-inferences are to be explained by reference to the occurrence of F-words in the evaluative conclusion rather than the occurrence of an F-word in the description from which the evaluation is derived. That is to say, it is the peculiar nature of F-conclusions which explains F-inferences rather than the peculiar nature of F-descriptions.

Secondly, if it is true that F-conclusions are qua evaluations analytic, then a second implication of my previous argument is shown to be unfounded, namely, that the kind of evaluations entailed by F-descriptions are normal or non-analytic evaluations.

The wider significance of these two suggestions is as follows. If F-inferences are generated by pure descriptions and are to be explained by reference to the nature of F-conclusions, namely, that they are analytic qua their evaluative content, then it follows that the evaluative element in F-descriptions plays no part in F-inferences. If that is the case, it should be possible to express the descriptive content of F-descriptions in descriptive sentences which have no evaluative content and hence no synthetic evaluative implications. From this it follows in turn that it should be logically possible to separate out the descriptive and evaluative elements in the meanings of F-words like 'auger'. And if it is the case that the descriptive and evaluative elements of F-words are not logically related, a good deal of the significance of F-words for an understanding of the relationship between facts and values would disappear.

IV.3 Hare's suggestion considered

In order to establish that the similarities between H-inferences and F-inferences suggested by Hare do exist, three questions must be answered. First, does the F-word which occurs in F-descriptions play any part in F-inferences. Second, are hypothetical imperatives analytic qua their imperative content? Third, are F-conclusions relevantly similar to hypothetical imperatives such that if hypothetical imperatives are analytic qua their imperative content that therefore F-conclusions are analytic qua their evaluative content?

IV.4 Question one examined

The first question asked in the preceding section is best answered through the examination of a specific F-inference. If the F-word in an F-description plays no part in an F-inference generated by that F-description, then it follows that in the inference

This auger will not bore holes

This is not a good auger

the word 'auger' in the premise is superfluous to the inference. If it is superfluous, then presumably it can be dropped from the premise without damaging the inference. If the word 'auger' is dropped from the premise of the above inference the following inference results:

This will not bore holes

This is not a good auger

What is being suggested then is that for the purpose of inferring 'This is not a good auger' 'This auger will not bore holes' and 'This will not bore holes' are equally serviceable.

The chief difference between 'This auger will not bore holes' and 'This will not bore holes' is that in the latter sentence the reference of 'this' is indeterminate. This difference may not appear to be a crucial one in part because one assumes on reading the inference

This will not bore holes

This is not a good auger

that what 'this' refers to is an auger. But if the word 'auger' as it occurs in 'This auger will not bore holes' is genuinely superfluous, then the assumption that what 'this' refers to in the sentence 'this will not bore holes' is an auger is both unnecessary and unjustified. It is unjustified because if it is not necessary to know the reference of 'this' in 'This will not bore holes' for the total inference to be valid then the assumption that 'this' is referring to an auger has no justification in the context of the inference. However, it is incorrect to think that knowing the reference of 'this' in 'This will not bore holes' is not required for an understanding of the inference from 'This will not bore holes' to 'This is not a good auger' as the following illustrates. Two persons, A and B, are talking. A says 'This will not float on water'. B, who has no idea at all as to what A is referring to in saying 'This will not float on water' nevertheless concludes

'This is not a good canoe'. Now, B is undoubtedly right in concluding that whatever it is which A is talking about, one thing is certain, it is not a good canoe. But, though B is justified in drawing the conclusion which he draws, there are two quite distinct inferences either one of which he may be relying on in reaching this conclusion. First, A might in fact be talking about a canoe which does not float because it has a hole in its bottom. If this is what A is talking about in the sentence 'This will not float' then it follows from what A says that the canoe in question is not a good one. On the other hand, A may not be talking about a canoe at all. He may be talking about a rock. Now it is certainly true that a rock is not a good canoe. But the fact that it is not a good canoe follows not from the fact that it will not float but rather from the fact that a rock is not a canoe at all. By definition if something is not a canoe, it is not a good canoe either. But then neither is it a red canoe or a light canoe etc. This indicates that there are, as I have suggested, two quite different ways of explaining why B is justified in drawing the conclusion which he draws from A's statement.

Let us assume that B is justified in drawing his conclusion for the first reason. His inference

This will not float

This is not a good canoe

is seen to be valid because it is based on the inference

This is a canoe
 This canoe will not float
 A canoe is for paddling on water
 A necessary condition of being a
 good canoe is being able to float

This is not a good canoe

which in turn is a misleading form of an inference having the
 above four premises but concluding

'This (being a) canoe is not a good one'

If 'this' in 'This will not float' refers to something which
 is not a canoe, e.g. a rock, then B, in concluding 'This is
 not a good canoe' from 'This will not float', is relying on
 two inferences namely:

This is a rock
 A rock is not a canoe

This is not a canoe

And:

This is not a canoe

This is not a good canoe

The important thing to note here is that regardless of whether
 the inference

This will not float

This is not a good canoe

is based on the former inference whose initial premise is
 'This canoe will not float on water' or the latter two inferences
 the initial premise of the first of which is 'This is a rock',
 a fully explicit form of the inference will include in the
 descriptive premise which generates the inference a reference
 to the sort of object being described in that premise and

evaluated in the conclusion.

The above argument indicates that the F-word which is employed in an F-description does play a necessary role in F-inferences. This follows from the fact that failure to make explicit what is being talked about in a description from which an evaluation is derived renders the form of that inference inexplicit.

There is another way of making the above point. Any sentence which takes the form 'This is not a good X' is ambiguous. It might imply 'This, being an X, is not a good one'. Or it might imply 'This, not being an X, is not a good X' or 'This, because it is not an X, is not a good X'.

There are two points here. First the ambiguity cannot be eliminated without specifying what it is which is being evaluated in the sentence 'This is not a good X'. And to specify what is being evaluated is by implication to specify or make explicit the reference of 'this' in the description from which the sentence 'This is not a good X' is being derived.

Second of the two formulations 'This, being an X, is not a good one' is not analytically true; 'This, not being an X, is not a good X' is analytically true. Thus if one does not eliminate the ambiguity in the sentence 'This is not a good X' it remains unclear why the inference from 'This will not float' to 'This is not a good canoe' is valid. If 'This is not a good canoe' is interpreted to mean 'This, being

a canoe, is not a good one' the inference is valid because being able to float is a necessary condition of being a good canoe. But if 'This is not a good canoe' is interpreted to mean 'This, not being a canoe, is not a good canoe' then the inference is valid because the conclusion is analytic.

The conclusion just arrived at is reinforced by the argument of the second chapter above which demonstrated that F-words did contribute to the descriptive content of F-descriptions. We now see that that contribution plays an important role in those F-inferences which are generated by descriptions in which F-words are employed to designate what is being described.

If what I have argued is correct, F-conclusions are entailed not by pure descriptions but by F-descriptions which are in part descriptive and in part evaluative. That being the case, it follows that the suggestion that F-inferences and H-inferences are similar in that both are generated by pure descriptions is mistaken.

Before attempting to draw any general conclusions from what I have just argued, it is worth attempting to answer the second question posed above.

IV.5 Question two

Are hypothetical imperative analytic qua their imperative content? If we follow Hare's account of the matter this resolves into the question 'Is it the case that who wills the

end ... wills also the means?'. The difficulty with this latter question is that it is ambiguous as we shall see. As a consequence, no simple straightforward answer is possible¹. As it turns out, there are at least three possible interpretations of 'Who wills the end ... wills the means'. The first two interpretations render 'Who wills the end ... wills the means' analytic. On the third interpretation, however, 'Who wills the end ... wills the means' is not analytic. I shall argue that of the three interpretations only the third is relevant to the view that hypothetical imperatives are analytic qua their imperative content.

IV.6 Interpretation I

On this first interpretation, 'Who wills the end ... wills the means' means 'Who brings about end E willingly (voluntarily) by means of M, wills M'. The phrase 'brings about end E by means of M' is intended to imply that the agent in question deliberately invokes M to achieve E.

I think it is clear that on this interpretation 'Who wills the end ... wills the means' is indeed analytic. If I know that one way to catch fish is to dangle a line in water, and if I actually and intentionally catch a fish by dangling a line in the water, then it is logically true that I did dangle a line in the water and that I did so willingly or voluntarily

1. I shall make no attempt in what follows to determine how Kant intended his slogan to be understood though I shall refer to some comments by Roy Edgley in which he makes a tentative attempt to deal with this question.

for the purpose of bringing about the end in question.

I do not see how 'If, go to the largest grocer in Oxford, then go to Grimbly Hughes' could be held to fit 'Who wills the end etc.' on this interpretation. The hypothetical imperative 'If go to the largest grocer in Oxford, then go to Grimbly Hughes' describes what a person must do if he decides to bring about a certain end and is to be successful. Interpretation I describes what logically must be the case given that a particular end has been brought about willingly by the willing use of some means.

IV.7 Interpretation II

On the second interpretation, 'Who wills the end ... wills the means' is to be understood as 'Who decides to bring about end E by willing (deciding to bring about) means M, wills (decides to bring about) M.'

On this interpretation 'Who wills the end etc.' is also analytic. This second interpretation also brings 'Who wills the end etc.' closer to hypothetical imperatives of which the 'Grimbly Hughes' imperative is an example. However, it is nevertheless inadequate as an interpretation of what is intended by 'Who wills the end etc.'. The hypothetical imperative 'If, go to the largest store in Oxford, then go to Grimbly Hughes' indicates what a person must as a matter of fact do if he is to be successful in bringing about a particular end. What 'who wills the end etc.' on this interpretation indicates is what a

person as a matter of logical necessity has decided to do if he has decided to bring about a particular end by a particular means. The two cases are therefore not relevantly similar in an important respect.

IV.8 Interpretation III

On the third interpretation, 'Who wills the end ... wills the means' is to be understood as 'Who wills (decides to bring about) end E, wills (decides to bring about) M if M is a means to E'. Is 'Who wills the end etc.' analytic on this interpretation?

If on interpretation III 'Who wills the end etc.' is analytic, it follows that it is logically impossible for a person to will (i.e. decide to bring about) a particular end and not will M where M is a means to the end in question. This in turn means that the sentence 'Jim willed end E but did not will means M' describes a logically impossible state of affairs. But it is clearly not impossible for a person to will (i.e. decide to bring about) an end E and yet not decide to bring about means M. That this is the case is illustrated by any situation in which a person decides to pursue a particular objective but fails to decide to pursue the means to that objective simply because he does not know what the means to the objective in fact are.

It might be objected to this that what is analytic is that one cannot will an end E and not will means M where the person

willing E knows or believes M to be a means to E. However, this, too, is unacceptable as it stands. For there might be more than one means to the end in question. Thus, a person might fail to will M' though he knows M' to be a means to an end which he has decided to bring about simply because he knows of another means, M'', to the same end and has chosen it.

It might be argued that this last difficulty can be eliminated by altering the position in question to read 'one cannot will end E and not will M if one believes M to be a necessary condition of achieving E' is analytic¹. (It is important to bear in mind that M for the purposes of this argument can be a necessary condition only in the sense of an empirically or causally necessary condition.)

It seems to me that with this last rewording of the slogan 'Who wills the end ... wills the means' we have as plausible a candidate for an interpretation which is both relevant to hypothetical imperatives and analytic as we are likely to find

1. This suggestion is strikingly similar to the Socratic paradox that no one does wrong knowingly. To my knowledge, Socrates does not suggest that to do wrong knowingly is a logical impossibility. Nevertheless, the effect of assuming the view that it is impossible to do wrong knowingly is the same regardless of whether one assumes the position for Socratic or alternatively prescriptivist reasons. That this is so can be seen from the fact that the same paradoxes can be generated around Hare's view of hypothetical imperatives as can be generated around Socrates' view that no one does wrong knowingly. Certainly one of the interesting things about Hare's account of hypothetical imperative is its striking similarity to the Socratic view, a similarity which is less obvious if one is examining prescriptivism from a broader and perhaps more common perspective.

But is the slogan 'Who wills the end ... wills the means' analytic given this last interpretation? It seems to me that even on this interpretation, the slogan in question is not analytic, on the grounds that to view it as analytic is to fail to make a distinction between what is logically impossible and what is irrational.

I think it is quite commonly accepted that it is logically possible for a person to hold contradictory beliefs¹. That is to say, it is logically possible for a person to believe both p and not p at the same time. Let us assume that p is the belief that in order to achieve E one must do M. If, as I have suggested, it is logically possible for a person to hold contradictory beliefs, then it is logically possible for a person who believes that, in order to achieve E one must do M, to believe at the same time that in order to achieve E one does not have to do M. Finally, if we assume that a person actually does hold two such beliefs, then it follows that such a person could will some end E and not will M even though he believes M to be a necessary condition of E. His failure to will M is then explained by the fact that while he believes M to be a necessary condition of E he also believes M not to be a necessary condition of E.

In the face of the above argument there seem to me to be two counter-moves available to the prescriptivist. Neither,

1. In 'Wanting: Some Pitfalls', Practical Inferences, p. 51 Hare indicates his acceptance of the view that it is logically possible for a person to adopt contradictory beliefs, both of which he holds at the same time.

I think, is convincing. First, the prescriptivist might argue that if a person willed E but failed to will M even though he believed M to be a necessary condition of E because he held the contradictory belief that M was not a necessary condition of E, this would show that at the crucial moment what the person in question really believed was that M was not a necessary condition of E. To take this view is to renege on the view that it is logically possible for a person to hold contradictory beliefs at the same time. It is to take the view that it is not logically possible for a person really to believe both p and not-p at the same time. I think that to opt for the view that a person cannot really believe contradictory things at the same time is to take the view that people cannot be genuinely irrational. I think such a position to be implausible.

There is a second move which a prescriptivist might attempt in fact of the contradictory beliefs argument put forward above. He might argue that if a person failed to invoke the necessary means to an end which he had decided to bring about it would be because he was either physically or psychologically unable to do what was necessary to achieve his desired end. Now it may be the case that irrationality is something which must be explained on some kind of deterministic model. But I do not see that it is effective here. For, if it is logically possible for a person to will E and yet not will M even though he believes that M is a necessary condition of E because it is e.g. psychologically impossible for him to do M, then it is

logically possible for a person to will E and not do M even though he believes M to be a necessary condition of E. By suggesting such a move, a prescriptivist would simply be offering a counter-example to his own position.

The alternative view of the matter under discussion is that it is indeed possible to will an end and not will what one believes to be a necessary condition of that end but that to fail to will what one believes to be a necessary condition of the end one has willed is to act irrationally. If this is correct what is analytic is the sentence 'One cannot will (decide to bring about) an end E and fail to will M believing M to be a necessary condition of E and be consistent'. An alternative wording of this would be '"One is being irrational if one wills (decides to bring about) an end E and fails to will the means M to that end believing M to be a necessary condition of E" is analytic'. What this suggests is that a person who decides to bring about a given end and who fails to do what he believes to be necessary to achieve that end is being inconsistent or irrational assuming of course that he has not changed his mind about bringing about the end in question¹.

1. An alternative account of hypothetical imperatives is offered by Roy Edgley in Reason in Theory and Practice. He suggests that 'He who wills the end wills the means' should be understood as 'If A intends (wills) to do X he must in consistency intend (will) to do Y' (Op.cit. p. 145) This wording together with his critique of the prescriptivist view of hypothetical imperatives while lacking somewhat in precision seems to me to be fundamentally sound. Edgley bases his attack on Hare's account in part on the view that 'practical judgements are such that it is possible for one's actions to be inconsistent with what one thinks one should do' (Ibid, p. 140). My agreement with Edgley on this point derives from an independent analysis of Hare's position. However, Edgley's

I take it, then, that hypothetical imperatives are not analytic. We have then an answer to our second question. We are left then with only the third question to be answered.

IV.9 Question III

We are left now with the question 'Are F-conclusions relevantly similar to hypothetical imperatives such that if hypothetical imperatives qua imperatives are analytic then F-conclusions are analytic qua evaluations also'. In a sense, this third question is irrelevant since hypothetical imperatives are not analytic. Hence even if it is the case that F-conclusions are disguised hypothetical imperatives, it does not follow that F-conclusions are qua their evaluative content analytic.

Footnote continued

arguments do offer a useful comparison to my own. Edgley points out that if Hare's view that hypothetical imperatives are qua imperatives analytic is correct, it follows that a person in his actions cannot, as Edgley puts it, contravene a hypothetical imperative (Ibid, p. 140-1). That is, 'one cannot fulfill the antecedent clause (of a hypothetical imperative) and not fulfil the consequent clause; it must be obeyed' (Ibid, p. 142) Using arguments similar to some of those offered above, Edgley suggests that this must mean that a person cannot knowingly contravene a hypothetical imperative. But this, he argues, is true only if it is logically impossible for a person's actions to be inconsistent with his judgement that to do X he must do Y. Edgley goes on to argue that this is not logically impossible for reasons given in his section 4 and 7. He argues that it is always logically possible for one's conduct to be inconsistent with one's practical judgement.

There is a final point of interest in Edgley's position. He questions (Ibid, p. 142) Hare's suggestion that the view he (Hare) is putting forward is similar to a position advanced by Kant with regard to hypothetical imperatives. Edgley argues; 'one of Kant's versions of the analytic principle governing the form of all hypothetical imperatives is: "whoever wills the end wills also (so far as reason decides his conduct) -- my italics -- the means ..."' (Second section of the Fundamental Principles of the Metaphysic of Morals, translated by T.K. Abbott) If this is the parenthesis which Hare's quotation omits, it 'clearly distinguishes Kant's view from the interpretation of Hare's theory outlined above

However, it is worth pursuing the comparison a little further. For the analysis offered in the preceding attempt to arrive at an answer to the second question posed above does shed some light on the nature of F-conclusions.

Let us assume for the sake of argument that the structure of hypothetical imperatives is correctly conveyed by the formula 'If do X, then do Y'. Let us assume further that in hypothetical imperatives, whatever Y stands for is always a necessary condition of whatever X stands for. That being the case, it follows that if Y is a necessary condition of X and if one knows that Y is a necessary condition of X and if one wills X then one must, if one is to act rationally, will Y. I doubt that in fact these assumptions are correct. However they do afford us with a point of view which allows an interesting contrast between hypothetical imperatives and F-conclusions. For whatever else is to be said about F-conclusions it is not their function to specify necessary conditions for the satisfaction of specified ends. In fact, the function of F-conclusions is to evaluate one or more of the various ways in which a particular end can be achieved. Further, if there was only one way of achieving a particular end, there would be no need to evaluate the means to that end. Evaluation is meaningful only to those who have choices available to them, a point made by many including Hare in both The Language of Morals and Freedom and Reason.

