Chapter Four

SEMANTIC RULES AND LIVING LANGUAGES

4.A. Indefiniteness

4.A.1. In chapter three an attempt was made to describe various ways in which descriptive words may be correlated with universals by semantic rules. It was pointed out in section 3.3 that our ordinary use of words is much more complex than the uses described in that chapter, and the purpose of this chapter is to describe some of those complexities.

There are many respects in which the description of semantic correlations and logical and non-logical syntheses of meanings provided an oversimplified model. For example, it took no account of descriptive words which refer to tendencies or dispositions or unobservable properties or theoretical notions of the sciences, or those words, such as "angry", "hopes", "intends" which may be used to talk about conscious beings. However, even if we leave out these complicated concepts, and concern ourselves only with words which are correlated with observable properties in something like the manner described in the previous chapter, we shall find complications which have not been accounted for, though very briefly mentioned near the end.

Philosophers sometimes draw attention to these complications by saying that ordinary empirical concepts have "open texture", are vague, have indefinite boundaries, or admit of difficult borderline cases. Sometimes the point is made by saying that concepts do not stand in exact logical relations to one another, or that it is
impossible to make a clear distinction between usage
due to meaning and usage due to generally shared col-
lateral beliefs. (Cf. Quine: "Word and Object", p.43). Sometimes they are carried away by all this
and say that words in a language are not used according
to rules, or that logical laws do not apply to ordinary
languages, or that there is no clear distinction between
analytic and synthetic statements, or between necessary
and contingent truths.

Unfortunately, no one seems to have given a very
clear and systematic account of all these complications
and difficulties, nor explained how a language is able
to work despite many kinds of indeterminateness in it.
I suspect that this is because people have no clear
notion of what it would be like for these indeterminacies
to be absent: so they do not have any model for the
missing simplicity with which to contrast the actual
complexity and provide a basis for systematic discussion.
I believe that the account of semantic rules in the
previous chapter provides at least part of such a model
and hope to illustrate this by contrasting some of the
complications in ordinary usage with its relative
simplicity.

4.A.2. The kinds of indeterminateness which will be
described in this chapter fall into two main classes:
(i) those due to indefiniteness of properties themselves
and (ii) those due to indefinite semantic correlations
between words and properties. It will not be possible
to describe all possible cases: there is room for only
an incomplete and somewhat condensed sketch.
4.A.3. **Indefiniteness of properties.**

It is sometimes remarked that properties can be indefinite, as if it were perfectly clear what this means or how it is possible. It is certainly not clear to me. The point seems to be that when we try to decide which objects have and which have not got some property, we may come across a borderline case where it is difficult to decide. (Compare 3.B.4.a.) There seem to be several different cases in which one may have this sort of doubt about an object in one's field of perception.

1) The doubt may be empirical, and due to abnormal circumstances. For example, the light may be bad, or one may be too far away to see clearly, or one may be temporarily unable to concentrate, owing to tiredness, a headache or emotional problem. Or one may simply have forgotten what the property looked like. Such doubts can be eliminated by eliminating the abnormal circumstances, and are of little interest.

2) The doubt may be due to permanent psychological or physiological limitations, such as an inability to make fine discriminations. This can cause doubt whether two visible objects are exactly alike in some respect (e.g. shape, or colour), or whether an object which is present has exactly the same shade of colour as the shade which one has in mind (e.g. a shade seen on the previous day). Other examples are: a permanent inability to memorize fine shades of colour, or an inability to "take in" or "survey" complicated properties, like the property of being a figure bounded by 629 sides. (In some of these cases, the use of procedures such as counting, may help to resolve the doubt. This raises interesting problems as to which doubt it resolves.)

