### **SUMMARY**

A semantic theory of names of the sort which we have attributed to Wittgenstein is to be preferred, on the one hand, to Frege's theory that communication requires mutual knowledge of modes of determining reference, and on the other hand to theories which require reference to be determined by something other than *fit* with the modes of thinking associated with a name.

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# Isomorphic Representation

In this chapter we begin our consideration of the Picture Theory of the proposition, outlining and assessing the interpretation which lies closest to the surface of Wittgenstein's text: namely that sentences represent isomorphically; a relation between two individuals, for example, being represented by a relation between two proper names.

#### 14.1 EARLY INSIGHTS

In January 1913 Wittgenstein wrote a letter to Russell in which he claimed to have made a new discovery: that qualities and relations are all copulae (NB 120–1). Instead of thinking of the state of affairs of Socrates being mortal as consisting of Socrates and mortality linked to one another by a special sort of relation (a two-place copula), he now wishes to analyse it into Socrates and 'something is mortal'. The motivation for the change of view, he says, is that there cannot be different types of things. On his old way of looking at the matter, both 'Socrates' and 'mortal' get treated as kinds of name, and then a theory of types is necessary to explain why 'Mortality is Socrates' is nonsense. But his new analysis, he thinks, renders a theory of types superflous by making it impossible to substitute the wrong way round, since the two symbols are themselves of different kinds.

Here, then, was clear expression of an idea which remains associated with the Picture Theory throughout its development, as we shall see. The problem of sentential significance – of what makes 'Socrates is mortal' significant but 'Mortality is Socrates' and 'Socrates Plato' not – is to be solved by distinguishing between different kinds of symbols, one of which itself is (or contains) a

copula. It is also the earliest expression of the doctrine that logic (and the theory of symbolism generally) has priority over metaphysics, to be discussed fully in MT. For the mistake in the doctrine of the copula, Wittgenstein thinks, is that it then requires the backing of a metaphysical theory of types to explain sentential significance. There is also some suggestion in this early letter that it is a mistake to think of a predicative expression as being related to reality in anything like the way that a proper name is, it being this that gives rise to the illusion that objects and properties are merely different kinds of thing.

By the time of writing the 'Notes on Logic', in September of the same year, Wittgenstein's ideas had sharpened considerably. He now distinguishes between names and *forms* (general indefinables), the proposition 'aRb' being analysed into the names 'a' and 'b' and the indefinable form 'xRy' (NB 98). So he still thinks that it is the relational expression itself which contains the copula. But he also insists, for the first time, that a proposition is a fact (NB 98). This is certainly one aspect of the mature Picture Theory, where it is supposed to be the fact that the elements in a sentence are related to one another in a particular way which enables it to represent a configuration of objects. (See 2.14–2.15, 3.14–3.1432.) Not only this, but he also says that what symbolizes the relation in 'aRb' is not the sign 'R' itself, but rather a relation between the signs 'a' and 'b', of which the sign 'R' forms only a part (NB 99,105). This too is an aspect of the mature Picture Theory. (See in particular 3.1432.)

However this time the ideas are not introduced as providing a solution to the problem of sentential significance, but rather to explain how it is possible for us to understand new sentences, Wittgenstein insisting that there must be general indefinable symbols if it is to be possible for us to understand propositions which we have never heard before (NB 98). This too survives into the mature Picture Theory, since it is said to be the fact that we can understand new propositions without them having to be explained to us which shows that a proposition is a picture (4.015–4.02).

Wittgenstein's doctrine would then appear to be that what symbolizes in the proposition 'Socrates is mortal' is a certain fact, namely the fact that the name 'Socrates' has a certain property (the property of having the sign 'is mortal' written immediately to the right of it). Similarly, what symbolizes in the proposition 'Socrates' loves Plato' is a certain fact, namely that the names 'Socrates' and

'Plato' stand to one another in the relation of being written one on the left and one on the right of the sign 'loves'. The idea is thus that representation is isomorphic, the predicative fact that Socrates is mortal being symbolized by the fact that the name 'Socrates' (itself an individual thing) has a certain property, and the relational fact that Socrates loves Plato being symbolized by the fact that the names 'Socrates' and 'Plato' (again individual things) stand to one another in a certain relation, and so on.