The point can perhaps be illustrated by reference to the 'Grimly Hughes inference' and the 'auger inference' to which

we have returned frequently in preceding discussion. If it is indeed the case that Grimbly Hughes is the largest grocer in Oxford, then one must go to Grimbly Hughes if one is to go to the largest grocer in Oxford. Thus, for a person wishing to go to the largest grocer in Oxford, Grimbly Hughes is not a good place to go; neither is it the best place to go. It is in fact the only place to go if one is to achieve the end of visiting the largest grocer in Oxford. There are no alternatives to be evaluated. On the other hand, to say of an auger that it is not a good one is not to imply that if one wish to bore holes one must select an auger other than the one being evaluated. For the auger being evaluated though not a good one may nevertheless do the job; it might, for example, only need to be sharpened. On the other hand, by saying that an auger is not a good one, one implies that there are alternatives which are better. And only on the assumption that there are indeed other augers from which to choose which vary in quality is the evaluation of any particular auger meaningful.

It follows that the only sense in which 'who wills the end, wills the means' is analytic, namely, where it is interpreted to mean 'who wills the end must in consistency will the means where the means is and is known to be a necessary condition of achieving the end', does not apply to F-conclusions. For F-conclusions e.g. 'This is not a good auger' do not state necessary conditions for the achievement of specified objectives.

To conclude, if hypothetical imperatives are analytic - a

way of putting the matter which is misleading in the extreme as suggested above - thus it is because they state a necessary condition for achieving a specified objective. But it is exactly this feature which F-conclusions do not have. They do not state a necessary condition for achieving a specified objective. Hence in this crucial respect, hypothetical imperatives which are analytic (so-called) are not relevantly similar to F-conclusions. Hence, too, establishing that (some) hypothetical imperatives are analytic in the sense described above is irrelevant to establishing that F-conclusions are analytic qua their evaluative content.

IV.10 Conclusions

There are two conclusions which follow immediately from the previous argument. First, the suggestion that F-conclusions or instrumental evaluations like hypothetical imperatives are entailed by pure descriptions is incorrect. Second, the suggestion that F-conclusions like hypothetical imperatives are analytic qua their evaluative content is also incorrect. However, what follows from previous argument goes beyond simply these two conclusions. A rejection of what was referred to above as suggestion II, namely, that instrumental evaluations are entailed by pure descriptions, has certain implications for the argument of this thesis. It serves to confirm that F-words in F-descriptions do play a necessary role in F-inferences. This follows from the fact that if the F-word in the descriptive

premise of an F-inference is eliminated, the inference becomes ambiguous. In order to eliminate that ambiguity the F-word must be reintroduced into the descriptive premise. It follows that the F-word in the descriptive premise of F-inferences is not superfluous to the inference. A rejection of the suggestion that F-conclusions or instrumental evaluations like hypothetical imperatives are analytic qua their evaluative content also has important implications. It serves to demonstrate that instrumental evaluations evaluate alternative means to specified ends and operate only where there are alternative means to a specified end. Their function is to evaluate one or more of those alternatives. For this reason instrumental evaluations are correctly regarded as genuine or substantive evaluations, a conclusion which is reinforced by the fact that they are entailed by descriptions which themselves have evaluative content.

There remains the broader significance of the argument for an understanding of the relation between facts and values. The argument serves to reestablish that F-words have descriptive and evaluative content. Both derive from the fact that F-words as a group constitute a type of classification in which things are classified by reference to a use or uses which they have. Because the descriptive and evaluative content of F-words do derive from the same source their descriptive content cannot be separated off from their evaluative content and expressed independently of it. It is this, I suggest, which gives F-words their

peculiar importance for an understanding of the relation between facts and values.

IV.11 Prescriptivism

As indicated in Chapter I above, where the argument appears to have direct relevance for the prescriptivist/naturalist controversy I intend to comment on the implication of what has been argued for that controversy.

It might be thought that there are three reasons for thinking that the position for which I have been arguing is incompatible with prescriptivism. I shall examine each of them. None, I think, are entirely convincing.

First, I have argued that the view that hypothetical imperatives are qua their imperative content analytic is incorrect. This, of course, contradicts the account given by Hare in The Language of Morals. However, I do not think that it follows from this that my account is incompatible with prescriptivism. To begin with, my account does not challenge the view that

Grimbly Hughes is the largest grocer
in Oxford

If you want to go to the largest grocer
in Oxford, go to Grimbly Hughes

is a valid inference. What my account does suggest is that if a person assents to 'Go to the largest grocer in Oxford' he must in consistency assent to 'Go to Grimbly Hughes' assuming of course that he knows that Grimbly Hughes is the largest

grocer in Oxford. One virtue of this account, though of course it does differ with the prescriptivist account, is that it allows one to draw a parallel between assenting to an imperative and believing a statement. Hypothetical imperatives, it might be argued, are such that if one assents to the imperative contained in the 'if'-clause and to the whole hypothetical imperative, then one must in consistency assent to the imperative contained in the consequent; however, it is logically possible for one to fail to do so. That is, it is logically possible for one to be illogical or inconsistent. With beliefs, the same is true. Beliefs are such that to believe that p requires that one not believe that not-p if one is to be consistent. Nevertheless it is logically possible for one to be inconsistent. That is, it is logically possible for one to believe both p and not-p though to do so would be to believe inconsistent things.

I do not see that this account of the matter need be thought incompatible with prescriptivism.

The second reason for thinking the argument of the preceding pages to be incompatible with a prescriptivist account of the nature of moral language lies in the fact that freedom to choose one's own values is one of the major features of that view. However, if what I have argued for above is correct, this freedom would appear to be circumscribed by virtue of the fact that what is good or bad as a particular kind of instrument is determined by a description of that instrument. The statement, 'This auger will not bore holes' is one which is factually true or false. It is not a statement which one can

freely accept or reject if one is concerned with the truth. Whether something is an auger is a matter of fact. Similarly, whether an auger will bore holes is a matter of fact. But, if what I have argued is correct, these two facts entail an evaluation. That is to say, if a person accepts that something is an auger but will not bore holes, he must on pain of thinking irrationally, accept that it is not a good auger. Where then, is one's freedom to choose one's values?

It seems that if what I have argued is correct there is a certain limitation on what value a person can place on some things. But the limitation is restricted to the instrumental value one can put on things. Nothing that I have so far concluded suggests that there is a corresponding limitation on the intrinsic value that one can place on things. It follows from this, that while one is somewhat restricted on one's valuation of things, one's actions are not thereby restricted since whether one acts on an instrumental evaluation of something depends on whether one has placed a value on the end to which the thing in question is a means. The constraint therefore, is on what a person can, while remaining rational, think to be a good or bad instrument for some purpose and not on what people must do if they are to act in accordance with reason, except, of course, in the secondary sense that having chosen what ends to pursue one's choice of means is correspondingly affected.

The third reason for thinking that the position argued for

above is incompatible with prescriptivism lies in the fact that I have argued that F-descriptions do entail evaluations. This, it might be thought, is a breach of the prescriptivist rule of no evaluation from a pure description or a conjunction of pure descriptions. I do not think that this is the case. For, as I have argued instrumental evaluations are entailed by F-descriptions which have evaluative content. They are therefore not pure descriptions. Hence F-inferences do not break the prescriptivist rule. Neither does my account of hypothetical imperatives (insofar as I have given such an account) imply that H-inferences are an exception to that rule. Hare in fact demonstrates that H-inferences are valid by showing that inferences from pure descriptions to hypothetical evaluations are based on a more complex inference in which there is an evaluative premise. His demonstration of this is conducted quite independently of those of his arguments which purport to show that hypothetical imperatives are qua imperatives analytic.

I take it then that a rejection of the view that hypothetical imperatives are qua imperatives analytic is not necessarily incompatible with prescriptivism.

CHAPTER V: Conclusions to Part I

In the preceding pages, I have attempted to establish a number of points of which the following are the most important.

1. F-objects are objects which are identified by reference to a use or uses which they have.
2. One way of identifying objects by reference to a use or uses which they have is through the use of F-words. That F-words do identify objects by reference to a use or uses which they have is indicated by the fact that F-words include as part of their meaning a reference to a use or uses of the object which they pick out or identify. I have defined an F-word as any word which includes as part of its definition a reference to a use or uses of the object which it serves to pick out.
3. I have argued that F-words have descriptive content by virtue of the way in which they pick out or identify objects. This point has been established in two ways. First I have shown that sentences which identify objects by reference to their use or function entail a causal description of the object thus identified. Second, I have argued that F-descriptions minus an F-word fail to entail instrumental evaluations in part because of a lack of descriptive content. I have argued that this deficiency can be overcome only by making explicit what is being described which in the case of F-descriptions is an F-object. F-descriptions therefore only through the use of an F-word.
4. I have argued that F-words also have evaluative content. Their

evaluative content derives from the way in which they identify or pick out objects, namely, by reference to their use or function. Whenever something is identified by reference to a use or uses which it has, the criteria in terms of which it is identified serve also as criteria in terms of which it can be evaluated.

5. F-descriptions are descriptions which use F-words to identify what is being described. F-descriptions have both descriptive and evaluative content by virtue of their use of F-words.

6. F-descriptions generate F-inferences the conclusions of which are instrumental evaluations. An instrumental evaluation is the assessment of the value of something as a means to a specified end, where it constitutes only one of a variety of means available.

7. No attempt has been made to establish that for every instrumental evaluation there is an F-description which entails it. Such a conclusion would be justified only if our knowledge of how things in our environment could be used was complete and was also embedded in our language in the form of F-words. Neither of these two possibilities is the case. We are always finding new uses for old things and new things which have both new and old uses. Not all such uses will be sufficiently important to warrant their being embedded in the language in the form of F-words. One of the functions of instrumental evaluations then will always likely be to draw attention to uses of objects which for some reason or other are not embedded in the language in the form of F-words.

8. A final and perhaps most important conclusion is as follows.

I have concluded that F-words are words which identify or pick out objects by reference to a use or uses of those objects. Further, by virtue of the way in which F-words identify objects, they have both descriptive and evaluative content. It follows from the fact that the descriptive and evaluative content of F-words derive from the same thing, namely the way in which F-words identify objects, that the descriptive content of F-words cannot be separated from their evaluative content and expressed independently of that evaluative content. That being the case, F-words cannot be eliminated in favour of words or sentences which convey the same descriptive meaning but have no evaluative content. It follows that there exists in language a type of word the descriptive and evaluative content of which are logically related. To eliminate such words from the vocabulary is therefore to limit the descriptive power of that language.

The conclusions just listed are of interest in themselves I think. But they leave unresolved one question. I have argued that in one sense, F-words cannot be eliminated. To do so is to prevent one from communicating certain factual information about the world. But while this is a sense in which F-words cannot be eliminated, it does suggest that in another sense F-words can be eliminated from the language. It suggests, that is to say, that the kind of linguistic job done by F-words while unique from a descriptive point of view is nevertheless eliminable from a logical point of view. To use an analogy, no descriptive

words other than colour words can do the work of colour words from a descriptive point of view. Nevertheless, it is possible to conceive of a language in which there was no reference to colour. Is it equally possible to conceive of a in which F-words were never used? Some philosophers have implied that this is a possibility by suggesting for example that physical object language could be reduced to a sense datum language. The purpose of the second part of this thesis is to examine whether it is logically possible to eliminate from a language all F-words?

SECTION II

PERCEPTION, DESCRIPTION AND AGENCY

CHAPTER VI: PERCEPTION AND AGENCY

The chief purpose of this part of the thesis is to discover whether it is logically possible to eliminate F-words from one's descriptive vocabulary. I intend to approach an answer to this question through a discussion of both perception and description for reasons which I hope will gradually become clear. The discussion of perception is to be guided by the question, 'Is the identification of objects of manipulation as objects of manipulation a logically necessary feature of perception?' I shall argue that perceivers do perceive things as objects of manipulation in the normal course of events. But from this it does not follow that the identification of things as objects of manipulation is a logically necessary feature of perception. In order to determine whether the perception of things as objects of manipulation is a logically necessary feature of perception it will be necessary to consider the question; 'Why do we perceive the world the way we do?' It is with this latter question that I wish to begin the discussion in Part II of this thesis.

VI.1 Why do we perceive the world the way we do?

What sort of answer might we expect to be given to this question? The first one which comes to mind might be that we perceive the world the way we do because that is the way the world is. This reply taken at face value seems unexceptionable. The difficulty with it, however, is that it seems to suggest that the question to which it is an answer is trivial and without major philosophical significance. Such a view has supporters. However, I shall argue that to accept this answer is to accept an answer which is either uninformative or wrong. It is uninformative because it does not offer insight into what I shall show to be an important question. It is wrong if it is regarded as closing the door to other more informative approaches to the question. I intend to argue, therefore, that this first response to the question 'Why do we perceive the world the way we do?' is not a satisfactory one.

A second possible answer to this question might be based on a causal view of perception. This sort of answer would no doubt rely on a theory of perception developed at a physiological or psychological level. However, this approach, too, is unsatisfactory for a number of reasons of which the following two are in my view the most important. First, according to the causal theory of perception, there is a distinction between what is perceived and the external world. The relation between these two, it is argued, is a causal one. This in turn implies that all that is required for an understanding of perception is an adequate scientific account of the

nature of the causal connection involved.

The danger with this view is that it implies that perception is something which just happens to a person and not something which is engaged in by persons. This, together with the claim characteristic of classical causal theories that the perceptual world is in some sense a duplicate, or replica or mirror image of the real world which stands to the perceptual world as cause to effect, implies that the world is presented to perceivers in a pre-articulated way¹. Any account which has these consequences must be considered inadequate at the very least. For it implies among other things that any two persons who are placed in the same situation under similar external conditions will perceive the same things, assuming of course that each has normal use of his sense organs. As we shall see, this view of the matter is erroneous.

The second reason for thinking an answer offered by a causal theory of perception to be inadequate is as follows. If we assume that perceptual experiences are caused, then we are committed to the view that there is a contingent connection between the experiences themselves and their causes. This raises the following difficulty. If one thing, A, is the cause

1. It could be argued that one can adopt a causal theory of perception without thereby committing oneself to the view described above. This might well be true, in which case the argument can be regarded as an attack on a position which has been characteristically associated with the causal theory, and not an attack on the causal theory itself. I have no particular objection to this view of the matter. The purpose of the criticism is not to refute the causal theory, but rather to expose certain assumptions which have been thought to be characteristic of various accounts of perception, including the causal theory.

of a second thing, B, then it must be possible to establish the existence of the cause, A, independently of the existence of the effect B. On the other hand, if the only ground for asserting the existence of A is the existence of B, then the link between A and B is not a contingent one. If this is the case, A cannot be said to be the cause of B. It is this latter situation which advocates of the causal theory find themselves in. The only evidence for a material world which exists independently of perceptual experience and which is the cause of it, is the existence of perceptual experience. But as argued above, if this is the case, then, if there is a difference between experience and reality of the suggested sort, the relation between the two is a non-contingent one and not a contingent or causal one.

A third possible answer to the question 'Why do we perceive the world the way we do?' would be one which answered by referring to the purposes, intention, interests or ends of those engaging in perception. An answer of this sort suggests that perception is in some sense goal-directed. To attribute agency to something is to suggest that that thing has a certain direction, or that it is to be understood as leading toward a certain end. That is to say, activity which is goal directed is to be explained at least partly through a use of such phrases as 'with a view to', or 'in order to', or 'because of', or 'in aid of' and so on. If we apply this to the suggestion that perception is in some sense

goal-directed, what results is the suggestion that perception, like activities such as playing an instrument, or playing a game, or reading a book, is to be explained at least partly in terms of the goals of the individual engaging in perception.

Is an approach of this sort justified? In what follows, I shall attempt to determine the answer to this question.

VI.2 Perception and goal-directed behavior

There are a number of ways in which the concepts of perception and agency might be related. It might be the case that perception is itself one sort of goal-directed behavior. Or it might be the case that being able to engage in goal-directed behavior is a necessary condition of perception.

The first two of these possibilities will be examined in this chapter. The third possibility will be left to the next chapter.

VI.3 Perception as a necessary condition of goal-directed behavior

The easiest place to begin the discussion is with the suggestion that perception is a necessary condition of goal directed behavior. I take this to mean that an agent logically must be capable of perception.

Goal directed behavior is behavior which is initiated for some purpose. It is behavior which is designed to bring about a state of affairs which does not already exist or maintain a state of affairs which does already exist. This

in turn requires the ability to differentiate between various states of affairs. Something which is incapable of perception is incapable of determining that the end which it is trying to bring about has been achieved. Such a thing is therefore incapable of engaging in goal-directed behavior. An animal which is incapable of differentiating between food and other substances in its environment cannot be said to be hunting for food. It follows that the ability to perceive is a necessary condition of goal-directed behavior.

What is the significance of this conclusion? To bring this out, more development is required. An agent which acts on its environment necessarily does something to something. That is to say, to engage in goal-directed behavior is to manipulate the world in some way. If no manipulation of things in one's environment is required for the achievement of a particular end, this means that the desired end already exists or is going to exist without any effort on my part. If the desired end is not already in existence or is not going to exist without any effort on my part, then something must be done to bring it about; something must be manipulated; some obstacle must be removed. A baby, in order to reach the biscuit, must coordinate his arms and legs, exert the effort required to crawl across the floor, climb onto the chair and reach for the biscuit. The fact that movement of the sort required does not appear to constitute an obstacle for an adult indicates only that the movements required can be carried

out with comparative ease, and hence, relatively speaking, do not require overcoming obstacles. But, in fact, all that is indicated is that, at this level, manipulation of the environment (including the control of body movements) is relatively straight forward. Consequently, the action is not thought of as overcoming obstacles; but of course the obstacles are there even though they are unimportant ones.

Any action, then, is carried out in the presence of certain obstacles and consequently requires that the world be manipulated in some way. This in turn requires some knowledge of the nature of the obstacles to be overcome. Thus, perception must be regarded as a necessary feature of goal-directed behaviour.

In the context of a given action, the function of perception is to reveal the nature of the obstacles present. And to reveal this is to reveal the significance of a given object vis à vis the achievement of the goal in question. The nature or significance of a given object will be indicated by an answer to the question "How must I manipulate this object if I am to achieve my end?" In the context of a given action, then, an object is identified both because of its significance for the achievement of the end and as having this significance.