3) It is possible that there is a third sort of doubt
to be described as being due to indefiniteness of a property. An object and all its properties can be seen plainly, and yet one may be in doubt as to whether its hue is red or not despite the presence of many red objects to ensure that memory is not at fault. This does not seem to be an empirical doubt, to be settled by closer examination in a better light, for example, or under a spectroscope. (If I let the spectroscopic readings settle the question, then I have taken a decision to use the word "red" in a new way.) For what the spectroscope tells me cannot remove any doubt about how the object looks to me. Notice that although the doubt concerns the way the object looks, nevertheless there is a sense in which I am in no doubt as to how it looks, for I can memorize its appearance, and recognize other objects as having exactly the same shade of colour. This is what suggests that it is a doubt about a property: is that hue (red) present in this shade (e.g. redange - see 3.B.4.a.)?

It is not at all clear to me that there is a difference between cases 2) and 3). Perhaps it depends on whether there is only one person who is unable to decide or whether everyone is unable to decide. At any rate, I shall be content to leave this and carry on with discussion of indeterminate semantic correlations.

4.A.4. Indefinite rules

Not only may the properties to which words refer be indefinite, but in addition the way in which they are referred to may be indefinite, or indeterminate. (Though it is not clear that these two cases can always be distinguished.) Here again, there are various ways in which doubt as to the describability of an object by a word may arise.
First consider an f-rule, correlating a word with one observable property. It may be unclear which is the property with which the word is meant to be correlated, and this, of course, may cause doubt in the application of the word. No more need be said, as this is just a special case of the next sort of doubt.

Secondly, if a word is correlated with a set or range of properties disjunctively, by a d-rule (see 3.B.2, ff.), then the boundaries of the set of properties may be indefinitely specified. This is one of the things which may be meant by the word "vagueness". Notice that although it is a range of properties which has indeterminate boundaries, this may have the consequence that the class of objects with those properties has indeterminate boundaries, in which case the word has an extension with indeterminate boundaries. (Part of the indeterminateness may be due to indefiniteness of the individual properties, of course.) The previous case is clearly an example of this, for it involves a unit-set of properties, with indeterminate boundaries, so that it is not clear which is the property in that set.

4.A.4.a. It is difficult to illustrate this by means of an example, because our ordinary words are too complicated and illustrate too many things at once. But we can come close to seeing what sort of thing is meant by noting that the word "rod" is correlated with a whole range of shapes, each more or less straight, with a fairly uniform cross-section, and a length somewhat greater than its diameter. But how much greater? How much longer must a rod be than it is wide? It should be clear that the range of shapes correlated with the word "rod" has somewhat indeterminate boundaries, for although the ratio of length
to diameter must not be too small or too great (else the word "disc" or "filament" or "wire" may be more appropriate), nevertheless there are no definite limits. So there is a range of shapes which may definitely be possessed by rods, and a range which may definitely not be possessed by rods, but there are no determinate boundaries between them. (Compare also the words "heap", "few", "small", "many", "giant", etc. As with "rod", caution is required, since these words illustrate more than one kind of indeterminateness.)

4.A.4.B. Next we have indefinite conjunctive correlations. Two or (usually) more properties may be conjointly referred to by a descriptive word in an indefinite way. (Cf. 3.B.3.) For example, if the properties are as a matter of fact always found together and never separately, then the word "W" may be used to describe objects which have all the properties without its ever being decided whether possession of all of them is necessary for describability by the word, or whether only some subset need be possessed, and if the possession of only a subset is sufficient, in that case. We can describe this sort of indefiniteness in terms of the last, as follows. Form the set of all possible combinations of one two or more of the properties in question. Then we regard the word "W" as correlated disjunctively with some subset of this set of complex properties, the boundaries of the subset being indeterminate. When, in such a case, the original set of properties (and so also the set of possible combinations of those properties) is infinite, or at least indefinitely extensible, we seem to have an illustration of what Waismann called "open texture". (In "Verifiability", I shall postpone illustrations till later, for the reason already mentioned: ordinary
words are too complex and illustrate too many different things.