Note that at this early stage, at least, Wittgenstein thinks that both names and forms signify elements of reality (have reference). For he speaks of the relation which figures in 'aRb' being related to the relation R in a way which is in some respects analogous to the way in which a name is related to a thing (NB 99). And in a particularly revealing remark in the 'Notes dictated to Moore', he says that propositions are related to reality by virtue of (a) their names being names of simples, and (b) their relations having quite a different sort of relation to relations (NB 111). (Nothing further is said here about what the 'difference in sort' might be.) So at this stage the doctrine is not just that relational facts, for example, are symbolized by relational facts; it is also that each distinct element in the representation – i.e. the two names, as well as the relation between them – refers to a distinct aspect of reality; namely, to two simple individuals and a relation.

It is easy to see how the thesis of isomorphic representation might help with the problem of sentential significance. For if what symbolizes loving, in 'Socrates loves Plato', is the relation which exists between two names written on either side of the sign 'loves', then it is obvious why 'Loves Socrates Plato' is nonsense. For in this sequence of signs the relation in question simply does not occur. Similarly, 'Socrates Plato' is nonsense because no significance has been attached to the relation which exists between two names when one is written immediately after the other.

It is not nearly so obvious, on the other hand, how the thesis could help solve the problem of the new sentence. For the task here is to explain how we can know the meaning of a previously unencountered sentence in virtue of knowing the meanings of its component parts. Now according to the isomorphism thesis, the component parts of 'Socrates loves Plato' are two names and a relation between them. So I know that 'Socrates' stands for Socrates, that 'Plato' stands for Plato, and that the relation between the two

names stands for the relation of loving. But this does not by itself give me an understanding of the sentence: I must also know that a whole consisting of three such parts says that the things which the names stand for are related to one another by means of the relation for which the relation stands.<sup>2</sup> I must know, in fact, that the sentence purports to be an isomorphic representation: that if I come across a sentence (a fact) in which two names stand in a certain relation to one another, then the sentence will say that the things which the names stand for are related to one another by means of the relation signified by the relation between them.

According to the isomorphism thesis there must then be two distinct aspects to the knowledge which enables us to understand new sentences: on the one hand there is the knowledge of the reference of the component parts of the sentence, the names and relations involved; and on the other hand there is the knowledge that this sentence, like any other, purports to be an isomorphic representation of a fact, saying that the referents of the component parts stand to one another in a manner isomorphic to the arrangement of those parts themselves. Yet this is precisely *not* to solve the problem of the new sentence, which was to explain our understanding of new sentences on the basis of our understanding of their component parts alone.

If we had been allowed to introduce an additional item of knowledge into the explanation like this, then we could have solved the problem of the new sentence without embracing the isomorphism thesis (though we might still have needed that thesis to solve the problem of sentential significance). We could have said that we understand 'Socrates loves Plato' by virtue of knowing (besides the reference of 'Socrates', 'loves' and 'Plato') that whenever a sentence consists of a name of a thing, followed by a name of a relation, followed by a name of another thing, then the whole sentence says that the first thing stands in the relation named by the relation-sign to the second thing. Now admittedly, the extra item of knowledge enabling us to understand 'Socrates is mortal' would have to be rather different. It would have to be the knowledge that whenever a sentence consists of a name of a thing followed by a name of a property, the sentence then says that the thing has the property. So it might be claimed as an advantage of the isomorphism thesis that it reduces the additional knowledge required for understanding new sentences to a single item, the same for all forms of sentence. But this advantage is minor, being comparable to the introduction of a notation which enables us to replace all the different forms of copulae (two-place, three place, etc.) with a single ubiquitous copula. We should still be left claiming that there is more required for the understanding of a new sentence than can be derived from the meanings of its component parts alone, just as the ubiquitous copula would still leave us having to deny (contra Wittgenstein) that predicates and relational expressions are themselves copulae.