We can say, then, that one of the functions or purposes of perception is to determine what sorts of resistance the agent is likely to encounter in the pursuit of various objectives. And further, the significance of any given object in

the environment will be determined at least in part by its relevance to the achievement of a particular end. But we can add to this. Not only is an object's significance determined in part by the sort of obstacle it presents, the nature of any given object can be determined by attempting to manipulate it. Consider how we go about identifying a strange object. We could no doubt begin by noting its colour, shape and position. But unless we are already familiar with the object this much information will not be of much use. The essential information can be gained only by discovering how the object can be manipulated. What is its weight and consistency? Can it be burned, cut up, sharpened, eaten, bent, broken up into smaller pieces, melted down, thrown? If it is animate, can it fight, bite, scratch, run away? Or is it edible and if so is it bitter, sweet, nourishing? Or can it pull a plough, guard sheep, steal chickens, produce milk, amuse children, and so on? When we have answers to some or all of these and other similar questions then we know or at least have a good idea of what the object is.

The point is that what an agent perceives is a world which bears a certain relation to his actions, a world which is of significance because it stands as an obstacle and as a means to the achievement of his objectives.

VI.4 The significance of determining the relation between perception and goal-directed behavior

I think that we are now in a position where it is possible to begin to see the importance of discovering whether there is a logical connection between perception and goal-directed behavior. If it is logically necessary that an agent perceive things in his environment as having significance for the achievement of his ends i.e. as objects of manipulation as I have argued, and, if it is logically necessary that only agents are able to engage in perception, this suggests that it is logically necessary that for anyone able to differentiate things in its environment, at least some of the things he perceives must be perceived as objects of manipulation.

VI.5 Perception as goal-directed

As I have argued above, it is possible to see a relation between perception and goal-directed behavior. But the relation described above is not such as to require that perception itself is goal directed. It merely shows that perception on occasion at any rate occurs in conjunction with the actions of percipient beings. But what we must now consider is whether perception is itself goal-directed. We shall find reason for concluding that it is not essentially goal-directed.

It might be argued that an important reason for thinking that perception is goal-directed is provided by an analysis of perception words. As Ryle points out in Concept of Mind, 'verbs of perception such as "see", "hear", "detect", "discriminate", and many others are generally used to record observa-

tional successes, while verbs like "watch", "listen", "probe", "scan", and "savour" are used to record observational undertakings.' (Op. cit., p. 222). This way of talking about observation or perception suggests very strongly that perception is a goal-directed activity, or perhaps a family of goal-directed activities, with all the characteristics of activities like swimming, or running, or playing games with their attendant attempts, undertakings, successes and failures. Certainly, it is difficult to see how one can speak of successes and failures where there are no goals or purposes.

But are we justified in talking about perception in this way?

VI.6 Reasons for thinking we are

Let us begin by setting up an example. A man goes hunting with the purpose of bringing home a moose head as a trophy. He comes to a clearing in the forest and there standing on the other side is a moose. The hunter raises his rifle, fires and kills the moose thereby achieving the objective of obtaining the trophy.

The question to be asked here is whether the act of seeing the moose is similar in the relevant respects to the act of pulling the trigger. If we can find an answer to this question, we are part way toward seeing whether the notion of perception includes the notion of agency, which is to say whether all perceptual acts are directed or purposeful in

the same sense in which the act of pulling the trigger in the above example is directed or purposeful.

It is to be noted that the act of pulling the trigger is directed in the appropriate sense. It was not an accident; it did not result from a start of some sort. The hunter was not forced to pull the trigger. He did so because he wanted to shoot the moose and thus obtain his trophy. Thus the question is, can we say that seeing the moose stands in the same relation in killing the moose as pulling the trigger to killing the moose?

To begin with, both acts are means to the same end. This is indicated by an answer to the question, "How did he get his trophy?" Answer: "He went out hunting last week, saw a moose and was able to get a shot at it." This account indicates that if the hunter had not seen the moose he would not have been able to shoot it; similarly if he had not had time to aim and pull the trigger, he would not have been able to shoot it.

Then too, we can work both acts into the same sort of general account of what happened. For example, in giving a general account of what happened we might say, "He saw the moose because he was looking for it; he was looking for it because he wanted to shoot it, etc." Similarly, we might say, "He pulled the trigger because the moose was in his sights; he was aiming at it because he wanted to shoot it."

There are other points of comparison as well. Certain

necessary conditions must be satisfied if we are to say correctly of the hunter that he saw the moose. There must have been a moose for the hunter to see; the light conditions must have been such that it was possible to see; and the moose must have been in a position such that it could be seen. But similarly, certain necessary conditions must be satisfied if we are to say correctly that the hunter pulled the trigger. For example, there must have been a gun available and it must have been in working order.

There is a second set of necessary conditions which are similar in both cases. For if we are to say correctly that the hunter saw a moose then it must be the case that the hunter knows what a moose is and secondly that he has acquired the skill of differentiating between e.g. moose and deer. Similarly, to say of the hunter that he deliberately pulled the trigger, it must be the case that he knows something about guns and their function, and further, knows how to go about firing them.

As a final condition, if the hunter is to see a moose, he must attend to the job of hunting. Similarly, if he is to have the opportunity to pull the trigger and shoot a moose he must attend to what he is doing.

These considerations suggest three reasons for the view that perception involves agency, i.e. that perceptual acts are directed in the same sense that actions like the action of pulling a trigger in the above example are directed. They can be put as follows.

- a) Perception involves the use of sense organs. In order to see something, I have to both open my eyes and look in the right direction. In order to discover what something smells like, I have to bring it within smelling distance. In order to use my sense of touch, I have to bring some part of my body into contact with something. In order to hear, I have to ensure that I am in the right position. Thus, in each case, I have to put my organs of sense to use and ensure that I am in a position where they can be used. And this is purposive behavior.
- b) The ability to perceive is an acquired skill. It has to be learned. The baby, when he is first born, does not simply open his eyes and observe the world around him. He has to learn to use his eyes so as to be able to distinguish different colours, for example. Similarly, a person who wishes to become a bird watcher does not simply go out into the country and notice different types of birds. He must train himself in the art of observing birds. He must learn to distinguish between birds which to the untrained eye are indistinguishable. And he must learn to see birds in situations where to an untrained person they would go unnoticed. Thus, the ability to use one's senses is something which must be acquired often at considerable effort.

Of course, a child does not learn to see on purpose. Neither could he be described as deliberately setting out

to acquire a skill, a description which would be appropriate in the case of the novice bird watcher. Nevertheless, it would appear that the acquisition of the skill of seeing is purposive in the sense that it is a necessary means to an end which is in the acceptable sense aimed at.

Thus it is necessary both to acquire the ability to perceive and to exercise that ability in appropriate circumstances when it has been acquired. Both the acquisition and the exercise of skills are purposive in the required sense. And as perception shares these characteristics, it too, can be said to be purposive, or so it would appear.

- c) Perception requires a certain element of attentiveness. I cannot look absent mindedly; or rather, if I do, what I observe or see will be limited as a result. A person who is listening with rapt attention will hear more than a person who is just barely attending. A person who is an avid bird watcher will see more on a hike than a person who is along just for the walk, even though both are equally expert at bird watching.

But only agents engaged in purposeful activity can be attentive, or absent minded, or interested in what they are doing. And from this it would appear to follow that perception is purposeful.

VI.7 Reasons for thinking that perception is not goal-directed

The preceding argument is designed to show that it is possible to characterize perception in much the same way as we characterize purposeful behaviour. But to talk in this way, it might be argued, is simply to be misled by the close but contingent link between perception and action. The fact that we have been misled, it might be argued, is indicated when we ask of a particular act of perception whether it is purposeful or intentional or goal-directed. When we ask this sort of question, we are concerned with behaviour. And we are misled into thinking that the question applies to perception because perception occurs so often in the context of behaviour which is goal-directed.

These considerations lead to three sorts of objections to the thesis that perception involves agency.

- a) Perception need not occur in the context of goal-directed activity.
- b) The fact that perception is a necessary feature of all goal-directed behaviour is comparable with its being akin to breathing which is also a necessary feature of all activity. Or it may be related to goal-directed activity in the way in which movement is related.
- c) It is always possible to ask intelligibly of a person who has acted in a certain way why he did what he did. But this question is inapplicable in the case of perception except where it is suspected or known that error has occurred.

In what follows, I will consider each of these objections in turn, and will argue that none of the objections has its intended effect.

- a) A person is walking down a street with the sole intention of getting from point A to point B. As he is walking, he sees a friend and greets him. The perceptual act of seeing a friend is in no way related to the goal of getting from A to B. All that seems to be required here if perception is to occur is that the conditions of seeing are adequate, that the friend be present on the pavement and that the person be relatively alert, e.g. not sleep walking.

The advantage of this example, it might be argued, is that it allows us to analyse perception outside of the context of goal-directed behaviour. The example, as a consequence, raises a number of interesting points.

- i) Sometimes perception is automatic. The person described above did not intend to see his friend, neither did he expect to see his friend. But this does not in itself indicate that perception of this sort does not involve agency. Many actions are automatic in the same sense. For example, when I get up in the morning, without thinking I automatically put on my socks before putting on my shoes. But this does not indicate that my action in so doing is non-intentional. Rather, it is a habit which allows me to act without thinking. A

good deal of perception, it could be argued, is of this sort, i.e. resulting from habit or automatic.

- ii) The fact that the act of perception in the example does not occur as the result of an articulated intention is not sufficient ground for concluding that agency is not involved. We attribute purpose to the dog scratching at the door. "He wants out", we say. Yet the description does not commit us to the view that a particular thought occurred to the dog, namely, "I want out". Similarly, in the case of human beings, much purposive behaviour occurs unaccompanied by an articulated purpose or intention.
- iii) The fact that the person in the example saw his friend is instructive. No doubt many things and people were encountered on the street besides the friend. Almost certainly, most of what went by went unnoticed except, perhaps, as obstacles to be avoided. But the friend was noticed. One possible reason for this is that greeting friends is a part of a complex of behaviour which is related to having friends. Normally it is expected that a person will greet friends on the street. If he does not, the friend is likely to be offended. To this extent, then, the example suggests the opposite of what is intended.
- b) The second objection suggests that perception, like breathing, is a characteristic of a normally functioning

human organism. It might be argued that this is the sense in which perception is automatic. Certainly the comparison is a tempting one. To a certain extent, it is possible to control one's breathing just as it is possible to a certain extent to control what one perceives. However, the comparison is only superficially inviting. Breathing is automatic in the sense that it is something which is not taught. It simply occurs at birth. But perception does not occur from the moment of birth. A child has to learn to perceive what is going on around him. Further, a person can, e.g. while deeply immersed in thought, become oblivious to what is going on around him. But he cannot in the same sense simply stop breathing.

The comparison of perception with movement is also superficially attractive but nevertheless invalid. Perception, it might be thought, is a necessary feature of actions just as movement is. Yet, in the case of movement, we are not deceived into thinking that it is to be explained in the way in which we explain actions. But movement and perception are in important respects not analogous. For example, movement can be attributed to non-conscious entities while the power of perception cannot. Actions, too, can be attributed only to conscious beings.

These attempted analogies, however, do bring out an important feature of perception, namely, that it is a sign of consciousness on the part of percipient beings.

That is to say, if a person is conscious, it must be true of him that he is aware to some extent of what is going on around him. This point is of some significance when we consider the third objection.

- c) Intentional behaviour is such that it always allows for a particular sort of answer to the question "Why?", as in "Why did you cross the street?" or "Why did you shoot the moose?". The answer being solicited here is one which introduces in some form the notion of agency, that is, one which indicates the point or purpose of the action. The sort of answer ruled out is one which indicates that the person did what he did accidentally or inadvertently.

Now presumably, if perception involves agency, this question and the requisite type of answer can be asked and given of particular acts of perception. Yet this question when asked of perception appears to be nonsensical, at least in the form required. Take, for example, the question "Why did you see the moose?". The question would seem to be asking one of two things: (i) "How is it that you saw the moose while your companion did not?", or, (ii) "Why did you think you saw a moose?" -- implying that in fact he did not, i.e. that he was mistaken. In neither case does the question appear to solicit the kind of answer required. In the first case, the answer will focus on why the companion did not see the animal. In the second case, the answer will indicate why the hunter was

deceived. The problem here is not so much the sort of answer which is given as the sort of answer which is not given. And the sort of answer which is not given is precisely the sort of answer we would expect if we were considering not what a person saw but what he did. The implication seems to be that given the circumstances, normally, a person would not do what he did do unless for some purpose. The questioner, then, is requesting enlightenment as to the purpose. On the other hand, where perception is concerned, the assumption is that, given the circumstances, normally, any person would have seen what the person in question did see or observe. Hence, no account need be given of the fact that he did see e.g. the moose. It is only if e.g. the moose is not seen or if a mistake is made that an account is necessary.

Before tackling the problem head on, it is important to notice what it is that we are asking when we ask a person why he did what he did. We are not asking the person in question why he did anything at all, as opposed to doing literally nothing. For it is characteristic of human beings when they are awake that they are doing something, i.e. that some action or actions can be attributed to them. Rather, when we ask "Why?" we are asking why the person in question did what he did the way he did it, as opposed to doing something else; or why he did what he did the way he did it. For an example, if we ask

someone why he crossed the street, we are asking either why he crossed the street as opposed to continuing the way he was going, or why he crossed the street the way he did, e.g. at that particular point instead of at the crosswalk, or on the run. Similarly, if we ask of a person who has just seen a moose why he saw it, we cannot be asking why he was aware of what was going on around him or why he saw anything at all as opposed to literally nothing. For as we pointed out above, it is characteristic of human beings that when they are awake they are aware to some degree of what is happening to and around them. Hence, if the question "Why?" has any meaning in this context, it must mean either "Why did you see what you did see, as opposed to many other things which you might have observed", or "Why did you see what you saw the way you saw it?"

The first question clearly is meaningful. It might be asked of a person who has just walked through a poor section of Madras, "Why did you notice all those quaint shops without noticing the hungry children hovering nearby?" or "How is it that you saw the tulips and not the daffodils?" Typical answers might be, "Well, I am writing a book about Indian shops and was completely absorbed by this new find", or "I am a tulip salesman." Both answers point to the interests of the person in question, thus offering a reason for the fact that something is noticed

(seen) while something else is not. Thus, the question, if it is intended to have this meaning, is a significant one and does solicit an answer of the required sort.

The second way of rendering the question is also important and significant although its meaning is more obscure. It amounts to asking why a person saw what he did the way he saw it. The question, if asked of the hunter, would then take the form "Why did you see the moose as a moose instead of as e.g. an animal." This amounts to the question why a person saw what he saw under that particular description as opposed to under some other one. But is this a meaningful thing to ask?

VI.8 Seeing and seeing as

In order to hold the view that the second question (cf. VI.7.c) posed above is meaningful it is necessary to argue that all seeing is seeing as. This I propose to do. But before doing this, it is necessary to indicate that in one sense of "seeing as", all seeing is not seeing as. In one of its uses, "see as" means "to take one thing for something else". There are two standard situations where this occurs. In the one situation there is an element of ambiguity such that the thing under consideration can be taken in one of two or more ways. Wittgenstein's duck-rabbit is an instance of this. In this case, an observer might see the figure as a duck or as a rabbit, where neither of these two ways of seeing

the figure involves error.

In the second standard situation, a person is said to see something as something else, for example, when he takes John for Jack or a moose for a deer. In this case, the observer is mistaken, and hence, is said to see some one thing as something which it is not.

In both these cases we can talk of seeing as only if it is possible to talk simply of seeing. Only if we can talk of a person seeing a moose can we also talk of a person seeing a moose as a deer. And of course, people do see e.g. tables and chairs. In these situations it would be incorrect to say that the tables and chairs were seen as tables and chairs. This is what Wittgenstein is suggesting when he says that one does not take e.g. cutlery which is laid on the table in preparation for a meal for cutlery.

This much is true. But there is another sense in which it is correct to say of a person that he saw e.g. the steak knife as a steak knife and not as something else. For the same object would be seen quite differently depending on the context in which it was located e.g. on a dining room table as opposed to in a tool shed where it was constantly used as a screw driver, or in an operating theatre where it serves as a scalpel.

I am suggesting here that any given object can be identified in an indefinit number of ways. There is no one correct way of

describing an object and hence, there is no one correct way of seeing an object. Consequently, we have a second way of using the expression 'to see as' such that it means to see some thing as X as opposed to as Y or Z where Y and Z are other possible ways of correctly describing the object and hence of seeing the object. This is not to say that it is incorrect to say of a person that he saw e.g. a moose. Rather, we are simply pointing to the fact that, for example, three persons placed in the same context might correctly describe what they saw as an animal, as a moose or as a bull moose. Each description would be a correct description of what was seen. And of each person it would be correct to say, he saw what he saw as opposed to seeing what one of the other two saw.

Thus the question, "Why did you see a moose?" is significant if interpreted to mean, "Why did you see a moose and not a bull moose or simply an animal, or perhaps a brown object?" Which is to say, "Why did you see X under this description as opposed to seeing X under some other description?"

VI.9 The question "Why?"

The importance of this question is that it allows a refocusing of attention on two points previously made. They are as follows:

- a) The fact that the above question can be asked indicates that both veridical perception as well as perceptual error are of psychological and philosophical interest.

This latter point needs making if only because some philosophers (e.g. Hamlyn, The Psychology of Perception, Routledge and Kegan Paul, 1956, Chapter II) have argued that philosophers as well as psychologists should focus attention on perceptual error and not on veridical perception. The reasons for this view are two in number. First, it is argued that no general explanation of why we see what we see is possible. Second, philosophers have suggested that the only explanation of veridical perception is that it is veridical. That is to say, if I see a red pillar box, the reason why I see this pillar box, if there is a pillar box in front of me, is simply that there is one there. In one sense this account is obviously true. But it is not enough. For example, a native of a country where there are no pillar boxes and where orange and red are not differentiated will see neither a red pillar box nor a red object, given that he is presented with what an Englishman would call a red pillar box.

It is the difference in the way two people might correctly see the same thing which should be of interest both to psychologists and to philosophers.