4.A.4.c. The next kind of indefiniteness involves n-rules, as described in 3.B.4,ff. It was shown that words might be negatively correlated with properties by either strong or weak n-rules. The correlation may be indefinite in some cases, where for example, it is not certain whether the n-rule actually does govern the word or not. Thus, before the discovery of black swans, there might have been an indeterminate negative correlation between "swan" and blackness. Perhaps the more interesting case is that in which the indefiniteness is due to its not being clearly specified whether a weak or a strong n-rule correlates some word with a property (see 3.B.4.b.). This has the consequence that it is not definitely analytic nor definitely synthetic that nothing with the property is correctly describable by that word.

4.A.4.d. Not only logical syntheses, but non-logical ones also may be indefinite. Thus a word governed by a p-rule (see section 3.D) may have a meaning which is indefinite in a way analogous to that discussed above, in connection with d-rules. For example, in 3.D.2. we described a procedure for using the word "red". Two boundary-shades are selected and memorized, and then the word is applied to an object if and only if it has a specific shade of colour lying between the two boundary-shades. If, however, there is something indeterminate in the selection of the boundaries, or in the decision whether specific shades lie between the boundary shades or not, then the procedure considered as a whole will
be partly indeterminate. For example, the word "red" may be correlated with a set of properties with indeter-
minate boundaries by such a procedure.

4.A.5. We have seen how each of the types of synthesis described in chapter three may be indeterminate, giving rise to concepts whose boundaries are not clearly defined. If we recall that all these operations for constructing new semantic rules can be reiterated, to yield very complicated correlations between words and properties, involving both logical and non-logical syntheses, we see that the final product may be indeterminate in many different ways all at once, and even more so if we allow that properties themselves may be indefinite (see 4.A.3.).

In 3.B.5, we saw that a word may be correlated with the following combination of properties:

\[ P \land \neg(Q \lor R) \lor R \land \neg(S_1 \lor S_2 \lor \ldots) \lor Q \land \neg P. \]

In such a case, each of the properties \( P \), \( Q \) and \( R \) may be indefinite in the manner of 4.A.3, the range \( S \) may have indeterminate boundaries in the manner of 4.A.4 or 4.A.4.d, and it may not be certain that any one of the main dis-
jects is a sufficient condition for the applicability of the word, though any two together do definitely provide a sufficient condition. This illustrates the way in which several different kinds of indefiniteness may simultan-
eously contribute to the indeterminateness of the boundary of the extension of a word.

It should be stressed that we must distinguish borderline cases due to difficulty in deciding whether certain particular objects do or do not exhibit certain properties, and those which arise out of indecision as to whether those properties which are quite evidently possessed
or not possessed by objects are correlated with a word in one way or in another. This shows that concepts may have indeterminate boundaries in two quite different senses: it may mean that the extension, the set of particular objects falling under the concept, has indeterminate boundaries, or it may mean that the set of properties, or combinations of properties, sufficient to guarantee inclusion in the extension may have indefinite boundaries. In either case borderline cases are possible, that is, particular objects which are neither definitely describable, nor definitely not describable, by some word. We may say that in these cases the application of the word is not determined by or explained by the meaning of the word, or by the universals correlated with it. (See 3.C.4, 2.D.2.)

4.A.6. I have remarked that it is difficult to find words in a living language which illustrate only one kind of indeterminateness. It is much easier to find words which simultaneously illustrate several kinds. The word "horse" is a familiar example. There is a range of shapes which may be possessed by horses, but the range has no definite boundaries, for the shape of a horse may change continuously into that of an elephant or giraffe without definitely ceasing to be a possible shape for a horse at some one point.

Similarly, there is a range of possible colours for horses, and here it is not even clear whether there is any boundary at all, since whether a colour is possible may depend on other factors, such as whether the horse has been painted that colour. If some "horse" were born bright blue and produced off-spring with red white and blue stripes, we might not be sure whether to say that it
was a horse after all. Similar remarks may be made about the textures of the skins of horses. They must not be metallic, but there is no definite boundary.