The position so far is as follows: as early as the years 1913–14 Wittgenstein had arrived at the thesis of isomorphic representation, developing ideas which were to continue to be associated with the Picture Theory in *TLP*: that a sentence is a fact, and that the expression for the relation in 'aRb' is not the sign 'R' itself, but rather a relation of which that sign forms only a part. These ideas were introduced to subserve two distinct purposes: to solve both the problem of sentential significance and the problem of the new sentence. They can indeed solve the former problem (though we shall return to question the depth of this solution later). But they do not really help us with the latter.

### 14.2 SOME DISTINCTIONS

It is important to distinguish between a weak and a strong version of the thesis of isomorphic representation. For one might hold that sentences are isomorphic representations of facts without holding that every significant element of a sentence must stand in a relation of reference to an element of the fact.<sup>3</sup> In particular, one might accept that it is the relation obtaining between the names in 'Socrates loves Plato', rather than the sign 'loves' itself, which enables the sentence to express the fact that Socrates loves Plato, without holding that the relation between the names itself designates, or refers to, a relation. So from the fact that the Wittgenstein of *TLP* undoubtedly endorsed some version of the thesis, it does not follow that he believed that predicative expressions, like proper names, have reference. It may be that between the years 1914 and 1918 he moved from the strong version of the thesis – believing, as we have seen, that a relation between names serves to refer to a

relation – to the weaker version, endorsing isomorphism without holding that the relation between the names itself refers to the relation obtaining between the things.

It is equally important to distinguish between the isomorphism thesis, on the one hand, and the doctrine that a sentence is a fact, on the other. Consider the possibility of a language containing no proper names but only predicates and relational expressions, individuals being signified by properties of the predicative expressions. For example, there could be a convention according to which differences in the style of script in which a predicate is written would be used to signify the individual being said to possess the corresponding property.4 Thus 'TALL' might say that Plato is tall, 'tall' that Socrates is tall, 'TALLER than' that Plato is taller than Socrates, 'taller THAN' that Socrates is taller than Plato, and so on. With respect to this language the isomorphism thesis would fail, since the fact that Plato stands in a certain relation to Socrates would not be signified by a relation between their two names, but rather by a relational sign possessing two distinct attributes. Yet the doctrine that a sentence is a fact would still be correct. For it would not be the relational sign itself, but rather the fact that it is written in the two distinct styles of script, which would represent the situation in question.

This distinction is important because it turns out to be the doctrine that a sentence is a fact, rather than the thesis of isomorphism (in either of its versions) which really solves the problem of sentential significance. For in the language imagined above, the reason why 'taLL' would fail to constitute a sentence, for example, would be that no significance has been attached to the fact of that word being written in two distinct styles of script. (Just as in English 'Plato Socrates' fails to constitute a sentence because no significance has been attached to the fact of two proper names being written one after the other.) So what makes a sign into a sentence is that it constitutes a significant fact. It can be left open whether or not significant facts must be ones which are isomorphic with the situations depicted.

It might be thought that even the doctrine that a sentence is a fact stands easily refuted by the possibility of codes in which, for example, 'Marmalade' means 'I have passed on the microfilm'. But to this there are at least two effective replies. The first is that the existence of such codes must necessarily be parasitic upon nota-

tions in which sentences are facts, if we are to regain the potentially infinite expressive power of natural language. Only languages whose sentences consist of distinct elements combined in significant ways admit of the possibility of constructing unlimitedly many significant sentences. So we might say that a sentence, if it is to be part of a language with unlimited expressive power, must be a fact.<sup>5</sup>

The second possible reply to the objection would rely on the *TLP* identification of semantic content with logical equivalence. Since 'Marmalade' and 'I have passed on the microfilm' are here logically equivalent, they both possess the very same semantic content. And since the latter obviously contains a more explicit representation of their shared truth-condition than the former, it may be regarded as an anlysis of it. (See *MT* chapter 7 for a discussion of this idea of analysis.) So we could say that any sentence is (essentially) a fact, in that it will always be analysable into a sentence which is *manifestly* a fact.