- b) Second, and following from (a), the question "Why?" directs attention to the fact that every perceptual situation resembles the situation where a person is faced with an ambiguous picture or drawing and asked what he sees.¹

1. This conclusion finds substantial support by way of both examples and argument in Patterns of Discovery (N.R. Hanson, Cambridge, 1965) particularly Chapters I and II. The purpose of Hanson's argument is to draw attention in this chapter,

When the answer is given, it can then be asked why the picture was seen the way it was. And this is only to say that in any given situation, if a person sees an object X, it is appropriate to ask "Why did you see that X as an X and not as a Y or Z etc.?"²

The fact, however, that the question "Why?" can be asked does not in itself show that perception is goal-directed. There are a number of reasons for this. First, it may well be the case that goals or purposes do have an effect on perception in some instances. For example, a person intent on finding a particular house on a street may in his search for the house not see things which a second person ambling along the street might see. In explaining this difference, it would almost certainly be necessary to mention the intentions of each man in walking along the street. Such an explanation would be an answer to the question "Why did the one man see things which the other did not see?" But what this sort of

though his method of doing so is quite distinct from my own.

2. Hampshire, (Thought and Action, London, 1965) in the chapter on "Persons and their situations" develops a number of arguments which support the two conclusions above. For example Hampshire argues

"Whatever I may be referring to and identifying as a thing of a certain kind, I am always and necessarily amplifying the description that might originally be given of it: 'That heap of stones is a tomb'. Having established these two identifications, I can go on to a third identification of the same form and so on indefinitely. There is no necessary end to the series. Nor is there any necessary starting point, as so many philosophers have assumed, in a type of classification which most nearly corresponds to the true divisions in experience or reality. (Op. cit. p. 20)

(continued on next page)

example shows is that there is at least on some occasions a connection between a man's goals or interests and what he sees. This fact may be of interest to psychologists or social scientists generally. But it does not show that perception in all its occurrences is goal-directed.

What is required is an argument which demonstrates either that perception is a type of goal-directed activity or that it is not. And if it can be proven that perception is a type of goal-directed activity then what has been shown is that in any instance of perception some purpose or intention is present. Such a proof would not of course indicate what goals or intentions or interests or needs were operative in any given instance. But it would show that some goal etc. must have been operative, if perception occurred.

†

VI.10 Is perception goal-directed?

There are three major objections to the view that perception is a type of goal-directed behaviour. Each in my view is fatal.

- a) Given that certain minimum conditions are satisfied, what I see is a function of what is in front of me and not a

Hampshire then goes on to suggest that the forms of classification used depend on the interests of those using the system, a suggestion which I shall discuss at length in the following two chapters. In fact, his first chapter is providing arguments which support the point of view which it is the purpose of this chapter to set forward.

function of what I want to see or decide to see. Now it is the case that actions are limited in their scope by the existence of limiting conditions such as the possession of skills, strength, and so on. But given the satisfaction of these conditions, what a person does is determined by what he wants or decides to do. That is to say that the content of an action is determined by the desires and decisions of the agent. But the content of perception is not determined in this way. A person can satisfy certain conditions which make a certain sort of perception possible e.g. by developing certain perceptual skills. But this is the limit to the control over what is seen. In any given situation, what is seen is not a function of what the perceiver wants to see.

- b) The second objection is that while I am responsible for the most part for what I do, I cannot in a similar sense be said to be responsible for what I see. To this it might be objected that we assign guilt to peeping Toms and spies. But the objection will not do. The peeping Tom or the spy is guilty of acting in such a way that he is in a position to see certain things. But contrast this with the example of a person walking down a public road where he sees a military installation. It is inevitable that he should see the installation if he is reasonably observant. But he is not on that account arrested. Rather, the authorities are accused of bad planning or carelessness

or the like.

- c) The final objection is that goal-directed activity requires that the world be altered in some way. Or put another way, goal-directed behaviour involves an attempt to bring about a state of affairs which does not presently exist. It suggests a "given" and a "product". However, the function of perception is not alteration of the world. Rather, its function is to allow the observer to see the world the way it is. Then, too, if perception does involve a "given" and a "product", how do we differentiate between what is given and what is perceived? If we do talk this way we face those objections raised earlier against the causal theory of perception.

Perception, then, is not itself a type of goal-directed behaviour. Hence, it is now seen to be misleading at the very least to say that perception verbs are achievement verbs or success verbs. Yet, as the earlier argument shows, there are features of perception which strongly suggest a purposive element in perception. And, in addition, the question "Why do we see the world the way we do?" has been shown to be a meaningful one.

To this point in the discussion it has been assumed that what is needed is a demonstration that perception is itself goal-directed. There is, however, another possibility. It might be the case that while perception is not itself a type of goal-directed behaviour, nevertheless, there is a non-

contingent¹ connection between perception and goal-directed behaviour. It is this second possibility which I would like to examine in the next chapter.

1. It should be noted that for the purposes of this thesis the terms 'non-contingent' and 'necessary' are used synonymously.

CHAPTER VII: PERCEPTION AND AGENCY

VII.1 Introduction

Thus far we have done little more than map out a few facts about perception which are of importance to an understanding of the fact/value relationship as I hope will become clear as we proceed. I have argued that perception cannot itself be regarded as a goal directed activity or a family of goal directed activities. The primary reason for this is that what we perceive is a function not simply of what we want to perceive; it is a function of what is there. That is, perception is simply not a voluntary activity. This point is worth establishing because of the fact that perception shares a number of characteristics with activities which are central examples of goal directed activities e.g. playing a sonata, writing a book, running a race, selling goods and so on. And if we are to focus on these characteristics, as I think the topic requires, it is important to determine what, in the case of perception, possession of these characteristics implies and what it does not.

To summarize, perception is not something which one is automatically capable of. The ability to perceive things is acquired, or learned. This has led me to characterize perception as a skill or family of skills.

The present state of the argument, then, is as follows. While it does appear to be the case that goals, ends, interests,

etc. do play a part in perception, it is not a goal directed activity or family of activities. In other words, while it would appear to be the case that a teleological analysis of perception is appropriate in some sense, it is clear that a teleological analysis which implies that perception is itself goal directed is not acceptable. But what, then, is the relation of perception to the goals, purposes and ends of percipient beings? And is this relation anything more than a purely contingent one? This question can be broken into four parts, each of which will be considered in turn:

1. Is it possible to discover that something is percipient if that thing is not an agent, i.e. never engages in goal directed behavior?
2. Is it possible to discover what perceptual skills something in fact has if that thing is not an agent, i.e. never engages in goal directed behavior?
3. Is there in fact any connection between what is seen by something and the goals or needs or purposes etc. of that thing?
4. Can perceptual skills be acquired in isolation from goal directed behavior?

VII.2 Question One

Is it possible to discover that something is percipient if that thing never engages in goal directed behavior?

I think it is beyond dispute that we do in fact determine

that for example babies are beginning to perceive things in their vicinity by watching their behavior. The same is true of animals. We say that a particular animal is capable of perceiving things in its vicinity because we can see that it is responding in something more than a random way to its environment.

It is difficult to know just how one would deal with an assertion on someone's part that something which exhibited no behavior or alternatively no behavior of a systematic variety was capable of perception. The difficulty of dealing with the assertion is simply that it is unverifiable. There are conditions though which if satisfied would make such an assertion intelligible. If, for example, the speaker was commenting on a person who appeared to be unconscious and whose condition was the result of a serious stroke or perhaps an accident of some sort the claim that he was, though paralysed, nevertheless aware to some degree of what was going on around him would be intelligible though perhaps not verifiable. It is interesting that in such a case great effort would almost certainly be expended trying to discover something that the person could do which might indicate that he was indeed conscious. Even the most trivial kind of behavior might provide the desired sign, blinking for example. And if it was discovered that there was indeed something which such a person could do, the assertion that he was conscious would probably be regarded as verified.

Aristotle in De Anima appears to disagree with the view just presented. He argues that there are things which are

capable of perception which are not at the same time capable of movement. Aristotle's view of perception seems to have two elements. The first is reflected in the following passage from Ross's introduction:

Every body which can move (this, we note, is a fundamental characteristic of animals as against plants¹) would perish and fail to reach its end if it had not sense perception. How else is it to be nourished? Sessile creatures (plants) get their food where they are born, but a body which is not sessile, but has been generated, cannot have soul and critical reason without having sense perception. Why should it fail to have it? It would do so only if this were better either for soul or body, neither of which is the case ... It follows that no non-sessile body has a soul without having sense perception; in other words, all animals have, and must have, sense perception. (p. 53, De Anima, Tr. Ross)

This comment by Ross indicates that Aristotle is in agreement with the view argued for in the previous chapter that perception is a necessary feature of goal directed behavior. The second element in Aristotle's view of perception is made clear in his answer to the question: 'What is it which gives animals locomotion?' (Ibid, 432b7). Aristotle answers 'Nor is it the faculty of perception; for many animals have this which never move.' And elsewhere (ibid 414b32) Aristotle comments 'Of creature that have perception some but not all have local movement'.

Aristotle's point seems to be that 'while perception is a

1. This comment of Ross's seems inaccurate if by fundamental he means essential. For as the next quotation shows, Aristotle

necessary feature of the movement of animals it nevertheless does not explain the occurrence of their movement. For an explanation of why animals move one must look elsewhere i.e. to motivation. It seems that Aristotle is appealing to the fact that not all things which have sense perception do move to show that therefore the movement of animals is not to be explained by reference to the fact that they have sense perception.

The kinds of animals which Aristotle thinks to be examples of animals which have sense perception but are not capable of movement are such things as sponges and certain kinds of oyster. In Historia Animalium, the following comment is made about these sorts of animals:

Furthermore, some animals are stationary and some are erratic. Stationary animals are found in water but no such creature is found on dry land. In the water are many creatures that live in close adhesion to an external as is the case with several kinds of oyster. And by the way, the sponge appears to be endowed with a certain sensibility; as a proof of which it is alleged that the difficulty in detaching it from its moorings is increased if the movement to detach it be not covertly applied.
(Historia Animalium, 487b)

1. continued.

apparently thought that a thing could be an animal yet be incapable of movement. It also appears to be inconsistent with his comment (p. 50): 'Nor is it (initiating local movement) to be brought under the heading of sense perception since there are animals which have sense-perception but do not move'.

There is one further comment worth quoting on this subject:

So in the sea there are certain objects concerning which one would be at a loss to determine whether they be animal or vegetable (ibid, 588f)

Thus, in tracking down what Aristotle is in fact referring to in De Anima, one discovers an account of the matter which confirms what I have argued above. While sponges are not capable of movement, they are capable of a kind of goal directed behavior. And further it is because they are capable of this kind of response that the people to whom Aristotle is referring attribute perception to them. It is interesting also that Aristotle points out the difficulty of deciding whether such creatures as sponges and oysters of the variety being referred to are plants or animals.

It is clear that the illustrations offered by Aristotle are not illustrations of situations where we attribute the ability to perceive to something even though that thing is unable to engage in goal directed behavior. In fact the illustrations offered by Aristotle tend to confirm the position for which I am arguing namely, that only if something is capable of engaging in goal directed behavior are there any grounds for the view that that thing is capable of perception.

I conclude therefore that only if something engages in goal directed behavior do we have any grounds for ascribing the ability to perceive to it. But does this conclusion entail that only agents are capable of perception? I shall assume for the purposes of this argument that it does not.

That is to say I shall assume that the assertion 'X is capable of perception' is meaningful even where X is not an agent and where as a consequence there is no possible way of determining the assertion to be either true or false.¹ If we allow this assumption, it follows that the above argument does not demonstrate that non-agents are incapable of perception. It demonstrates only that we can never have any grounds for attributing perception to non-agents.

VII.3 Question two

Is it possible to discover what perceptual skills something in fact has if that thing is not an agent, i.e. never engages in goal directed behavior?

If the only way of determining that something is capable of perception is by reference to its behavior, then it follows that the only way of determining what something perceives is by reference to its behavior. Is the thing in question responding to its environment in a random way or in a selective way? And is its response to this different from its response to that?

What counts as a response? In the case of a baby, following an object with its eyes counts; or reaching out for something when it is presented counts. Doing something with something in one's environment also counts as is illustrated by some of Piaget's observations (to which I shall have occasion to refer in greater detail below). In fact, at anything
1. This assumption is shown indirectly to be justified in Chapter IX.

but the most primitive level of detection, what a purportedly percipient being does with things in its environment is a crucial test of what it is actually able to perceive. In the absence of this test, one would quickly run out of ways of determining which of the various things in its vicinity a baby was in fact able to perceive i.e. differentiate from other things in its vicinity.

Our use of this test in determining what perceptual skills a percipient being actually has acquired is in turn dependent on our ability to determine what an agent's purpose is in doing something. If we were totally incapable of determining what a particular animal was attempting to bring about by its actions, we would be totally incapable of determining what perceptual skills it actually had. 'There appears to be a pattern in what it is doing', we might say, 'but we can not determine what it is'. Once we have deciphered its purpose we can begin to work out from its actions what perceptual skills it must have in order to do what it is doing.

Its behavior, then, is the evidence which we require if we are to work out what perceptual skills some particular agent has. But once again, this does not prove that only agents are capable of acquiring perceptual skills. It shows simply that only in the case of agents is it possible to determine what perceptual skills have been acquired.

VII.4 Question three

Is there in fact any connection between what is seen by a perciever and the goals needs or purposes etc. of that perceiver? The evidence suggests that there is a significant connection of this sort. The nature and extent of the connection appears to derive from two features of perception which previous discussion has focused on. First, perceptual skills must be learned. Second, perception is a necessary feature of goal directed behavior.

The significance of the fact that perceptual skills must be learned is that it undermines the assumption that two or more persons if they are presented with the same phenomena will as a matter of course perceive the same thing. In fact, the evidence indicates that depending on conditions which do not relate to the actual situation, what two people will see when presented with the same phenomena may very well vary sometimes radically. Take for example two persons one of whom has grown up in an urban environment and the other of whom has grown up on a farm. Assume that they are walking across a meadow. What they encounter by way of sensory stimuli as they walk along will be the same assuming of course that both have normal faculties of perception. But what each sees will be quite different. What the city person sees as simply grass, the farm person will quite likely see as a variety of grasses and associated plants. The farm person will undoubtedly have perceptual skills that the other does not have simply because he has never has an opportunity to acquire them.

A more dramatic illustration of this phenomenon is that offered when persons of quite different cultural backgrounds are confronted by what is from the point of view of sensory stimulation the same thing. If an Eskimo and a typical Englishman are asked what they see when confronted with an expanse of snow, what they report will be radically different. The Englishman will see snow. The Eskimo will see something which he can differentiate from a number of things all of which the Englishman would see as simply snow. The difference lies in the fact that the ability to differentiate various kinds of snow is crucial to the Eskimo's survival. To the Englishman it is in all probability of no consequence.

J.Z. Young (Doubt and Certainty in Science, Galaxy Books, 1960) describes this phenomenon as follows:

The visual receiving system in its untrained state has only very limited powers. We are perhaps deceived by the fact that the eye is a sort of camera. Contrary to what we might suppose, the eyes and brain do not simply record in a sort of photographic manner the pictures that pass in from of us. The brain is not by any means a simple recording system like a film. Recognition of this fact of our relativity is one of the most revolutionary developments of the thought of the present time. Its importance is only now dawning upon us very gradually, ... Many of our affairs are conducted on the assumption that our sense organs provide us with an accurate record, independent of ourselves. What we are now beginning to realize is that much of this is an illusion; that we have to learn to see the world as we do. (Op. cit. p. 66)

Young offers a detailed illustration of what is meant by saying that perception must be learned. I think it is worth

quoting at length.

What would a person see, what would he say on first opening his eyes on a new world? During the present century, the operation has been done often enough for systematic and accurate reports to be collected. The patient on opening his eyes for the first time gets little or no enjoyment; indeed, he finds the experience painful. He reports only a spinning mass of lights and colours. He proves to be quite unable to pick out objects by sight, to recognize what they are, or to name them. He has no conception of a space with objects in it, although he knows all about objects and their names by touch. 'Of course', you will say, 'he must take a little time to learn to recognize them by sight'. Not a little time, but a very, very long time, in fact years. His brain has not been trained in the rules of seeing. We are not conscious that there are any such rules; we think that we see, as we say, 'naturally'. But we have in fact learned a whole set of rules during childhood.

If our blind man is to make use of his eyes he, too, must train his brain. How can this be done? Unless he is quite clever and very persistent he may never learn to make use of his eyes at all. At first he only experiences a mass of colour, but gradually he learns to distinguish shapes. When shown a patch of one colour placed on another he will quickly see that there is a difference between the patch and its surroundings. What he will not do is to recognize that he has seen that particular shape before, nor will he be able to give it its proper name. For example, one man when shown an orange a week after beginning to see said that it was gold. When asked, 'What shape is it?' he said, 'Let me touch it and I will tell you'. After doing so, he said that it was an orange. Then he looked long at it and said, 'Yes, I can see that it is round.' Shown next a blue square, he said it was blue and round. A triangle he also described as round. When the angles were pointed out to him he said, 'Ah. Yes, I understand now, one can see how they feel.' For many weeks and months after beginning to see,

the person can only with great difficulty distinguish between the simplest shapes, such as a triangle and a square. If you ask him how he does it, he may say, 'Of course if I look carefully I see that there are three sharp turns at the edge of the one patch of light, and four on the other.' But he may add peevishly, 'What on earth do you mean by saying that it would be useful to know this? The difference is only very slight and it takes me a long time to work it out. I can do it much better with my fingers'. And if you show him the two next day he will be quite unable to say which is a triangle and which a square.

The patient often finds that the new sense brings only a feeling of uncertainty and he may refuse to make any attempt to use it unless forced to do so. He does not spontaneously attend to the details of shapes. He has not learned the rules, does not know which features are significant and useful for naming objects and conducting life. Remember that for him previously shapes have been named only after feeling the disposition of their edges by touch. However, if you can convince him that it is worth while, then, after weeks of practice, he will name objects by sight. At first they must be seen always in the same colour and at the same angle. One man having learned to name an egg, a potato, and a cube of sugar when he saw them, could not do it when they were put in yellow light. The lump of sugar was named when on the table but not when hung up in the air with a thread. However, such people can gradually learn; if sufficiently encouraged they may after some years develop a full visual life and be able even to read.

It takes at least a month to learn the names of even a few objects. Gradually the patient leaves out the laborious counting of the corners and comes to identify things so quickly that, as in an ordinary person, the process by which he does so is not apparent. So it is not that all along the eyes or brain were incapable of acting normally. What these people lack is the store of rules in the brain, rules usually learnt by the long years of exploration with the eyes during childhood. They have no models with which to compare the input, no mould or filter that can be used to select the significant features of visual experience and

produce appropriate words and other motor responses. A normal person learns the rules of seeing by connecting some parts of the sensory input with motor acts that lead to satisfaction, for instance naming and the fulfilment of communication.