In addition, it is likely that even within the ranges of permissible shapes colours and textures, there are some which must not occur together. Some odd colours may be allowed, but not if the animal also has too odd a shape and texture too. However, there is surely no definite limit to the kinds of combinations which we should allow in objects correctly describable as "horses". Further, we may allow the possibility that biological investigations will provide an "explanation" of the existence of freaks and so persuade us once more to call them "horses". It is very likely that no explanation at all would redeem some cases, yet there is surely no clear boundary between those cases which may be explained away and those which may not. Investigation would doubtless reveal further complexities here.

4.4.7. These remarks help to illustrate the claim that the account given in chapter three was hopelessly inadequate to explain the use of all kinds of descriptive words. But there are still many kinds of complexity and indeterminateness which have not been mentioned. For example, we discover empirical regularities in the world, and construct scientific (or non-scientific) theories based on these regularities. Then in some cases the theories may be built into the definitions of some of the words used to state them. This may occur in an indeterminate way so that, for example, it is not clear whether it is a matter of definition that gases at constant pressure have a linear coefficient of increase in volume with rise in temperature, or a contingent fact. The
correspondence between mercury column readings, and
gas-thermometer readings is, of course, a matter of
experience, not a matter of definition. The indeter-
minateness consists in the fact that it would not be
clear how to describe the situation in which the cor-
respondence broke down. (In some cases, further inves-
tigation might make it clear, by yielding explanations
in terms of accepted theories.) So we can say that
increase in length of a mercury column is neither
definitely merely evidence nor a defining criterion
for the applicability of the expression "a rise in
temperature".

But there is no room for a detailed discussion of
all kinds of indefiniteness. Many cases are already
familiar (see, for example, the chapter on "Reduction
and Open Concepts", in "Semantics and Necessary Truth",
by Pap). I shall leave the description and classi-
fication of examples now, and make some general remarks
about indefiniteness.

4.B. Ordinary language works

4.B.1. The previous section showed how it is possible
to take account of various sorts of indefiniteness
within the framework of a theory which attempts to explain
our use of descriptive words in terms of correlations
with observable properties and other universals. It
brings out more clearly than ever some of the inade-
quacies of the one-one model, which assumes that there
is one universal correlated with each descriptive word,
and simultaneously shows why there is no need to give
up talking about universals altogether just because the
one-one model will not work.
For example, one sort of objection to talking about meanings as explained by properties, is that the properties to which words seem to correspond may change over the years while there is no need to say that their meanings change, or that the concepts corresponding to them change: concepts may have a history. But we can easily take account of this, for, owing to the complexities in the correlations between words and properties, it is possible for small changes to take place while most of the correlations remain unaltered. A concept may become more or less definite in some respect, a boundary may shift along a range of properties without becoming more definite, and so on. But, for normal purposes, or when people talk about the "history of ideas", the fact that so much remains unaltered while these changes take place is regarded as a sufficient reason for talking about "the same concept", or "the same meaning".

Here loose criteria for identity of meanings are used, and work as well as loose criteria of other sorts, as when we talk about "the same car", despite the minor repairs and replacements which it has suffered. In either case, where changes are too drastic, we may be unsure whether to say they are "the same" or not: any system of criteria for identity may work well in some circumstances and break down in others (see section 2.A).

In short, the complexity of semantic correlations, their indeterminateness, and the fact that in normal parlance we use looser criteria for identity of meanings or concepts than for identity of properties explains why oversimplified theories of universals will not work. But the argument of 2.D shows that there must be semantic correlations if there is to be anything definite about
the meanings of words, if concepts are to have any boundaries at all, however indeterminate, and that is why we need some explanation of the sort which I have tried to give, of various ways in which descriptive words may be correlated with observable properties.