#### 14.3 ISOMORPHISM IN TLP

We have already noted that there is sufficient textual evidence to find in TLP, not only the doctrine that a sentence is a fact, but also the weak version (at least) of the thesis of isomorphic representation. But there are two quite distinct ways in which the latter thesis could be grounded in the text, depending upon whether we adopt the wide or the narrow reading of Wittgenstein's use of 'name'.

On the wide reading, the elementary sentences which constitute the end-point of analysis (and which consist only of 'names' in immediate concatenation) would contain both proper names and predicative expressions. So here the isomorphism thesis would apply in the manner indicated at 3.1432: what really enables an elementary sentence to represent a relational state of affairs would not be the relational expression itself, but rather the relation which obtains between the proper names involved in the sentence, which exists when they are written on either side of the relational-sign. So on a wide reading of 'name' the isomorphism thesis would be true in precisely the same way for both elementary sentences and the sentences of ordinary language: the relational expressions occurring in such sentences would figure only as parts of relations between proper names.

It is worth recalling just how awkward the wide reading is as an interpretation of many of the crucial remarks of *TLP*. Consider 2.15, for example, which tells us that it is the fact that the elements of a picture are related to one another in a determinate way which represents that things are related to one another in the same way .<sup>7</sup> Given the wide reading of 'name' (in this context 'element') together with the isomorphism thesis, the 'elements' of a picture would include not only the proper names involved, but also the relations obtaining between them. So 2.15 would say that it is the determinate relation obtaining between two names and the relation between them (for example) which represents that two individuals and a relation stand in a determinate relation to one another. This is not only awkward in itself, but looks like a return to the doctrine of the copula; which was, as we have seen, what the isomorphism thesis was originally intended to eradicate.

It is also important to note that on the wide reading, the isomorphism thesis, together with the associated doctrine that a sentence is a fact, must constitute the whole of the Picture Theory. Whereas if the narrow reading is adopted, as we shall see in the next chapter, there is the possibility of finding in the Picture Theory an additional thesis, namely that predicates and relational expressions do not have reference. In which case much may depend upon our assessment of the worth of the isomorphism thesis. If, as I shall argue in the next section, that thesis is relatively trivial and uninteresting, then Charity will provide us with a powerful motive to find some additional interpretation of the Picture Theory if we can – and this will mean adopting the narrow reading of 'name'.

The narrow reading is equally consistent with either of the two versions of isomorphism thesis. But it means that they would apply in a different way to elementary propositions (which consist only of proper names) than to the propositions of ordinary language. In connection with elementary propositions the truth (at least of the weak version of the thesis) would be apparent on the surface. Since such a proposition would consist only of proper names standing in some significant relation to one another, it would be manifest that relations between objects are being symbolized by relations between names. Indeed it would be manifest that both states of affairs and the sentences which describe them consist of individual objects (the same number in each case) standing in some relation to one another, just as the isomorphism thesis requires. This might

then be supposed to reveal to us something of the essence of ordinary propositions, showing that here too (and despite appearances to the contrary) it is relations between names which do the symbolizing, rather than the relational signs themselves.<sup>10</sup>

## 14.14 DEPTH OR TRIVIALITY?

We have already seen how we might construct a language which would represent contramorphically, rather than isomorphically. Objects would be signified, not by individual names, but rather by properties of predicative expressions, through the use of distinct styles of script. And properties and relations would be signified by individual objects (signs), rather than by properties of, and relations between, signs. So the isomorphism thesis cannot be supposed to be a necessary truth about linguistic representation as such. Rather, it will be a contingent – if ubiquitous – fact about natural language.

We might be tempted to wonder whether it is even that. For why can we not turn the *TLP* account of what symbolizes in 'aRb' on its head? What is to prevent us saying that what signifies the relation here is the relation sign 'R' itself, and that what signifies the objects a and b are not the signs 'a' and 'b' themselves, but rather the relational properties which exist when those signs are written in some significant relation to a relational sign? But the answer to this is obvious: there is in fact no one such property in connection with any given name, since there are no rules governing where a proper name must occur in a sentence. What signifies the object b in 'aRb' cannot be the property which the sign 'R' has when 'b' is written immediately to the right of it, since the sentence 'bRa', equally, contains a designation of that object.