Piaget provides an interesting account of how learning to see can be and actually is connected with 'motor acts which lead to satisfaction'. In doing so he provides an account of how goal directed behavior influences the kinds of perceptual skills which are acquired by individuals. His commentary therefore also illustrates the importance of the second feature of perception as a necessary element in goal directed behavior.

According to Piaget, recognition results when an object comes to play a role in a system of elementary activities. The process of "coming to recognize an object" is described in the following passage.

"The most elementary example of this process is incontestably that of sucking. The nursling, from the second week of life, is capable of finding the nipple and differentiating it from the surrounding turgments; therein is proof that the schema of sucking in order to nurse begins to be disassociated from the schemata of empty sucking or of sucking at random, and thus results in recognition through acts.(1) So also, after the fifth to sixth week of life, the child's smile reveals that he recognizes familiar voices or faces whereas strange sounds or images astonish him. In a general way, every functional use of sucking, of sight, of hearing, of touch, etc gives rise to recognitions. (1)' (Piaget, Op. cit., p. 5)

These conclusions are supported by 'observations, two of which are as follows:

"Laurent, as early as the second day, seems to
 I. The italics are added.

seek with his lips the breast which has escaped him. From the third day he gropes more systematically to find it. From the first month, he searches in the same way for his thumb, which brushed his mouth or came out of it. Thus it seems that contact of the lips with the nipple and the thumb gives rise to a pursuit of those objects, once they have disappeared, a pursuit connected with reflex activity in the first case and with a nascent or acquired habit in the second case." (Op. cit., p. 9)

"Laurent at 0;0 (9 days) is lying. As soon as his cheek comes in contact with the breast, Laurent at 0;0 (12 days) applies himself to seeking until he finds drink. His search takes its bearings immediately from the correct side, that is to say, the side where he experienced contact.

At 0;0 (20 days) he bites the breast which is given him, 5 cm. from the nipple. For a moment he sucks the skin which he then lets go in order to move his mouth about 2 cm. As soon as he begins sucking again he stops. In one of his attempts he touches the nipple with the outside of his lips and he does not recognize it. But, when his search subsequently leads him accidentally to touch the nipple with the mucosa of the upper lip (his mouth being wide open), he at once adjusts his lips and begins to suck.

The same day, same experiment: after having sucked the skin for several seconds, he withdraws and begins to cry. Then he begins again, withdraws again, but without crying, and takes it again 1 cm. away; he keeps this up until he discovers the nipple." (Piaget, The Origin of Intelligence in the Child, Routledge and Kegan Paul, 1953, p.26)

Throughout, Piaget is concerned to insist that in the early stages "perception and action constitute a single whole in the form of a sensori-motor schemata (sic)". (Note: for Piaget, a sensori-motor schema is an elementary matrix of elementary activities involving a limited element of recognition; cf. The Construction of Reality in the Child, p. 93)

His investigation leads Piaget to conclude that "knowledge of the external world begins with the immediate utilization of things." (Ibid, p. 354.) Thus:

Even when the child explores a new object or studies the displacement he provokes by a sort of 'experiment to see', there is always in these kinds of sensori-motor assimilations, however precise the accommodation they evidence, the concept of a practical result to be obtained. By virtue of the very fact that the child cannot translate his observation into a system of verbal judgments and reflex concepts but can simply register them by means of sensori-motor schemata, that is by outlining possible actions, there can be no question of attributing to him the capacity of arriving at pure proofs or judgments properly so called, but it must be said that these judgments, if they were expressed in words, would be equivalent to something like, 'one can do this with this object', 'one can achieve this result', etc. In the behavior patterns oriented by the actual goal, such as the discovery of new means through active experimentation or the invention of new means through mental combinations, the sole problem is to reach the desired goal, hence the only values involved are success or failure. (Ibid, p. 359-360)

What these observations by Young and Piaget indicate is that perceiving something as having a function or use is a fundamental way of perceiving things in one's environment, a type of perception furthermore which is acquired in the earliest stages of perceptual learning. It should not be thought, however, that this way of perceiving things is restricted to perception in its early stages. Adults, too, can learn to differentiate things in this way. Take for example a person discovering that what he previously perceived simply as part of a wall was in fact a light switch. The discovery might very well result when he accidentally brushes

up against that section of the wall thereby turning on a light. It would be equally a mistake to assume that only random or accidental behavior leads to the acquisition of perceptual skills of the sort being described here. Science is to a considerable extent based on the systematic exploration of phenomena through experiment. This kind of exploration often is simply the systematic manipulation of phenomena for the purpose of discovering similarities and differences where previously only similarities or only differences were thought to exist.

A final point; what one perceives as the result of such experimentation is frequently different from what one perceived prior to the experimentation. What one learns in experimenting with one's environment affects not simply what one knows about one's environment; it affects often what one sees or perceives in one's environment. It is this point which Young is making in the passages quoted above and when he says that 'we literally create the world we speak about' (Op. cit. p. 108). He goes on to say:

The point to grasp is that we cannot speak simply as if there is a world around us of which our sense give us true information. In trying to speak about what the world is like we must remember all the time that what we see and what we say depends on what we have learned; we ourselves come into the process. This should make us much more humble in asserting that our present ways of speaking give a full revelation of what the world is like. As we expand our powers we should be able to observe and report more and more. This is what science has been gradually doing, and it

has enormously enlarged our vision',¹
(Ibid, p. 108)

VII.5 Is it logically necessary that a perceiver be an agent?

Can perceptual skills be acquired in isolation from goal directed behavior? Is it a logical truth that only agents are capable of perception? If the answer to this latter question is affirmative then it follows, I think, that for any percipient being at least some of the things which he perceives must be perceived as objects of manipulation. On the other hand, if it is logically possible for perceptual skills to be acquired by a non-agent then it is not logically necessary that at least some of the things perceived by such a being be perceived as objects of manipulation.

None of the arguments developed thus far go any distance toward showing that it is logically necessary that only agents are capable of perception. However, there is a feature of perception which is implied by the account of perception offered above which itself suggests that only agents are capable of perception. The feature to which I refer is that of learning; perceptual skills, I have argued, must be learned. This in turn suggests that a perceiver as he goes about identifying things in his environment is always subject to error. Further, even though a person has acquired a particular set of skills he is still subject to error in using those skills in identifying things in his environment. That being the case,
1. It is clear from the context that Young intends the word 'vision' to be taken literally and not metaphorically.

it might be argued that only agents are capable of detecting perceptual error.

But why should the suggestion that perceptual skills are learned carry with it the suggestion that for any act of perceptual identification the person engaging in that act is subject to error? Learning how to identify things correctly could be described as the process of learning how to differentiate between e.g. an X which is ϕ and an X which is ψ . That being the case, it is always logically possible that what seems to be a ϕ object is in fact a ψ object. And since this is true of any perceptual identification whatever, it follows that in identifying something as something it is logically possible that one is mistaken.

If the logical possibility of error attends all acts of recognition then it is always in order to ask how one would go about determining for any given act of recognition that it is not in error. And if in any given case the answer comes back that if for that type of perception it is not logically possible to detect perceptual error then for that type of perception it is not possible to differentiate between what seems to the perceiver to be the case and what is the case. That in turn implies that nothing has occurred which is correctly or coherently described as an act of recognition.

I take it that it is an argument of the above sort which Malcolm is relying on when he says:

The philosophical use of 'identify' seems
to make possible the committing of errors

of identification of sensations and inner experiences. The idea is that my sensation or my image is an object that I cannot show to anyone and that I identify it, and from it derive its description (374).¹ But if this is so, why cannot my identification and description go wrong, and not just sometimes but always? Here we are in a position to grasp the significance of Wittgenstein's manoeuvre: 'Always get rid of the idea of the private object in this way: assume that it constantly changes, but that you do not notice the change because your memory constantly deceives you' (p. 207)¹ We are meant to see the senselessness of this supposition: for what in the world would show that I was deceived constantly or even once? Do I look again -- and why can't I be deceived that time, too? The supposition is the knob that doesn't turn anything (cf. 270).
 ('Wittgenstein's Philosophical Investigations', Wittgenstein, The Philosophical Investigations, Ed. George Pitcher, Doubleday Anchor, 1966)

This passage is of interest for two reasons. First, it suggests that the perceptual identification of sensations is not a logical possibility because it is not logically possible to determine that one has misidentified a sensation if indeed one has. Second, the perceptual identification of e.g. material objects is radically different from the supposed perceptual identification of sensations in that the detection of error is logically possible where the identification of e.g. material objects is concerned.

But what is it about e.g. material objects which is such that misidentification of them is in principle detectable? It seems that this question can be answered only if we are able to determine what kind of check would in principle satisfy the requirement that for perception to be possible, perceptual
 1. References are to The Philosophical Investigations.

error must be detectable. Having determined this, it should then be possible to discover why the check works for e.g. material object identification but not for the identification of sensations -- assuming of course that our putative check does work only for public (e.g. material) objects.

There would appear to be three condidates for the job, first memory, second corroboration by other perceivers, third the actions of the perceiver himself. Memory is of course rejected by Malcolm in the passage quoted. Apparently memory fails because it, like perception, is subject to error; hence it, too, must be open to a check which is capable of establishing that error either has or has not occurred. Further, to appeal to another memory would be circular just as in the case of perception to appeal to a second perception as a check for a first perception would be circular.

We are left then with two condidates. The second candidate is corroboration by others. This kind of check would appear to work as follows. Imagine I have identified something as a table; yet I have a suspicion that I have made a mistake. If I was concerned to discover whether or not I was correct I could turn to someone else and ask him whether I am in fact correct in thinking a particular object a table. If the answer comes back 'Yes' then I am probably right; and as a check on my own identification of the object in question it is independent. On the other hand, if the answer comes back 'No' I can then proceed to discover why I was mistaken. Was

it just because the light was bad? Or is it the case that I have not learned to distinguish tables from another kind of object e.g. benches. Of course the answer I get back may be wrong; but this can be checked by asking yet another person. And if everyone either agrees or can be brought around to agreeing that the thing in question is a table, what point could there be in saying that it is not?

There is a crucial difficulty with this argument. First, the type of check which it offers appears to be available only to language users; and perception does not seem to be restricted to this group. But second, the kind of check offered by others presupposes the ability to differentiate things in one's environment in such a way that other person corroboration cannot on logical grounds ever offer a check on all acts of recognition which must be available to someone for this kind of perceptual check to work. This, I take it, is the force of Ayer's argument that other person corroboration rests on the possibility of acts of recognition occurring which are not themselves subject to this check. Ayer's argument is as follows:

Let the object to which I am attempting to refer be as public as you please, let the word which I use for this purpose belong to some common language, my assurance that I am using the word correctly, that I am using it to refer to the 'right' object must in the end rest on the testimony of my senses. It is through hearing what other people say, or through seeing what they write, or observing their movements that I am enabled to conclude that their use of the word agrees with mine. But

if without further ado I can recognize such noises or shapes or movements, why can I not also recognize a private sensation? ('Can There Be a Private Language?', Op. cit. p. 257)

And again:

My argument is that since every process of checking must terminate in some act of recognition, no process of checking can establish anything unless some acts of recognition are taken as valid in themselves. (Op. cit. p. 257, cf. the footnote)

If Ayer's argument is valid, and I think that it is, then our second candidate cannot do the job which is required of it. We are left with the third candidate. Is it possible that a perceiver's own actions provide a check which does not itself rest on another act of recognition?

It might be thought (indeed I did so think for a time) that a perceiver's own actions do provide a check on perception which does itself not rest on another act of recognition. The reason for thinking that this might be the case is simply that one's own actions do seem often to provide a way of determining whether what seemed to one to be the case was in fact the case. It seems to be this kind of check which Malcolm is relying on when he suggests that perceptual error is detectable where the perceptual identification of e.g. material objects is concerned because material objects can play a part in the activities of an observer who is said to have perceived them. Malcolm seems to suggest further that it is this which sets sensations apart from e.g. material objects.

This suggestion¹, while an interesting one, is not decisive
Footnote on following page.

simply because Malcolm fails to demonstrate how actions can provide a check which is adequate, i.e. avoids Ayer's criticism referred to above. Nevertheless, I think it is possible to work out why actions might be thought (wrongly as it turns out) to provide the required check on perception. And it is worth doing so if only to discover why in fact they cannot do the job which they might have been thought to do.

1. I have extracted this suggestion from the following passage of the Malcolm article referred to earlier. However, I do not attribute it to Malcolm with any great confidence simply because in the passage in question Malcolm slips back and forth between the formal and material mode. It is therefore difficult to determine whether Malcolm thinks that it is the cow which must play a part in our activities or 'cow' which must do so or both.

The quotation is as follows:

"For Strawson the conception of a private language possesses no difficulty. A man 'might simply be struck by the recurrence of a certain sensation and get into the habit of making a certain mark in a different place every time it occurred. The making of marks would help to impress the occurrence on him memory.' Just as, I suppose, he might utter a certain sound each time a cow appeared. But we need to ask, what makes the latter sound a word, and what makes it the word for cow? Is there no difficulty here? Is it sufficient that the sound is uttered when and only when a cow is present? Of course not. The sound might refer to anything or nothing. What is necessary is that it should play a part in various activities in calling, fetching, counting cows, distinguishing cows from other things and pictures of cows from pictures of other things. If the sound has no fixed place in activities ('Language games') of this sort, then it isn't a word for cow. To be sure, I can sit in my chair and talk about cows and not be engaged in any of those activities -- but what makes my words refer to cows is the fact that I have already mastered those activities; they lie in the background. The kind of way that 'cow' refers is the kind of language-game to which it belongs." (Op. cit. p. 96)

A person's actions do in the normal course of events provide a check on his perceptions. If I mistake salt for sugar and proceed to sugar my coffee with what I mistakenly think to be sugar, the subsequent action of drinking the coffee will quickly reveal my error. Similarly, if I misidentify what is in fact a coffee table as a bench and then proceed to sit on what I take to be a bench, my action of sitting on the thing which I have in fact misidentified will in all probability (to my subsequent embarrassment) uncover my error in as much as what I thought to be a bench will no doubt collapse under my weight. In these and similar ways, actions can and often do act as a check on my perceptions. Unfortunately, this kind of action cannot provide the kind of check which we are looking for. The reason is that each of these actions provides a check on a particular act of recognition by an action the outcome of which can be established only by another act of recognition.

My point is this. If I put what I take to be sugar into my coffee and then take a drink, my drinking provides a check on my identification of the substance in the bowl as sugar only if I am able to identify the taste which results from my taking a drink of the coffee. If I am incapable of differentiating the taste of coffee sugared with salt and the taste of coffee sugared with sugar then my action will not provide a check on my identification of the substance in the bowl as sugar. Thus my action provides a check only if I am able to perceive

what it is that my action has brought about. The original act of recognition which might itself be checked presumably by an action followed by an act of recognition the purpose of which is to discover what the action has brought about. But this act of recognition is itself in need of a check which requires an action which requires an additional act of recognition, and so on. It seems that the type of argument used by Ayer to demonstrate that an other-person check always in the end relies on acts of recognition which are valid in themselves applies also to actions when they are called upon to corroborate perception.

Is there any type of action for which this is not true? The only candidate I can think of is the kind of action where one sees or perceives something for the first time as a result of an action on one's own part which was not intended and which brought about a state of affairs which was not anticipated. In such a situation, the thing in question would be perceptually identified as a result of an action. Therefore the identification of the state of affairs brought about by the action and the identification of the thing whose manipulation resulted in that state of affairs being brought about would not be temporally distinct. An example of this sort of action would be the baby learning to differentiate its mother's nipple from the surrounding turgments as a result of random behavior which accidentally brings about a result which the baby perceives as desirable. An alternate example would be the discovery

that what was previously seen merely as part of the wall decoration was in fact a light switch which was perceptually distinct from the wall decoration of which it was a part. Learning to differentiate the light switch from its surroundings might very well result from an unintended action such as accidentally brushing against the wall where the action turns on the light. Here my identification of the thing in question follows from my identification of the state of affairs which can be brought about by the manipulation of the thing in question.

However, even this kind of action does not escape the criticism voiced above. For it remains the case, that the action constitutes a confirmation that I have correctly perceived something as e.g. a $\emptyset$ only if the action is accompanied by an act of recognition which identifies what it is that the action has brought about. And without this perceptual information the action cannot serve to corroborate the perception in question.

If my argument is correct, it follows that goal directed behavior cannot provide the check which perception appears to require if it is to be possible to differentiate between what seems to be the case and what is the case. It follows that what might be described as the argument from perceptual error does not provide valid grounds for concluding that to be percipient one must be an agent. Since goal directed behavior cannot provide a logically adequate check for perceptual error it follows that an agent is from a logical point of view no

better able to detect perceptual error than a non-agent. For the agent as for the non-agent there must exist, as Ayer has argued, acts of recognition which are valid in themselves.

Where does this leave us with regard to our account of perception? I argued earlier that there were three possible candidates for the role of providing a check for perceptual error. The first was memory, the second other-person corroboration, and the third goal directed behavior. The second and third have now been eliminated. This leaves memory which we set aside in the first instance because of Malcolm's comments (quoted above). The difficulty with memory, as Malcolm points out, is that memory is subject to error much as perception is. Therefore to have memory checking perception is like having the blind lead the blind. We are left then with two possibilities. Either we regard perception simply as something which percipient beings are able to engage in irregardless of other capacities which they may have such as the capacity to engage in communication or goal directed behavior, or we adopt the view that it is in fact not logically possible to differentiate between what seems to be the case and what is the case in any given perceptual situation. The latter view amounts to a denial of the possibility of perception, since, as has been argued above, a logical condition of perception is that one be able to differentiate between what seems to be the case and what is the case. The fact that perception does occur is evidence that this latter position is mistaken¹.

¹. Footnote on following page.

We are left with the former view which I gather is the view which Strawson is opting for when he argues:

Do we ever in fact find ourselves misremembering the use of very simple words of our common language, and having to correct ourselves by attention to others' use? -- Wittgenstein gives himself considerable trouble over the question of how a man would introduce a name for a sensation into this private language. But we need imagine no special ceremony. He might simply be struck by the recurrence of a certain sensation and get into the habit of making a certain mark in a different place every time it occurred. The making of marks would help to impress the occurrence on his memory. (Op.cit. p.44)

For the person who is potentially capable of perception, all that is required is that certain patterns recur. And that, it seems, is the only logical condition which must be fulfilled for perception to occur.