4.2. The question now arises: how can we get away with so indefinite and imprecise a use of words? How can our ordinary language be "in order as it is"? (Cf. "Tractatus", 5.5563, and "Philosophical Investigations", I.93). To answer this, we must examine the purposes for which we speak and write, and the circumstances in which we do so, and this will show why it does not matter for our normal purposes that what we mean by our words is not perfectly precise and definite, no matter how distasteful logicians may find it. Of course, when our purposes change, or the circumstances change, (e.g. black swans are discovered, or unexpected counter-examples turn up to accepted mathematical theorems), then we may have to eliminate some of the indeterminateness. New scientific discoveries, or new purposes, may reveal to us previously unnoticed indeterminateness and force us to eliminate it. (How to eliminate it may be a matter for arbitrary decision, or it may be determined by questions of convenience.) The indeterminateness does not matter because until the new possibilities turn up (such as horses which produce giraffe-shaped off-spring) we need not consider how to describe them: indeed it would not only be futile, but quite impossible, to consider all such possibilities and adopt definite linguistic rules for dealing with them. (Read Wittgenstein's "Philosophical Investigations", I.65–66, 97–100, inclusive.)
4.B.3. It may help to explain why the meanings of our words contain so much indefiniteness, if we notice that our desires and intentions may be indefinite in the same sort of way. When a farmer instructs his employee: "Go to the market and buy me a horse", can we say that there is a definite kind of thing that he wants? Can he say honestly that there are definite limits to what would satisfy him? Could he be expected to take seriously the request for a precise specification of the range of possible shapes, colours, textures and kinds of behaviour the animal may have? Must he have an answer to the question: "Will you mind if the only horse I can find has a neck as long as a giraffe's?"

If we can see why, in normal circumstances, this would be a stupid question for the employee to ask before setting out, then we shall see also why it would be stupid to expect people to use words with more precise meanings for normal purposes than they do in fact. (It is important that so little of our linguistic behaviour consists in merely making statements.)

If something works, then this is a justification for using it. Of course, something else may serve the same purposes better: but that is a question to be settled by experience, not by appeals to logical ideals of exactness and rigour.

4.B.4. All this may explain why it doesn't matter for normal purposes that words and sentences are used with indefinite meanings, but it does not really explain how this comes about. That can be seen by examining the conditions in which we first learn to speak.

Our initial lessons in the use of language must give us all the apparatus described in section 2.B. We
must learn what a language is, what it is to ask a question, make a statement, give a command, etc. We must learn what it is for statements to be true or false, for a word to describe an object correctly or incorrectly. We must learn to employ a conceptual scheme in which the world is seen as made up of enduring physical objects with shared properties and relations. General knowledge at all these different levels has to be picked up in addition to more specific knowledge of the rules correlating individual words with things and properties. A child cannot learn to use words with definite meanings without learning all these things. But he cannot acquire the general knowledge without first having learnt to speak: so, many different things must be learnt simultaneously, in a gradual and complicated process.

Progress must be made not only at different levels simultaneously, but also along a wide front. We do not first learn the precise meaning of one word, then the precise meaning of another, as if we could already speak and were learning the vocabulary of a new language by memorizing a dictionary. The clarity and definiteness of our understanding of many different words increases in one slow process. Only when we have already acquired a fair vocabulary and a considerable mastery of linguistic techniques, are we able to use meta-linguistic concepts (such as "meaning", "refers to", etc.) and thereby give our words relatively precise, simple and definite meanings. Not until an advanced stage has been reached can people intend their words to be governed by definite semantic rules of the kinds described in chapter three. Even so, the process of making our meanings more definite and
precise does not proceed beyond the point at which it serves our purposes to do so. We have already remarked (in 2.A.5.) that persons with special purposes, such as scientists, lawyers, or philosophers, may give ordinary words meanings more precise than in ordinary speech. The process can go on almost indefinitely. (See note at end of 2.B.)

4.B.5. Two reasons have been found why words are first of all used with indefinite meanings and only later on made more precise, namely because first of all a higher-level conceptual apparatus is required for making meanings precise, and secondly because many words are learnt simultaneously in a gradual process. But there is another reason, which is important if we wish to understand some of the things said by philosophers about the analytic-synthetic distinction.