So what emerges is that the real substance of the isomorphism thesis is merely this: that in natural language the rules governing the ordering of proper names, predicates and relational expressions in a sentence go along, not with the names, but with the predicates and relational expressions. In general, if you want to know whether or not a string of words constitutes a sentence, then it is no good looking to your understanding of the names involved. Rather, you must look to your understanding of the predicative expressions. For it is to these, rather than to the proper names, that belong the

rules governing what is to constitute a significant ordering of the appropriate number of words in a sentence – the rules which make that ordering, in the relevant sense, a fact rather than a mere string.

However (quite apart from the possible notations imagined above) it appears to be an entirely contingent, inessential, feature of natural language that we have rules of word-order at all. With simple predicates and symmetrical relational expressions anyway, we could have a convention according to which word-order is indifferent – it being equally permissable to write 'a is next to b' or 'b a is next to'. All that would be required to constitute a well-formed sentence would be that the appropriate number of names and predicative expressions should occur in some immediate linear relation to one another – which removes all temptation to think that there is something special about predicative expressions.

It might be felt that things are different when we consider directional relational expressions. Of course we could have a convention on which we could write indifferently 'a loves b', 'a b loves' or 'loves a b'. But it might be thought that some convention governing the relative ordering of the names 'a' and 'b' would be needed to show direction of the relation. However, we could in fact get by equally well with the use of active and passive suffixes to the proper names. <sup>12</sup> Then both 'a<sub>a</sub> loves b<sub>p</sub>' and 'b<sub>p</sub> a<sub>a</sub> loves' would say that a loves b. So once again there would be no motive to single out the relational expression for special treatment.

I suspect that the reason why we have conventions governing word-order at all, in the construction of simple atomic sentences, is that in spoken language we use such conventions in lieu of punctuation — it helps us to know when one sentence ends and another begins. And although there must be some convention to show which words go with which in the construction of complex sentences, we might be able to get by with a simple 'proximity convention' — words which occur together belonging together. (On this convention 'Ate John big apple' would be simply ambiguous between 'Big John ate an apple' and 'John ate a big apple'.)

There are thus two respects in which the isomorphism thesis is merely contingent. Firstly, it is contingent that we use individual signs to designate individual objects, rather than using properties of other signs (such as styles of script) to perform that function. Secondly, even given the use of individual proper names, it is contingent that we employ rules of word-order, and so contingent

that relations get represented by relations between names, rather than by the relation-signs themselves.

## **SUMMARY**

A weak thesis of isomorphic representation, at least, is endorsed in *TLP* (entailing the more general doctrine that a sentence is a fact). But if this is all that there is to the Picture Theory of the proposition, then that theory is almost devoid of philosophical interest.

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sentences, such as 'Aristotle was fond of dogs', which contain no modal terms (ibid. p. 11). He says that the issue concerns the truth-conditions of such sentences with respect to counter-factual situations (ibid. p. 12). But I agree with Dummett that there is no way for someone to manifest grasp of such truth-conditions except in judgements where the simple sentence occurs within the scope of a modal operator. See his (1981b), pp. 571 and 582.

17 This defense of description-theories has been employed, in rather different ways, by Dummett (1981b), pp. 557–600, and Noonan (1979).

18 Burge gives a similar explanation of rigidity to that given here. See his (1979), p. 413. See also Noonan (1979).

19 This point is also sufficient to undermine A. D. Smith's argument in his (1984), pp. 186–7, which attempts to attack description-theories by showing that names refer to the very same individuals with respect to all counter-factual situations, even in a language containing no modal operators. He claims very plausibly that when speakers of such a language are first introduced to modal operators it would not need to be explained to them that such operators always take narrow scope with respect to a name. But this does not show that reference is not determined by fit with the descriptions which speakers associate with names. For if they know that it is not a requirement for them to understand one another that they should all associate with those names the same modes of thinking, then they will automatically take names as having wide scope with respect to modal operators. For they will see that they would otherwise be constantly at risk of misunderstanding one another.