I can only conclude that Strawson and Ayer are correct on this point. It seems that it is logically necessary that there are acts of recognition which are valid in themselves. And if that is true it seems that the recurrence of patterns of some sort is the only condition which must (logically) be satisfied for the occurrence of perception. And from this it follows that it is not a condition of perception that to perceive one must be an agent.

1. I am not sure that a thorough-going sceptic would accept this as evidence or at best as totally convincing evidence.

CHAPTER VIII

I have argued in the previous two chapters that while there are a number of interesting connections between perception and goal directed behavior it is nevertheless not the case that to be percipient one must be an agent. That is to say it is logically possible for non-agents to acquire perceptual skills. In what follows I wish to determine whether as is the case with perception it is logically possible for non-agents to acquire a language. It is perhaps worth pointing out, however, that my concern is not with language in general but specifically with fact-stating or descriptive language.

VIII.1 Perception and description: some dissimilarities

Perception, as we have seen, is a necessary element in goal directed behavior. In the absence of perception, it is logically impossible for goal directed behavior to occur simply because in the absence of perception it is not possible for a putative agent to determine that he has succeeded in bringing about what he set out to bring about. It is equally impossible for a non-percipient thing to determine how to set about doing something in as much as perception is essential for the determination of what in one's environment constitutes an instrument relative to any particular objective.

The descriptive use of language is related to perception much as goal directed behavior is related to perception. In

the absence of perception, description is not logically possible. This is not to say, of course, that the absence of a particular perceptual faculty such as vision renders description impossible. People who are blind are able to use words for tastes. But then it is equally true that the inability to see does not render goal directed behavior impossible. In this respect as well perception appears to be related to goal directed behavior and description in much the same way.

It is interesting as well that while perception is necessary for both goal directed behavior and description, neither is necessary for perception. This point has already been argued in the case of goal directed behavior. That it is true of description as well is evident from the fact that non-language users are capable of perception. However, the basis of the claim that description is not logically necessary for perception is not simply the fact that non-language users are capable of perception. Rather, the basis of the claim resides in the argument developed above that the ability to use language presupposes the ability to make perceptual distinctions. Someone who is incapable of discerning recurring shapes or sounds cannot acquire language skills.

A final dissimilarity between perception and description derives from the fact that the ability to use language to describe things in one's environment is not a logically necessary feature of goal directed behavior.

VIII.2 Perception and description: some similarities

While description and perception are different in important ways, they share some striking similarities. To begin with, both the skills associated with perception and the skills associated with the use of language are learned. It is also the case that the skills learned vary from individual to individual, though the impact of culture on language-use is perhaps more obvious than its impact on perception. But in the case of perception as well as language, the goals, needs and purposes of individuals do influence what skills are actually acquired.¹

There are two similarities between perception and description which are not immediately obvious but on which the argument of this chapter turns. The first similarity is the fact (as yet to be established in the case of the acquisition of descriptive language skills) that it is logically possible for non-agents to learn to perceive and to learn to use a language. Second, and more important for the purposes of the argument, goal directed behavior is something that one must be capable of if others are to come to know what one is perceiving and what language skills one has acquired.

VIII.3 Description and goal directed behavior

Is it logically possible for a non-agent to learn or acquire descriptive uses of language? The considerations which appear to suggest that they cannot are similar to the considerations

1. This seems obvious in the case of language. That it is true also of perception is argued in Chapter VII above.

ations which earlier appeared to suggest perceptual skills could not be acquired by non-agents. It is obvious that ability to use language for the purpose of description is acquired or learned. It is equally obvious that in using acquired language skills in describing things in one's environment, one is subject to error. To describe an object is to classify it in some way. And since it is always logically possible that something which has been described as e.g. ϕ is in fact a ψ , it follows that it is always logically possible that in describing something as e.g. ϕ one is in error. If this is the case, it is a requirement that one be able to detect error when it has occurred; where this requirement cannot in principle be satisfied, the use of language is not a logical possibility. For in such a situation, it would be impossible to determine whether a particular description was correct and the point of using language for descriptive purposes would cease to exist. In this respect perception and description are alike.

It is the requirement that error be in principle detectable that lies behind the argument advanced by Malcolm in the passages quoted above¹. I have already argued that logically speaking agents are no better placed in this regard than non-agents. But might it not be the case that where descriptive uses of language are concerned agents are able to detect error in a way not available to non-agents? This suggestion seems to me to lie behind a good part of the private language argu-

1. See Chapter VII

ment. However, in my view it is mistaken. Earlier I argued that the only condition which must be satisfied for perception to be possible is the recurrence of patterns. And if that is all that is logically required for perception, why should anything more be required for description? If a percipient being is logically capable of identifying patterns why should such a being not be equally capable of giving names to those patterns identified perceptually.

A close examination of Malcolm's argument reveals, I think, that the supposed inability of someone to check what a particular word stands for is based on the supposed inability of someone to determine that a given pattern is the same as one perceived earlier. But if, as I have already argued, it is logically possible for patterns to be reidentified simply on the basis of perception and memory, then the central assumption of Malcolm's argument is invalid. If memory is logically adequate for the perceptual reidentification of patterns why should it not be logically adequate for the consistent use of words to describe things which have been perceived? As Strawson points out (in a passage quoted above) there seems to be no reason for thinking that what is logically possible for perception is not logically possible for description.

The importance of this argument from the point of view of my thesis is simply that, if valid, it indicates that there is no logical barrier to non-agents acquiring a language whose purpose is description. If it is objected to this that language use is itself a form of goal directed behavior then

the appropriate response is simply that there seems to me to be no reason to suppose that the use of language might not be a purely mental activity. If such were the case, the language user in question would not need to resort to overt behavior in his use of his language in which case he would not need to be an agent in my sense of that term.¹

VIII.4 Language and communication

I take it then as established that non-agents² are capable of acquiring a language and using that language for describing things which they perceive. We are left, then, with the second important similarity between perception and description mentioned above, namely, that an individual must be capable of goal directed behavior if others are to be able to discover what perceptual or descriptive language skills one has acquired. The interesting thing about this requirement is that it reflects not on the use of language per se but on the use of language for communication. Unless it is possible to discover what the descriptive words someone is using are intended to pick out and describe, it is impossible to understand what is being said by that person. What I am suggesting is that it is this ability to determine the descriptive content of someone's descriptive assertions which cannot be acquired if both the speaker and the hearer are not agents. If this is true, the

1. However see conclusion to this chapter particularly p.170

2. By 'non-agent' I mean something which is not able to engage in physical activity of a goal directed variety.

only kind of language which a non-agent can acquire is a private language. And this, I shall argue is not simply due to the fact that in order to use language to communicate a person must do something. For even if we assume some non-overt i.e. non-physical form of communication, the comprehension of the language of someone other than oneself requires that those involved be agents.

The feature of communication which can be satisfied only by agents is what I shall refer to as the communication corroboration requirement. It arises from the fact that if one is to use language for communication purposes, one must be able to determine that one is using language as others use it. And if it is in principle impossible to determine that one is using language as others use it, then it is in principle impossible for one to use language for communication since it is in principle impossible to determine how what one is saying is being understood.

The feature of description which gives rise to a corroboration requirement is two dimensional. First, descriptive uses of language imply a connection between physical objects and the words used to describe those objects. In the absence of this connection there can be no description. It would seem to be this which Wittgenstein is referring to when he says 'But how is the connection between the name and the thing named set up?' (Philosophical Investigations, #244). It would also seem to be this connection which Quine is concerned to inves-

tigate in Word and Object which he describes as 'an inquiry into the linguistic mechanisms of linguistic reference'.

It is often in the context of a discussion of the connection between words and objects that the notion of a corroboration requirement is raised. Indeed, the quotation from Wittgenstein is taken from a remark which serves in some respects to preface Wittgenstein's private language argument. However, if previous argument is correct, this characteristic of descriptive uses of language does not in itself give rise to the requirement that those using language for the purpose of communicating descriptions must themselves be agents.

However, it is not enough that a connection exist between a word and the object which it serves to identify. It is also necessary, if communication is to occur, that the connection be relatively similar for all those persons who have that word in their vocabulary. This is the second dimension to description mentioned above. And it is this requirement which leads Strawson to argue:

A set of people together in certain surroundings will be in general agreement on 'what it looks like here', 'what it feels like (to the touch) here', 'what it sounds like here'. In this possibility of a general agreement in judgements lies the possibility of a common impersonal language for describing what we see and hear and touch. (Op. cit. p. 48)

In making this comment, Strawson refers to Wittgenstein's remark that:

If language is to be a means of communication there must be agreement not only in definitions but also (queer as this may

sound) in judgements. (Ibid, p. 88)

Whether Wittgenstein and Strawson are saying the same thing here is a question that need not be answered for my purposes. What does appear indisputable is that both agree that unless a given word is connected to an object in the same (or in a similar) way for both speaker and hearer, it is hard to imagine communication taking place. But is it enough that the connection between a word and the object which it serves to identify or pick out be similar for those using the word for descriptive purposes? I think it is not. As Roger Doorbar points out ('Meaning, Rules and Behavior', Mind, Jan. 1971) while it is a necessary condition of communication that a person know what a given word identifies, this is not enough. He must also know that what he intends a word to identify is what other persons (with whom he wishes to communicate) use that word to identify. That is to say, for a (descriptive) word to be used for communication, it is necessary that 'the relation between a particular sign (i.e. word) and a particular item or class of items must be (publicly) established' (cf. Op. cit. p. 32). This seems to me to be quite clearly the case.

If what I have just suggested is correct, it follows that if a language is to be used for communication, it must be possible for the various connections between the descriptive words in that language and the things they are used to describe to be taught and learned. It is this feature of language which necessitates the introduction of a corroboration require-

ment. Unless a person can determine that his use of language parallels the use made of language by those with whom he wishes to communicate, he cannot know that he is using language correctly. And if a person cannot determine whether he is using descriptive language correctly, then for him there can be no distinction between correct and incorrect usage. On the other hand, if a person is able to discover that he is using language to describe things in his environment as others use that same language, then his language can be taught and learned. If a language can be taught and learned, a necessary condition for communication is satisfied.

These considerations lead to an important question. Is it the case that the connection between a (descriptive) word and what that word identifies can be publicly established assuming only that 'a set of people together in certain surroundings will be in agreement on "what it looks like here"....' If previous argument is correct, it will not be sufficient that there be general agreement of the sort suggested by Strawson in the quoted passage. For, not only must there be agreement, it must be known that there is agreement. It is the argument of this part of the chapter that the existence of this agreement cannot become known except through goal directed behavior.

VIII.5 An illustration

Imagine a situation involving two persons, a teacher, A,

and a pupil, B. Imagine further that A is attempting to teach B the meaning of the word 'chair'. How is A to go about this task assuming that he has no recourse to goal directed behavior. (To get this illustration off the ground it will be necessary to assume that 'no goal directed behavior' means no goal directed behavior with the exception of talking behavior and pointing behavior. The possibility that a person might learn to communicate though he had access only to talking behavior is discussed also in the next chapter).

Let us assume that there is a chair in the vicinity of both A and B. A points to the chair and says 'chair'. But how is B to know what A is pointing at? And assuming that B does associate the word 'chair' with something in the vicinity, how is B to know that he has associated the word 'chair' with what A associates 'chair' with. Finally, how is A to know first that B has associated the word 'chair' with something and second what B has associated it with? Decreasing the number of objects in the vicinity will not help. For even if there is only the chair present with A and B in an otherwise empty room, there is no guarantee of success. B still has a number of possible associations available. He could associate the word 'chair' with the chair itself, or with the substance the chair is made of, or with the shape of the chair, or with its colour, or back, or legs, or rungs and so on.

I take it that it is this latter point which Doorbar is making in the following passage. Using the Crusoe situation

he argues:

Let us imagine that Crusoe makes an utterance in the presence of Friday (perhaps accompanying it by pointing, etc.). 'Referentialist' philosophers have assumed that someone in Crusoe's position needs only to utter and to gesture enough times for someone in Friday's position to get the idea, to link a sign uttered with an item indicated. But for several reasons this giving of public ostensive definitions cannot by itself establish a relation between a sign and an item. Friday may associate the sign with the wrong item. Crusoe, for instance, might have meant 'tree', while Friday had in mind 'wood', 'brown', 'edible', etc. etc. Crusoe himself may not have referred to the same item on the previous occasion on which he uttered 'tree'. Moreover, experts in communication theory would wonder how sensitive Friday's ears would have to be to enable him to detect the difference between 'tree' and 'three' from the outset. (Op. cit., p. 31)

It would seem that Quine is pointing to a similar difficulty (Word and Object, the Massachusetts Institute of Technology, 1960) in discussing the difficulties which a translator would have in a situation requiring what Quine refers to as radical translation. He argues there,

For consider 'gavagai'. Who knows but what the objects to which this term applies are not rabbits after all, but mere states, or brief temporal segments, of rabbits? In either event, the stimulus situations that prompt assent to 'Gavagai' would be the same as for 'Rabbit'. Or perhaps the object to which 'gavagai' applies are all and sundry undetached parts of rabbits; again the stimulus meaning would register no difference. (Op. cit., p. 51)

Again:

Does it seem that the imagined indecision between rabbits, stages of rabbits, integral parts of rabbits, the rabbit fusion and rabbithood must be due merely to some special fault in our formulation of stimulus

meaning, and that it should be resolvable by a little supplementary pointing and questioning? Consider, then, how. Point to a rabbit and you have pointed to a rabbit stage, to an integral part of a rabbit and you have pointed again to the remaining four sorts of things; and so on around. Nothing not distinguished in stimulus meaning itself is to be distinguished by pointing, unless the pointing is accompanied by questions of identity and diversity: 'is this the same gavagai as that?', 'Do we have here one gavagai or two?'. Such questioning requires of the linguist a command of the native language far beyond anything that we have as yet seen how to account for. (op. cit., p. 52)

The three accounts given above, point to what is in many respects the same problem. But how difficult a problem is it? The answer lies in looking at the requirements for communication in conjunction with our previous discussion of perception.

VIII.6 Communication: two necessary conditions

For communication to occur two conditions must be satisfied. The first condition is that for communication to occur there must be, as Strawson puts it, a 'general agreement on "What it looks like here", "what it sounds like here", "what it feels like (to the touch) here", and so on. If this condition is not satisfied, and it is possible that it might not be, then there is no basis for communication, nothing shared to talk about. But there is a second condition which must also be satisfied for communication to occur, It is not enough that there be general agreement of the sort described; it is also necessary that potential communicators know that there is

general agreement. If someone uses language to describe something but in so doing does not know whether the person with whom he is communicating is aware (capable of perceiving) of the things he is describing then the person initiating communication can not and further does not know how to go about discovering whether the person with whom he wishes to communicate is aware of or capable of learning to perceive the sorts of things he is describing, then the person who is attempting to communicate can never know whether he has succeeded in his attempt to communicate. If such a state of affairs attended all attempts at communication, communication itself would not be possible. The concept of communication (i.e. the concept of what actually constituted having communicated something) would not exist.

We are now in a position to see that the difficulty faced by the non-agent with regard to communication is not simply severe; it is insuperable. To begin with a non-agent is not justified in assuming that two persons having normal perceptual equipment will simply and as a matter of course, in general pick out the same recurring patterns in their environment. This is not to deny, of course, that people do in general agree on what it looks like here etc. What is being denied is that this agreement is something which is automatically achieved or results as a matter of course for those capable of perception. Indeed quite to the contrary there is no a priori reason for thinking that agreement will occur. Indeed, as earlier discus-

sion of perception has shown, it is logically possible for those having normal perceptual equipment to perceive quite different things though they are being impinged upon by the same stimuli, or even to perceive nothing or very little. Young's example quoted earlier of the blind man who is given his sight shows that learning to see what others see requires a good deal of effort and motivation, takes place over an extended period of time and certainly does not occur just as a matter of course. The ability to differentiate a variety of shapes for example is one which most people possess. But there are reasons for this, reasons having to do with the fulfilment of needs and the requirements of living in certain sorts of communities. This latter point is also illustrated by the different perceptual skills acquired by those living in an Eskimo culture for example as compared with the perceptual skills acquired by persons living under similar climatic conditions but in a non-Eskimo Canadian cultural community.

It follows from this sort of evidence that one person attempting to communicate with another does not have a priori justification for believing that he is in agreement with the person with whom he wishes to communicate on how it looks here etc. Thus it is incorrect to assume that for persons wishing to communicate condition one can simply be assumed to be satisfied. And because it cannot simply be assumed that condition one is satisfied, satisfaction of condition two is essential. That is, for communication to occur it must be

possible for those participating to discover that there is amongst themselves general agreement on what it looks like here etc. It is exactly this which non-agents cannot do. This point has already been established in previous discussion of perception where it was argued that (a) unless a supposed percipient thing did actually engage in goal directed behavior it was not possible to determine that it was capable of perception and (b) unless a supposed percipient thing actually engaged in goal directed behavior it was impossible to determine what it was capable of perceiving, or actually perceiving at any given moment. This latter point is important on the grounds that even if it was possible to determine that a non-agent was capable of perception it would not be possible to determine what it was he had in mind when he e.g. uttered a particular word. That is to say, it would not be possible to determine which of the patterns recurring at a given moment a particular word was intended to pick out assuming of course that it could even be determined that the word was intended to pick out one of the patterns recurring at the time of its utterance.

If what I have just argued is correct it follows that a non-agent cannot satisfy condition two, namely that for communication of information to be possible it must be possible for potential communicators to discover that they are in agreement on how it looks here etc. And since there are no a priori reasons for assuming that there is general agreement as

I have argued above, it follows that the two conditions which must be satisfied for the communication of information to occur cannot be satisfied where non-agents are concerned. Therefore, non-agents are not in principle capable of communicating information.

VIII.7 Communication and agency

What advantages do agents have over non-agents? First, an agent is able to determine that he is in general agreement with those with whom he wishes to communicate about what it looks like here etc. Second, agents are able to determine which of the various patterns in a given perceptual field are being focused on by another agent. And third, agents are able to indicate through their own behavior that they know that there exists a general agreement on how it looks here etc. and further that they know that what someone else is focusing on at a given moment is what they are focusing on also. Because agents are able to do each of these three things it is logically possible for agents to teach others what the descriptive words they are using are intended to pick out. That is to say, it is logically possible for agents, in contrast to non-agents to learn how to use descriptive language to communicate.