The third reason is that much of the child's vocabulary is picked up from things said by people around him such as "Here comes Daddy", "Look, there's a kitten", "Would you like some more jam?" "Don't splash your milk", and these are complete statements using words, not definitions explaining them. The child does not hear things like: "The word 'red' is a descriptive word referring to the hue common to those three objects". The child learns which statements are true and which are false: but this cannot teach him the precise meanings of the words occurring in those statements. Knowing the meanings involves more than knowing that statements are true in certain conditions: it requires a knowledge of why the statements are true in those conditions, what it is about those circumstances which makes the statements true, or whether, for example, the statement would be true in
any circumstances at all.

For example, when a child hears someone utter a statement that is analytic or necessarily true, all that the child can learn is that it is true. More has to be said before he can learn that it is analytic, and usually not enough is said for the child to be able to answer all questions about precise meanings of words (not that he formulates these questions, of course).

How much evidence is available to the child for him to learn whether "tadpole" is used to refer to the property of being a frog-larva, so that it is analytic that all tadpoles are frog-larvae, or whether it is merely a contingent, generally accepted fact?

In view of all this, it is perhaps remarkable that children do learn to use words with meanings at all. It is certain that they must take many a leap into the dark, extrapolating beyond what they can learn from the linguistic utterances of their elders. (Of course, they do not do this consciously.)

4.3.6. In view of all this, and also the fact that our powers of discrimination, etc., are limited in the way described in 4.4.3., it is not at all surprising that people learn to associate only relatively indeterminate meanings with words. In order to understand all the words in a statement in a definite way, one would have to know how to decide in all possible conditions whether that statement would be true or false (cf. 2.6.5.). But the child can only observe the use of words in actually existing conditions, and so it understands things in an indefinite way, until new experiences force it to remove some of the indefiniteness. As already pointed out, some
kinds of indefiniteness are never removed, and this does not matter for normal purposes (which is why loose criteria for identity of meanings are employed). But we shall see later on that it does matter when we try to apply the analytic-synthetic distinction.

4.B.7. The indefiniteness of which I have been speaking may manifest itself in many ways. There may be fluctuations in usage which can be observed in a whole society at any one time, or over a period of time. It may manifest itself in fluctuations in the usage of only one person over a period of time. Even at one time, the meaning with which a person understands a statement may be indefinite in any of the ways described, as is easily shown by asking someone how much sand is required in order to amount to a heap, or how long a cylinder has to be relative to its diameter in order to be describable as a "rod".

4.B.8. We can now summarize the main points made so far. (a) Indeterminateness, or indefiniteness in meaning, or the existence of borderline cases, may be a consequence of indefiniteness of the properties with which words are correlated, or it may be due to indeterminateness in the semantic rules correlating words with observable properties, or features.

(b) It may not always be possible clearly to distinguish these two causes of indefiniteness from each other, or from indeterminateness in usage which is due to limitations in our abilities to make fine discriminations, to survey complicated patterns or structures, or to memorize very specific features or complex properties. But in some cases the distinctions can be made.
(c) As we shall see later on, the indefiniteness of the meanings with which ordinary words are used, may make it impossible to apply sharp criteria for identity of meanings to ordinary statements, and so impossible to apply the analytic-synthetic distinction to some of those statements.

(d) Finally, we have seen how, within the framework of a theory of universals, to take account of complexities which could not be coped with by the one-one model. Universals can explain our use of descriptive words, and the existence of boundaries to empirical concepts, but not in a simple way.