However I agree with what is in fact the main thesis of Smith's paper, that the important thing about names is not their behaviour in modal contexts but rather that they are what he calls 'purely referential' (ibid. p. 190) – if this just means that their semantic content is exhausted by their bearers. But it does not follow from this that reference is not determined by fit.

20 See Kripke (1980), pp. 83-92.

It also is sufficient to counter one of the main arguments of his (1979), involving the premiss that speakers will often have only an indefinite description to associate with a name, for example 'Tully was a famous Roman orator'. (See Margalit, 1979, p. 246.) For there is in fact a further (definite) description here, namely 'The person referred to as "Tully" by those from whom I acquired this use of the name'.

A similar suggestion can solve the problem of Pierre who learns 'Platon' in France as the name of a Greek philosopher and learns 'Plato' in English with the same (indefinite) identification, subsequently asserting both 'Platon était chauvre' (Plato was bald) and 'Plato was not bald' (ibid. p. 260). There need be no contradiction in Pierre's beliefs if in the first case he believes that the man called 'Platon' by those from whom he acquired this use of the name was

bald, whereas in the second case he believes that the man called 'Plato' by those from whom he acquired this use of that name was not bald.

22 See Evans (1982), ch. 11.

23 For further development and defence of a view of this sort in connection with demonstratives, see my (1987a).

24 As before, such a description is implied by the producer-sense of a

name, rather than being identical with it.

25 The proposal made here is sufficient to handle Donnellan's example (Davidson and Harman, 1972, p. 368) of the man who introduces the names 'Alpha' and 'Beta' to refer to each of two similar squares visible before him on a screen, when unknown to himself he is wearing spectacles which invert his visual field. For then even if he believes Alpha to be the upper square he is in fact referring to the lower, since it is the lower square through acquaintance with which he acquired this use of the name 'Alpha'.

#### CHAPTER 14 ISOMORPHIC REPRESENTATION

- 1 This does not mean that the concern with sentential significance has been dropped, however. On the contrary, in the 'Notes dictated to Moore' of April 1914 Wittgenstein explicitly deploys a fact-analysis of propositions to explain the impossibility of wrong substitutions (NB 115).
- 2 Thus Stenius, who has been foremost in interpreting the Picture Theory as expressing the thesis of isomorphism, says that there are two aspects to the understanding of a sentence: there is knowledge of the 'key of interpretation' (which elements in the sentence stand for which elements in reality), and there is the general knowledge that the sentence, like any other, is intended to represent isomorphically. See his (1960), pp. 91–9.

3 This would then be isomorphism, not in the sense of 1–1 correspondence of parts, but rather in the sense that states of affairs of a given type (e.g. relational ones) would be symbolized by sentences belonging

to the same type.

4 There could be a similar convention governing spoken discourse, perhaps relating to the tones of voice with which predicates and relational expressions are spoken. Of course either form of language would suffer from severe practical limitations, since there may be many more things that we want to refer to than there are distinguishable styles of script or tones of voice. But all this shows is that such languages would have to use one and the same name for a variety of different individuals (as natural language in fact does), leaving it to the context to disambiguate the different uses.

5 Many, of course, regard this as the defining characteristic of genuine language. The later Wittgenstein apparently disagrees – see PI 2.

6 This is the line taken by Stenius in his (1960).

7 Only if the wide interpretation is adopted can 'in the same way' be read as literal identity. Otherwise a spatial picture, for example, would be incapable of depicting anything other than spatial states of affairs. If we adopt the narrow interpretation, then 2.15 has to be read as saying that the elements in a picture and the individuals in the state of affairs depicted are related to one another in an analogous way (by means of a relation allowing the same 'degrees of freedom'). The original German literally says 'represents that things are so combined with one another', which is ambiguous between identity and likeness.

8 This is not strictly accurate. There are also the suggestions made by Pears, that Wittgenstein found the analogy with pictures illuminating in bringing out why a sentence cannot represent its own mode of representation (see his 1987, p. 143), and by Anscombe, that the analogy helps us to understand propositional negation (see her 1959, ch. 4). No doubt these ideas are present in the Picture Theory – like any fruitful metaphor, one would expect this one to be many-faceted. But each of the above suggestions is consistent with either the wide or the narrow reading of the *TLP* terminology of 'name' and 'object', and so cannot help us in choosing between them.