VIII.8 Learning to communicate

Let us return to the teaching situation described earlier. There we had a situation in which A, was attempting to teach B

the meaning of the word 'chair'. If B is to learn his lesson, he must learn to associate the word 'chair' with the sort of thing with which A associates the word, namely with chairs. B must also be able to discover that he has made the correct association, i.e. the same association which A makes. Further, A must be able to discover that B has learned to associate the word 'chair' with chairs and also that B knows that he, B, has learned the correct association for the word 'chair' .

As I have suggested above, the kind of evidence which both A and B require can only be supplied by goal directed behavior¹.

1. Doorbar, whose account in "Meaning Rules and Behavior" parallels closely my own on this topic nevertheless diverges on this point. He argues that "... while behavior is necessary in practice, it is not logically necessary. One could imagine a complex electronic device which could be plugged into Friday in order to record his private understanding of Crusoe; it might represent on a screen the item Friday had in mind when Crusoe said 'stone'". (Op. cit. p. 33). I take issue with Doorbar on this point. For there is no difference between looking at a representation (electronic or otherwise) of what a person is looking at and simply looking at what someone is looking at. The same difficulties emerge in both situations. The problem for Doorbar's Friday is to see what Doorbar's Crusoe (who is the teacher in Doorbar's example) is seeing the way in which Crusoe sees it. And no amount of gadgetry is going to help Friday find his way to a solution of this problem. This becomes more clear if we follow Doorbar's reference to an electronic representation a little further than Doorbar himself does. Assume that Crusoe is presented with or plugs into an electronic representation of what Friday understands by the word 'stone'. If Friday has got it right what the device will represent one would suppose is a stone. But how would the electronic device differentiate between the representation of a stone and the representation of e.g. the stone's shape, or texture, or size etc. And how would Crusoe know that it is the object with which Friday associating the word 'stone' rather than the object's shape etc. It would seem in fact that Doorbar has fallen prey to the illusion to which he appears sensitive elsewhere that, to use Young's description, the eye is simply a camera. As I have argued above, this view is mistaken.

For example, A will know that B has learned what the word 'chair' means if B uses the thing that A has picked out through the use of the word 'chair' in manner appropriate to chairs. B will know that A knows that he has learned his lesson if A responds to B's action in an appropriate way, by giving B a reward. Doorbar makes this point in the following way.

That a particular sign refers to a particular item is not determined alone by the associations that speakers make in their own minds but also by their knowledge of what associations other speakers are making. Crusoe says 'stone' and Friday responds appropriately; Crusoe gives some indication that Friday has responded correctly, and Friday then knows that he has associated 'stone' with the right item. They are in effect agreeing what 'stone' shall stand for, establishing a convention which will be a fact about their language. And since they cannot know what each other is thinking except on the evidence of behavior, agreement can be secured only if they adopt a procedure which involves the giving of responses. (Op. cit., p. 32)

But what constitutes an appropriate response? The non-verbal behavior which B engages in to demonstrate that he has associated the word in question with something must be recognized by A as appropriate to the thing which he intends the word to be associated with. That is to say, if A can know that B has made the connection A intends only if B responds with an appropriate action, then A must know the range of actions from which B must choose his action if B is to demonstrate that he has learned his lesson. Thus A in designating an object using a given description is designating an object to which, by virtue of the description used, a certain range of actions are

appropriate. Unless B is able to act on the object in at least one out of the range of ways appropriate to the object, he cannot demonstrate that he has learned his lesson. And unless B knows that what is being designated is an object to which a certain range of actions is appropriate, he does not know what the word in question is picking out since what the word is picking out is an object to which a certain range of actions is appropriate.

VIII.9 The example revisited

How this process works can be illustrated by the example used above. The word 'chair' designates a type of object to which a certain range of actions is appropriate qua chair. Chairs are not under normal conditions used for fire wood even if they are constructed of wood. Neither are they used as foot stools or as ornaments as a rule. Rather, they are used for sitting. Thus when A uses the word 'chair' to pick out a particular object, he is using it to pick out an object to which a certain range of actions are appropriate. Let us imagine that A is teaching B what the word 'chair' means. First, A will be able to determine that B knows what chairs are by looking to see whether B treats chairs as he A treats them. Having discovered that B does know what a chair is, he can then proceed to teach B what the word 'chair' means by perhaps using the word 'chair' in the context of an instruction like, 'Bring me a chair', or

'Sit on a chair' or perhaps by simply saying 'Chair' and then sitting on the thing he has used the word to pick out. If on issuing the instructions he discovers that B responds in an appropriate way, he can then reward B thus indicating that B has done what the instruction called for.

VIII.10 An objection considered

Why, it might be asked, is it not enough that someone be able to engage in talking behavior for communication of information via the use of language to be possible? There are two reasons for concluding that the ability to engage in talking behavior alone is not logically sufficient for the communication of information via the use of language. First, as argued above, there are no a priori grounds for assuming that two persons will perceive the same patterns even though they encounter identical stimuli. Yet, as Strawson points out general agreement about what is being perceived is a prerequisite of communication using descriptive language. There is the further difficulty that even if it is assumed that e.g. two persons do perceive the same patterns when presented with identical or very similar stimuli, how are they to know that this is the case; and without this knowledge, they cannot know that they are communicating anything at all. Finally, even if it is assumed that they do know that they are perceiving the same patterns in any particular situation, how is each to discover which of the multitude of patterns

being perceived any particular word is intended to pick out? None of these three obstacles can be overcome by an agent who is able to engage only in talking behavior.

All of this is not to deny, of course, that once language skills have been acquired, the ability to talk is itself a powerful tool in acquiring perceptual skills which, it might be added, could in all probability not be acquired in the absence of the ability to talk. For example, it is possible for someone to discover through communication that certain things exist which he has not encountered or perhaps has encountered but not noticed. Having learned that this is the case a person might attempt to verify by his own observations that what he has been told is indeed the case. In doing so, he might well acquire perceptual skills which he might not otherwise have acquired. Theoretical advances in the sciences provide additional illustrations of the same phenomenon. Yet none of these facts undermine the essential point that for communication to be possible there must be a degree of general agreement on what is being perceived in a given situation if communication using descriptive language is to be possible; and this general agreement is presupposed by a public language whose very existence depends on the existence of a general agreement of the sort being discussed.

The second reason for thinking that talking behavior is not itself sufficient for linguistic communication of information is simply that if it were enough then it too would be

unnecessary. Let us assume that two persons, A and B are non-agents except that both can talk. That is, both can engage in talking behavior. If this was in itself sufficient for A and B to communicate using language then logically it would be possible for A and B to communicate using language though they were in addition incapable of engaging in talking behavior. We need only imagine that there existed a kind of electronic device that both were plugged into which allowed each to know what was going on in the other's head. The ability to engage in extrasensory perception would do just as well. There are no doubt many arguments whose purpose it is to demonstrate that such a situation is not feasible. Yet from within the context of my argument there is no reason to reject this supposition. And indeed it is exactly this supposition on which Doorbar relies in arguing (incorrectly as I have suggested -- see footnote above) that access to goal directed behavior is only a practical and not a theoretical or logical requirement of the use of descriptive language for the purpose of communication. It follows from this that if it is possible for A and B to use descriptive language for communication then it is possible, assuming the possibility of extrasensory perception, for A and B to use descriptive language for communication even though neither is an agent. But it is exactly this possibility which previous argument has been designed to demonstrate to be logically impossible. It follows that it is not sufficient for communication that those engaging in the

use of descriptive language for the purpose of communication be agents only in the sense of being able to engage in talking behavior. An additional conclusion to be drawn from this argument, but one I do not intend to follow up, is that talking behavior cannot itself be a fundamental sort of goal directed behavior, assuming of course that it is a kind of goal directed behavior in the first place. For as the above argument shows, for talking behavior to result in communication (and if it did not what grounds would we have for calling it talking behavior) those engaging in talking behavior must, on logical grounds, be agents capable of engaging in non-talking goal directed behavior.

CHAPTER IX

I have argued in the previous chapter that it is logically necessary that the members of a descriptive language using community be agents. I have argued also that the members of such a community must share the ability to perceive things in their environment as objects of manipulation. I have argued finally that for communication to occur in such a community, the members of that community must be capable of identifying at least some of the same objects of manipulation which are present in their environment.

There are at least two questions which arise from this conclusion which are of particular interest. First, given that communication requires a shared ability to identify at least some of the same objects of manipulation, how might this requirement be reflected in the development of an actual or natural language? That is to say, what are the implications of the view presented above for the descriptive vocabulary of a natural language? Second, does it follow from what I have argued that it is logically necessary that all description centre on the description of objects of manipulation?

The second question is of particular interest. To answer it would be to show how it is possible to describe things in one's environment in ways which make no reference to the manipulative characteristics of those things.

In what follows, I wish to approach an answer to both

questions through the use of a model or illustration. The first two parts of the illustration will be concerned with question one above. The third part of the illustration will focus on the second question posed above.

IX.1 An illustration

The situation which I intend now to describe is one which satisfies the conditions for communication set out above. However, it is an austere situation and one whose existence is in no way assumed. Having drawn from the situation those things which I wish to illustrate, I shall then develop the illustration in the direction of greater realism.

Let us imagine a situation in which all communication is related to the procurement of food; that is to say a situation in which the only need which individuals in that community have is a need for food.

The single objective of the members of our imagined community is one which in fact all men share. It is a goal best achieved through cooperative endeavour. Two or more persons can hunt over a wider area, kill larger game and transport larger quantities of food than can one person alone. In such a cooperative endeavour, communication would be essential. Communication using language, while not essential would certainly be an important aid. Of the kinds of communication required, communication of information would be paramount. Finally, if we consider the tasks to be undertaken in our

imagined community to be hunting, the transportation of food, and the preparation of food for eating, then, if these tasks are to be accomplished cooperatively, some elementary organization and coordination of activity will be required.

In a group of the sort just described, what linguistic tools would be required for the purpose of communication? There would certainly have to be agreed methods of talking about the things of importance in the procurement of food. These things would include the animals to be hunted, methods of transportation, and domestic articles used in the preparation of food for eating. The linguistic tools required would have to include linguistic structures which would enable the members of the community to convey information, ask questions and give instructions.

In our putative community, all information will be of relevance to the satisfaction of the single need. Utterances which have no bearing on the achievement of the single goal will have no meaning as the only common purpose and hence the only recognizable reason for communicating is the procurement of food. What might be described as the descriptive meaning rules of the descriptive words in the language of the community will centre on this single goal. That means that classification will have as its function the sorting of things in the environment according to the part they play in the achievement of the single objective. Thus, the point of classification will be to sort things in accordance with their function.

This description of a community of language users all of whose members share a single purpose gives rise to two questions. First, is it not the case that words for the properties of objects e.g. words like 'large' or 'fast', or 'white' might be useful in hunting? If so, how is the learning of these kinds of words to be accounted for? Second, is it not the case that what the model shows is that the members of the community described would not want to have words other than those useful in hunting? If this is so, then the model does not demonstrate that it would be impossible for the community in question to acquire a common vocabulary whose use was unrelated to the procurement of food.

The first question raises a number of related issues. It indicates for one thing that while it might be agreed that one of the functions of descriptive language is to allow those using the language to pick out objects of manipulation, this is certainly not the only function which descriptive language fulfills. How, then, it might be asked, does one's ability to identify objects of manipulation as objects of manipulation assist one in acquiring a descriptive vocabulary beyond a vocabulary devoted solely to naming objects of manipulation?

Whether words like 'large' or 'fast', or 'white' could be taught to, or learned by, the members of our community without reference to the activities of the community, can be set aside for later consideration. That such words could be taught by reference to activities associated with the

procurement of food is clear. The weight properties of things could be set out by reference to what an individual was able to carry either by himself or with the assistance of others. A heavy or large object might be one which could be carried only by the combined effort of say four persons. A person could know that he was communicating what he intended in using a word like 'large' or 'heavy' of something if after he told a group of persons that he had just killed a heavy or large animal, at least four men were dispatched to bring the animal in. Distance descriptions could be based on the time a person required to move from place to place. And time could be calculated by reference to the occurrence of hunger, for example, which is a shared sensation which defines the shared need of the community in question. Or, of course, reference to days or nights could be the basis for time calculations in so far as they were required. Shades of light or darkness could be differentiated by reference to the various conditions under which hunting could be successfully or productively engaged in. Weather conditions could be identified in much the same way. Similarly, the discernment of colours could derive from the activities associated with the procurement of food. The ability to differentiate certain colours would almost certainly be of value in hunting. In fact some of the most striking examples of the way in which the vocabulary of communities is built up around the activities of communities have to do with colour differentiation. The Eskimo

has a vocabulary which has many words for what a person brought up in a non-Eskimo community would in all probability refer to simply as 'white' and Arabs as is well known have numerous words for what others would very likely identify as simply 'brown'. In both cases the ability to differentiate the colours in question and communicate about such things is intimately related to questions of survival, i.e. to what one must or should do if one is to survive.

It is clear from these examples that it would be possible for the meanings of property words like 'white', or 'heavy' or 'fast' to be taught or learned by reference to activities which those persons engaged in as members of that community. It is equally clear that even in a community which shared a single need or purpose, a diverse vocabulary could develop. And this does constitute an answer to the question raised above about how words like 'white' etc could be learned, given that it was not their function to name objects of manipulation on the grounds that what they picked out were properties, not objects.

This brings us to the second question raised above. It might be argued that what the model shows is that the members of our imagined community would not want to develop a vocabulary which bore no relation to the procurement of food. It does not show that they would be incapable of developing a vocabulary which bore no relation to the procurement of food. There is a second problem which is related to the one just raised. Given that the vocabulary of the community has developed around the procurement of food, why should it be thought to follow

that it could be taught only in the context of actions related to the procurement of food? For example, if 'heavy' meant any object requiring the combined effort of four men to be lifted, could not the meaning of 'heavy' be taught without any reference to lifting as it occurs in the procurement of food?

Let us tackle this latter question first. We can then turn to the first and more fundamental problem. The first point to be noted is that the procurement of food is a complex activity or perhaps more accurately, a complex of activities. Each activity which is a part of the pursuit of the single objective could be engaged in independently of the pursuit of that single objective. For example, a person in our imagined community could carry something independently or whether his doing so advanced either himself or his community toward the achievement of their goal. The same would be true of running, or tracking, or shooting, or cutting, or sorting (as in the sorting of berries or firewood). The moment that this becomes clear, it becomes equally clear that the descriptive vocabulary of the community could at least in part be taught without reference to the overall objective of the community. For example, the word 'heavy' could be taught simply by referring to what four men could lift without commenting on why four men might together wish to engage in a cooperative lifting effort. Similarly colours could be taught by having those learning to use colour words sort coloured objects into piles again making no reference to anything having to do with

the procurement of food.

These observations give rise to two points. First, the kind of teaching which we are now talking about even though it would not be carried out by reference to the procurement of food would nevertheless be carried out in the context of the actions of teacher and pupil. Hence, even if we were to modify the model so as to allow for some teaching of language without reference to the over-all objective, the model would still illustrate how goal directed behavior can be involved in the teaching of language. However, it is very unlikely that language teaching would occur in this way in our imagined community. For, as pointed out earlier (see Chapter VII above), learning to differentiate and name things in one's environment does not occur simply as a matter of course. Motivation is required. To apply this to our model, since the procurement of food is the single goal our language users have, if we remove this single goal from the teaching of language, those who have not acquired the language will have no reason to do so. Why then would anyone who did not possess the language make the effort required to perceive what others in the community were capable of perceiving and describe what others in the community were capable of describing?

However, having made the point that learning a language requires motivation, it must be acknowledged at once that the requirement is an empirical one and not a logical one. This brings us to the second question raised above, namely

is it not the case that the model illustrates a situation where the members of the imagined community would not want to acquire a vocabulary over and above what was needed or useful in the pursuit of their sole objective? I think that it is indeed the case that what the model illustrates is a situation where the members of the community would not want to acquire a vocabulary over and above what would be of value in the pursuit of their sole objective. Further I do not think that a model could be developed which illustrated or demonstrated that acquiring a certain sort of vocabulary was a logical impossibility. That is to say, no model could show that it was logically impossible for the members of a single goal community to acquire a vocabulary which was unrelated to e.g. the objective of procuring food. Nevertheless while neither this nor any model can be used to show that the descriptive use of language must logically be restricted to descriptions having some relevance to the procurement of food, we can still ask what would follow if we imagined that the single purpose of food procurement did not exist. Could a group whose members had no reason for acting learn to communicate information using language? The argument of the last chapter indicates that they could not. How could any one member of the group determine that others perceived in any given situation at least some of the things which he perceived in that same situation? And without this knowledge, how could any member of the group work out what others in his group were associating any given sound with? I have already

argued that there is no a priori reason for believing that simply as a matter of course one person will perceive what another person perceives in any given situation. I have also argued that a prerequisite of a public language is that people should perceive at least to a limited extent what others perceive in any given situation. If these arguments are sound, there is no reason for thinking this prerequisite to be satisfied by the members of a group who had no reason to act and presumably therefore never did act. I think, therefore, that while the model which I have developed does not actually show that the persons in the community described must have a common purpose before there can be any communication, it nevertheless remains the case that if the imagined community had no reason for engaging in goal directed behavior and as a consequence did not ever engage in goal directed behavior, it would not be logically possible for them to acquire a common language.

What then does our model illustrate? I think that it illustrates a situation in which it would be plausible to suggest that all objects named in the language would be objects of manipulation and identified as such. That is to say, the classification of things by members of the community described would be based on the use or function of the things being described. The single function, then, of descriptive discourse would be to draw attention to those things in the environment which were relevant to the procurement of food. Thus, the model

also illustrates what is meant by 'object of manipulation'. An object of manipulation is simply any object which is identified by reference to its function or use. That is to say, an object of manipulation is simply an F-object.¹

IX.2 An illustration: part two

The model as it has been developed to this point is highly artificial. No small group would centre all its activities around a single objective. However, the model can be extended in two directions both of which are instructive.