4.C. Purely verbal rules

4.C.1. The description of various sorts of indefiniteness in the meanings with which words are normally understood, has helped to bring out one of the ways in which the description in chapter three gave an oversimplified picture of correlations between words and universals. But there is another oversimplification, which goes back to section 2.D, where it was argued (see 2.D.3.) that there was something wrong with Hampshire's claim that "In all cases, clarifying the use of a descriptive word or phrase is a process of drawing attention to its established links with other descriptions." This claim ignored the fact that if words are to have meanings, if they are to be able to occur in statements which are about anything, then they must be correlated not just with other words, but with non-linguistic entities. However, there is some truth in the claim, for it is possible for some aspects of the use of words to be determined by rules which merely
correlate words with other words, and this has been overlooked so far, engrossed as we have been with semantic correlations. This oversimplification must now be eliminated.

4.0.2. In many cases, setting up a correlation between words and other words has the effect of setting up a semantic correlation, between one word and the properties referred to by the other words, for example. Thus, if I rule that the word "glean" is to describe objects if and only if they are correctly describable by the English words "glossy" and "green", then this correlates the word "glean" with the combination of the properties referred to by the other two words, namely glossiness and greenness. Similarly, as shown in 3.8.4.a-b, the adoption of an incompatibility rule, correlating the word "RED", which primarily refers to a hue, with the word "redange", which refers to a specific shade of colour on the red–orange boundary, may help to make the meaning of "RED" less indefinite than it would be otherwise, by correlating it negatively with a specific shade.

Sometimes, however, we may adopt a purely verbal rule, which merely correlates a word with another word, in cases where indeterminateness of meaning gives rise to indeterminateness of relations between descriptive words. Thus, suppose the relation between the words "red" and "orange" is indeterminate, owing to the fact that there are difficult borderline cases which are neither definitely red nor definitely not red, and at the same time neither definitely orange nor definitely not orange. (It does not matter for the illustration, whether this is due to indefiniteness of the hues referred to by the two words, or to indeterminateness of the
boundaries of ranges of specific shades, if they are used as d-words.) In such a case a rule may be adopted to the effect that "red" and "orange" are incompatible descriptions. We may call this a purely verbal (strong) n-rule.

4.6.3. Such a rule, unlike the one correlating "RED" and "redange", leaves the two concepts it correlates as indefinite as they were without it, for it does not say which objects are to be described as "red" and which as "orange": it leaves borderline cases as undecided as ever. But it does mean that if one makes a decision about the use of the word "red" in some of these cases, then one may be committed to a decision concerning "orange": the two lots of problems about borderline cases may not be settled quite independently. So it rules out the possibility of the truth of some statements, such as "This box is red and orange all over" and the falsity of some others such as "Nothing is red and orange all over at the same time". This will turn out to be important when we come to look for a definition of "analytic", for no definition will do which does not make this last statement analytic in cases where the words are governed by the incompatibility rule under discussion.

4.6.4. Since such a rule does not provide more determinate boundaries to the extension of either word, it might be thought to be a completely useless sort of rule, and so it almost is, for no situation can be described any more precisely after it has been adopted than before. But it does have the advantage of making a "second-order"
concept more definite: the concept of a hue. If we have no way of telling what sorts of things hues are, except by saying that hues are referred to by hue-words, then, if we adopt the linguistic convention that hue-words must be incompatible with one another, this helps to make the concept of a hue more definite, since it has the effect that no two hues may occur together, despite the fact that it does not make any of the individual hue-concepts any more definite. (Compare this with Dummett's example, in Phil. Rev., July, 1959, p.328.) All this may be of some use in enabling us to formulate some scientific theory or other kind of theory about hues in a simple or elegant way, without fear of embarrassing counter-examples in borderline cases. At present I am not concerned to show what the point of such an incompatibility convention might be, so much as to show that there might be such a convention, and thus to illustrate the fact that there is some truth in the claim that "links between descriptive expressions" may have to be described if the full meanings of some words are to be described.

4.0.5. This completes my account of ways in which chapter three contained an oversimplified description of the linguistic conventions giving our descriptive words their meanings. Not all oversimplifications have been pointed out and the description contains many omissions, but it will have to do.

The next chapter attempts to show how it is that once the semantic rules have been adopted, which determine which objects are describable by which words, those words may be combined with other words to form statements which may be true or false.