9 Note that if Sellars is right, then 'relations between names' would include, as a limiting case, a proper name signifying by means of some significant property of itself that a Simple possesses a non-relational attribute. See the discussion in ch.11, and Sellars (1962a).

10 This is the interpretation offered by Long in his (1969).

This gives us the sense in which predicative expressions carry with them the form of the sentences in which they can occur, which makes it natural for Wittgenstein to speak of such expressions as 'forms'. See the discussion and notes in ch. 11.

12 I am told that something like this possibility is realized in Latin.

## CHAPTER 15 THE PICTURE THEORY

- 1 It is here that he mentions the use of models in the Paris law-courts to represent accidents.
- 2 Let me stress the very close proximity to one another of these two strands in the text of NB. This is in marked contrast to the passage which Pears selects as setting the problem which the Picture Theory is designed to solve, which does not occur until a full month after the introduction of the comparison with pictures (see Pears, 1987, pp. 117 and 130). This is at NB 21 where Wittgenstein writes thus:

This is the difficulty: How can there be such a thing as the form of P if there is no situation of this form? And in that case, what does this form really consist in?

Pears sees the difficulty in question, as arising for the theory of judgement developed by Russell in his 1913 manuscript 'Theory of

Knowledge' (now published in his 1984), which Wittgenstein had seen. There Russell had claimed that judgement requires acquaintance not just with the things for which the individual words in a sentence stand (namely individuals and universals), but also with logical forms. So the judgement [that aRb] would require acquaintance with a, b, the relation R and the logical form  $\emptyset \alpha \beta$ . Pears claims that the Picture Theory is designed to refute such a view.

There are a number of points to be made about this. The first is that when Wittgenstein speaks of 'form' in the above passage it is by no means obvious that he has in mind something of the same sort as  $\emptyset \alpha \beta$ . For there is the evidence of the 'Notes on Logic', where he speaks of 'xRy' (i.e. a relational expression) as being the form of the sentence 'aRb' (NB 98). And as we saw in ch. 11, there is some reason to think that this use continues into TLP itself. So the difficulty raised in the passage above might not be a difficulty for Russell, but rather the problem of what the relation (the form) in 'aRb' is to stand for in a case where that sentence is false. On this see the discussion in the next section of this chapter.

No doubt Pears is correct that Wittgenstein rejects the existence of forms such as  $\emptyset \alpha \beta$ . For this is the same as saying that he denies the existence of copulae (see the next section of this chapter). But it is quite another matter to characterize the point of the Picture Theory in such terms. Indeed it is hardly very likely that Wittgenstein would have given such prominence to the theory, if its point had been to refute a doctrine whose falsity he was able to see at a glance. (See Blackwell, 1981, p. 16ff, for an account of Wittgenstein's reaction to 'Theory of Knowledge'.)

3 But it seems that he himself did not immediately appreciate their significance. For in the very last remark relating to the Picture Theory which occurs in NB, dated April 1915, he laments that he cannot even bring out the sense in which a proposition is a picture, and says that he is almost inclined to give up all his efforts (NB 41).

4 This would be the relation which holds between two names and a relational expression when one of the names is followed by the relational expression which is followed by the other name.

5 This regress is, of course, just another version of the regress generated by any version of Platonism about universals which construes participation in a universal as being yet another universal.

6 Much of the reasoning in this paragraph is implicit in Wittgenstein's January 1913 letter to Russell (NB 121).

- 7 To get around this problem we might try equating the reference of a significant relation with a set of relation-tokens. But this would run into trouble over the principle of Semantic Ordering. (This is the principle that sense determines reference which determines truth-value see ch. 2). The argument to show this is essentially the same as that developed in the next chapter against the view that the reference of a predicate is a set of objects.
- 8 This example is similar to one of Wittgenstein's own see NB 20-1.