First, a language community will have more than one reason for its existence. Many objectives will play their part in group activity. These will include such things as shelter, defense, satisfaction of emotional needs, procreation and so on. The existence of these additional goals will lead to a more complex society and a more complex language. But the basis of determining that there is at least a degree of general agreement among the members of the community about what, in any given situation is being perceived, will remain the same. The variety of goal directed behavior which confirms the existence of agreement will be much greater. But the evidence that there is agreement will remain the behavior of the various members

1. I recognize that the illustration is incomplete at least in the sense that a person in our artificial community would encounter not simply means to his ends but also obstacles. It would no doubt be of considerable assistance if these were to be named too. But of course in naming obstacles the community would not be naming F-objects; what they would be naming would be C-objects. However, words for C-objects would not be indispensable in a language-using group whose vocabulary included F-words. Consequently it is conceivable that in such a community the only words available for picking out things in the environment would be F-words.

of the community. In addition, description of those aspects of the world which are relevant to the accomplishment of the various objectives of the members of the community will remain a fundamental objective of communication. And as before, things in the environment will be classified by reference to their uses or functions.

Second, in an ordinary community, not all the objectives of the members of that community will be shared by all other members of that community. A hunter may wish to have a weapon which fulfils its hunting function but which is useful for woodcarving as well. Here, hunting is a social concern involving a common objective, the procurement of food. But woodcarving no doubt is not. However, this latter 'non-social' goal can still provide the basis for the development of language facilitating its achievement if as a goal it is recognized by others. That is, other persons must recognize that woodcarving is something which a person might want to do even though it is an objective which plays no part in their own activities.

This latter point is important in that it illustrates that an objective need not be shared in order for language to develop around it. What is required, however, is that an objective be recognized as an objective by those who do not share it. For if it is not recognized as an objective by others then the point of activity designed to achieve that objective by a person who does have it as an objective will not be

understood. As a consequence, that particular objective and activities associated with it cannot provide a demonstration of general agreement about the existence of those things whose manipulation is required for the achievement of that end.

What this indicates is that identifying something as an object of manipulation is not the same as manipulating that thing. Neither is it the case that identifying something as an object of manipulation implies that one has manipulated it, or intends to manipulate it, or will manipulate it for the purpose of bringing about a particular end. Rather, to identify something as an object of manipulation is to recognize a potential use of that thing which one may wish at some time to exploit or which someone else may at some time wish to exploit.

It follows from what I have just suggested that in order to use a system of classification which differentiates things relative to their various uses, it is not necessary that one share all the goals relative to which the various uses are specified. All that is required is that one recognize that objects falling into the various categories could be used for specified purposes if one so wished. If, on the other hand, one does not recognize that a particular goal is a goal, then it follows that something which falls into a category which is itself defined relative to that goal will not be regarded as an object of manipulation.

IX.3 An illustration: part III

Even with the extension to the model offered in part II above, the model remains artificial. This is because it has been constructed in such a way that all uses of descriptive language by the community in question would be subject to the kind of corroboration described in the last chapter. If it were the case under normal conditions of use that descriptive language was used solely for the purpose of describing things which has a known use or utility, then all uses of descriptive language would be subject to the kind of corroboration which I have been focusing on in this and the previous chapter. That is to say, if descriptive language was normally used only to describe things which had a known use then it would always be possible through goal directed behavior to determine that a particular description was being understood the way in which it was intended. But of course not all descriptions fall into this category. If they did language could never be used to describe things which had no known use. Neither could it be used to describe fictional or imaginary worlds.

There seems to be two types of description which are not subject to what was described above as the corroboration requirement. First there are those descriptions which for practical reasons cannot be checked through goal directed behavior, and for which, therefore, there is no mechanism immediately available for determining that a particular speaker is using the language correctly in describing whatever he has

described in the way in which he has described it. Descriptions of temporally and spatially distant phenomena fall into this category. Second, not everything which is described is even theoretically open to manipulation. The description of imaginary objects or dream occurrences fit into this second category.

Can the model being developed in this chapter be broadened to cover these types of use of descriptive language for the purpose of communication? I think it can. But before attempting the extension, let us remind ourselves of the functions of goal directed behavior relative to the use of descriptive language for communication purposes. They are two in number. First, goal directed behavior provides the evidence that there is general agreement of at least a limited variety as to what is being perceived in any given situation. As argued in the previous chapter, in the absence of this general agreement the use of descriptive language for communication is not possible; similarly, in the absence of any evidence that this agreement exists, one is not justified in thinking that there is general agreement of even a limited variety about what in any given situation is being perceived. Secondly, goal directed behavior provides the evidence, which anyone wishing to use descriptive language for communication requires, that he is using descriptive language as others use it and that others know that he is using descriptive language as they use it. To be specific, it provides the required evidence that one person is using words like 'white' or 'saw' to pick out perceived

patterns which others use those same words to pick out.

In arguing that language can be used for communication only between and among agents, I have also argued that the ability to use language is an acquired skill. It is this latter fact about the use of language which explains how it is possible to use language to describe things where no check by others is possible on how the words are being used. Once acquired, skills can be used in contexts other than those in which they were acquired. Thus, while the use of descriptive language must be learned in contexts where what is being learned can be checked by reference to the actions of pupil and teacher, the skills thus acquired can then be used in contexts where checks of the sort described above are not available. My ability to use a word like 'blue' for example must be learned in situations where I can obtain evidence that I am using the word to pick out what others use the word 'blue' to pick out. But having assured myself that I have got it right, I can then proceed to use the word to describe phenomena which others may not be able to perceive such as my own visual sensations. I can also use the word 'blue' to describe phenomena which are not subject to manipulation such as the stars. And if assurance is needed that I am not deviating from the accepted use of the word, I may demonstrate my ability to use the word 'blue' correctly by e.g. sorting objects which are objects of manipulation into appropriate piles.

To apply this kind of reasoning to the illustration I have

been developing in this chapter, a member of the community described in my illustration whose function is to hunt game might through hunting acquire the ability to differentiate and name various browns. That skill, once acquired, could be used by that person in a variety of contexts including contexts in which what is being described is not subject to manipulation and where as a consequence there is no way of checking that he is using the words in question as others would use them in the situations in question. But, as argued, since it would be possible to check the hunter's putative description skills in contexts where a check is possible, the use of those skills where no check is possible poses no problem for the account being given.

A type of description which has captured a great deal of philosophical attention and which is allowed for by this extension is the identification of things by reference to their sensory properties such as colour or smell or feel or taste and so on. Of course, many of those who have drawn attention to this sort of identification have done so with the view in mind of demonstrating, for example, that all other varieties of identification can be reduced to identification of objects by reference to what might be described as their phenomenal characteristics. If previous argument is correct, this approach to perception is mistaken. Nevertheless, identification of things by reference to their phenomenal features does occur. And things which are identified this way are quite

clearly not being identified as objects of manipulation. Why this kind of identification is possible is one of the things I have been attempting to explain.

Although the identification of things as phenomenal objects does constitute the major alternative to the identification of things as objects of manipulation, there are uses of descriptive language which do not fall neatly into either camp. These uses occur when what one is describing is mythical perhaps or imaginary. Some philosophers have concluded that descriptions of such things are not possible because there is no way of verifying the truth of what is said. Malcolm's account of dreaming seems to have this sort of implication. However, the fact that descriptions of dream experiences cannot be corroborated does not imply that therefore the description is somehow suspect. Why this is so should now be relatively clear.

The original model with the modifications suggested above in parts two and three is now capable of encompassing natural languages. It is not offered as comprehensive analysis of language. Rather, it is intended to illustrate how one might cope with the obvious diversity of descriptive vocabulary within the framework of the theoretical account offered above (see Chapter VIII).

CHAPTER X: CONCLUSIONS TO PART II

In what follows, I wish very briefly to draw attention to the most important conclusions to be drawn from the argument of this section. I shall then take these conclusions and apply them to the question which we set out to deal with at the beginning of this part of the thesis. The most important conclusions can be summarized as follows:

1. I have argued (Chapter VIII above) that only agents are capable of using language for the purpose of communicating information about their environment. This follows from the fact that (i) for communication to be possible using language, there must be at least a degree of general agreement among a potential language using community about what in any given situation is being perceived; (ii) in the absence of any evidence to the contrary, there is no a priori reason for any member of a potential language using community to assume that what he perceives in any given situation, others with whom he wishes to communicate also perceive in that situation; and (iii) only agents are capable of discovering that others with whom they wish to communicate are capable of identifying perceptually at least some of the things which they are able to identify in any given situation.

2. Since all descriptive language users are also agents, it follows that all descriptive language users are capable of identifying at least some of the things in their environment

which are objects of manipulation as objects of manipulation. If this were not so, they would be incapable of acting on their environment to bring about desired ends. And if they were incapable of doing this, they would not be agents.

(See Chapter VI and VII)

3. The function of goal-directed behaviour in a potential language using community is to provide evidence that the various members of the group do perceive at least some of the same things when presented with any given perceptual situation. If actions are to provide the needed evidence that there is a degree of agreement about what is being perceived then all members of the potential language using community must perceive at least some of the same objects of manipulation as objects of manipulation. For it is a person's actions on things around him for the purpose of achieving desired ends which provides others with the evidence they need in determining that he is able to perceive what they are able to perceive. But an individual's actions will provide evidence only if others are able to pick out what it is which the individual in question has picked out and manipulated to bring about his desired objective.

4. Being able to pick out the objects of manipulation which others are able to pick out depends on having the same sorts of goals and objectives which others have. If two persons share literally none of the same goals then it is likely that they will perceive few of the same perceptual patterns.

Certainly, they will perceive none of the same objects of manipulation. This may be but is not necessarily an insurmountable obstacle to communication. It will be an insurmountable obstacle to communication if the two persons in question are unable to work out the objectives the other has in mind in acting the way he does on various occasions. However, if each is able to recognize the point of the other's behavior then he is capable of identifying objects by reference to their use in achieving those particular objectives. This is not to imply, of course, that each must adopt the objectives of the other. It is to say that each must recognize objectives (or at least some of them) of the other as objectives which he could pursue if he so wished. It follows that a potential language-using community can acquire a common language only if it possesses a common recognition of at least some of the objectives of each member of that community.

5. The picture which emerges from these conclusions is as follows. A descriptive language using community is comprised of agents who share a set of mutually recognizable objectives and who are therefore able to identify as objects of manipulation at least some of the same things in their environment.

In beginning the second section of this thesis I pointed out that my purpose was to attempt to determine whether F-words could be eliminated from the vocabulary of a descriptive language user. I think I am now in a position to answer. I have argued that the ability to identify objects of manipula-

tion as objects of manipulation is a requirement for the members of any descriptive language using community. I have pointed out that an object of manipulation is simply an F-object, that is to say, an object which is identified by reference to some use or uses which it has for the individual identifying it. Thus it is a requirement of any descriptive language using community that its members be capable of identifying at least some of the same F-objects. I have argued further that the development of a public descriptive vocabulary will be based on a community's shared ability to identify and manipulate F-objects. It follows from this that a descriptive language using community could not exist whose members were not aware of the existence of F-objects in their environment. It follows also that the shared awareness of the F-objects around which a descriptive vocabulary had developed could not be eliminated or dispensed with. I do not think that it follows from what I have argued that a descriptive language using community must actually have F-words in their vocabulary. That is to say, while I have argued that the members of a descriptive language using community must share an ability to identify particular F-objects, the argument developed above does not show that they must have words for those objects. I suppose that it is possible that a society might develop a taboo against the use of F-words and that as a consequence the F-word vocabulary of the members of that society might gradually disappear. I think it could be said of such a society that although the words for F-objects had disappeared the concepts accompanying those words would not. By this, I mean simply that even though the F-word voca-

bulary had gone, what that vocabulary had been used to talk about would and could not disappear with the disappearance of the rest of the descriptive vocabulary of the language.

In the sense just described, F-words are not eliminable.

PART III

CHAPTER XI: CONCLUSIONS AND SPECULATIONS

XI.1 Conclusions

In parts one and two above, I have argued that F-words are not eliminable in two senses. First, the descriptive content of F-words cannot be communicated or expressed independently of their evaluative content. This implies in turn that there is at least one type of description, namely, F-descriptions, whose descriptive and evaluative content are logically inseparable. Secondly, I have argued that F-words cannot be eliminated in the sense that what they serve to identify or pick out, namely F-objects, play a logically necessary role in the formation and development of any descriptive vocabulary. For language users, classifying things by reference to their use is logically necessary though it would appear not to be absolutely essential that the resulting system of classification find linguistic expression in the form of F-words.

The general conclusion to be drawn from this is that the goals, needs desires and so on of language users necessarily enter into the way in which they perceive the world around them. And since the goals etc. of language users enter into what language users perceive, it is inevitable that those same goals etc. will enter into the description of what they

perceive by those same language users. This shows that the description by language users of their environment as they perceive it cannot be value-free, since at the heart of any descriptive enterprise will lie a system of classification based on the goals etc. of those involved.

The evidence that this is the case is offered by F-descriptions which are not eliminable in the two senses suggested above and which entail instrumental evaluations. It is important to note, however, that it is the goals of language users which generate F-descriptions. And these goals themselves play a part in the activities of agents not because of their instrumental value but because of their intrinsic value to those who have decided to pursue them.

XI.2 Speculations

It seems to me that what I have just concluded does follow from the argument of the pages preceding it. However, this conclusion does give rise to certain speculations about the relation between facts and values. I do not want to suggest that the comments which conclude this thesis are more than speculations. And I am not going to attempt to show that what is expressed below follows from preceding argument. Nevertheless, I think that the preceding argument does suggest a number of things which would be worth further exploration at another time. In what follows I wish to set out one or two of these possibilities.

It seems to me that the fact that the classification of things by reference to their use or function is a necessary part of the descriptive process explains in part the perennial appeal of both utilitarianism and naturalism in its non-utilitarian formulations. Utilitarianism, to put it very crudely, is a view of evaluation which suggests that all evaluation focuses on the utility or usefulness of what is being evaluated. If previous argument is correct, this kind of evaluation is certainly a vital form of evaluation; and it is non-eliminable. This follows from the fact that this type of evaluation is built into the descriptive enterprise. It is not surprising therefore that philosophers who have looked to the way in which people talk about what they perceive for evidence regarding the nature of evaluation should come to the conclusion that instrumental evaluation is a basic form of evaluation. But from the fact that instrumental or utilitarian types of evaluation are basic, it does not follow that all evaluation is of this form. In fact, I think that utilitarianism is counter-indicated by the preceding argument. For no part of my argument has suggested or assumed that the goals around which at least part of the classification of things by language users must revolve is itself determined by the descriptive process or by perception. The only requirement which my argument has turned up is that those using a public language for descriptive purposes must have goals and must classify at least some of the things they encounter by reference to those goals which they have. What

these goals are or ought to be is in no way implied by my argument. The classification of things by their function may ultimately revolve around such goals as the pursuit of happiness or pleasure or self-interest. But I see no reason to believe that description and perception must inevitably revolve around these objectives.

It seems to me that the same sorts of comment are relevant with regard to naturalism. Recently naturalist arguments have purported to show that descriptions do indeed entail evaluations. In this naturalists are correct, or so I have argued. But the explanation of this phenomenon seems to lie not in the nature of evaluation; in particular it seems not to lie in a naturalist account of evaluation. Rather, the explanation seems to lie in the fact that classification by function is a requirement for those wishing to use a public descriptive language. This in turn implies that a totally value-free description of the perceptual world is not possible. As a result, descriptions do, in the normal course of events, entail evaluations. But this is because the evaluations they entail are implicitly present in the descriptive enterprise and enter into descriptions through the classification of things by function.

I should like to suggest, by way of concluding, two possible implications of the position for which I have argued, each of which is of both theoretical and practical interest.

If what I have argued is correct, it seems that the

goals etc. of language users will determine in part what perceptual patterns language users will identify or notice. This would seem to me to suggest that persons who have radically different goals might as a result perceive quite different things when confronted with the same situation. Each might be correct in his description of what he perceives; yet the resulting descriptions might vary or even appear to be in conflict. This apparent conflict might result from the fact that what is being described has a variety of uses by reference to any one of which it might be identified. It also seems possible that if each was unaware of the goals of the other, each might be incapable of seeing that the description of a given situation offered by the other was a correct one. If what I have suggested is correct, the potential for misunderstanding and conflict seems clear.

To follow up on this point for a moment, those areas where misunderstanding seems most likely lie in those areas where the goals of individuals are most likely to diverge. Political objectives would seem to offer one such area. Misunderstanding would seem least likely to occur in those areas where the goals of individuals coincided. The common needs of human beings for food and shelter would seem to be such an area.

These suggestions seem to me to offer an interesting way of approaching the question of political philosophy. The basis for communication from one political ideology to another

might very well be the goals which both have in common. And no doubt these would be those goals which virtually all human beings have. Breakdown in communication would probably occur where the goals diverge. Divergent goals could result in divergent systems of classification. This in turn would ensure the perception of different facts with the result that the rival political views might actually be working from a different factual basis in drawing up their rival theories.

A second type of suggestion which seems to derive from the general conclusions for which I have argued is as follows. Presumably one function of a system of values is the ordering of priorities and the formulation of goals. If this is the case, and if the goals of language users do influence in part what they are able to perceive, then it is possible that adopting a particular system of values (like for example the Christian religion) might actually and literally affect what perceptual patterns one came to discern. This suggests that members of a particular value community might actually be capable of descriptive insights into their environment which persons who rejected their values were incapable of.

What I have just suggested suggests in turn a possible way of evaluating value systems. Some value systems might actually encourage greater perceptual flexibility than others. If, for example, one adopted a system of values which were narrowly exclusive and which placed a high value on rejecting

any attempt at a sympathetic understanding of the objectives or desires of those not holding that value system, the result might be to restrict the range of phenomena which persons holding those values were able to identify. An alternative system because of its encouragement of understanding, for example, might allow greater perceptual flexibility.

One way of putting all this is to say that the values of an individual or a society may have implications for what that individual or member of that society actually perceives. Working out where and how values are reflected in description seems to me to have interesting possibilities.

One final possibility is worth mentioning. It might be the case that to eliminate what have traditionally be called moral values from one's system of values may actually limit the ways in which people were able to talk about e.g. human beings or human society. The limitation here would be in part a limitation on one's ability to describe human nature or human society. It might in fact be the case that many of the words we use to describe ourselves are value-loaded in such a way that to eliminate the value content of such terms would be to eliminate the possibility of expressing certain kinds of facts. A concept which fits into this category might be that of a human being. Another possibility might be that of human society.

As the heading to this section suggests, all of this is speculation. But it does serve to indicate some possible

value in the exercise which preceded it.

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