

follow. Firstly, differences between symbols with the same *Bedeutung* are said to be inessential. This doctrine, together with its consequences, will be discussed in chapters 5, 6, and 7, and again in chapters 12 and 13. Secondly, there is no place in the semantics of *TLP* for senses which are not the senses of some sign or other, as the very use of the terms 'symbol' and 'proposition' indicates; whereas for Frege on the other hand, senses have necessary existence, independent of the existence of any language. We shall return to this in chapters 8 and 9. Then finally: for Wittgenstein, unlike Frege, not all *Bedeutungen* are items in the real world. We shall consider this idea in connection with predicative expressions in chapters 15 and 16.

 5

Essential Sense

As we argued at the outset, the proof of an interpretation lies in its fecundity, enabling us to make sense of the text under study. The task of the present chapter is to explain why Wittgenstein might have held both that language can contain a variety of signs with different senses but the same *Bedeutung*, and yet these differences are in some way inessential.

5.1 CONDITIONS FOR COMMUNICATION

One clue to the significance of this combination of views is provided by 4.024, which tells us that to understand a proposition means to know what is the case if it is true. We might initially be tempted to interpret this as a remark about idiolectic understanding, emphasizing once again that a speaker's understanding of a sentence is directed towards truth and away from falsehood. But the remarks which follow suggest, on the contrary, that what is at issue is understanding the statements of another. Thus 4.025 is about translating from one language to another, 4.026 speaks of using propositions to make ourselves understood (i.e. to another person), and 4.027 and 4.03 speak of the use of propositions to communicate. This suggests that 4.024 should be read as saying that to understand – to know the semantic content of – the statements of another, is to associate the very same truth-conditions with those statements as they do (i.e. not necessarily the same cognitive content). This reading is then confirmed by 4.03, which says that a proposition must use old expressions to communicate a new *Sinn*, suggesting that what is communicated is not, as Frege would have it, the thought expressed (the cognitive content), but rather the truth-condition.

In order to see what is going on here, we need to recall the main

features of Frege's theory of sense, which can be summarized in the form of four separate theses:

- 1 Sense is the immediate object of idiolectic linguistic understanding – it is the way in which individual speakers understand the signs that they use.
- 2 Sense determines Bedeutung – it is in virtue of the manner in which a speaker understands it, that a sign comes to make its contribution to the truth-conditions of sentences.
- 3 Sense is cognitive content – its identity-condition is sameness of information content, and two sentences express the same sense for a given speaker if and only if the person cannot believe the one while doubting the other.
- 4 Sense is semantic content – knowledge of it is required for understanding the speaker's native language, and mutual knowledge of it is that in virtue of which speakers can communicate with one another.

I submit that Wittgenstein is accepting the first three features of Frege's theory, but rejecting the fourth.

In the last chapter we saw that there is a textual basis for attributing theses 1 and 2 to Wittgenstein, his notion of a symbol (and of a proposition) involving the idea of there being a manner in which speakers project their signs onto the world. We can thus see him as claiming that any sign must have associated with it a mode of projection (a sense) in the idiolect of each individual speaker. Now I know of no passage where he explicitly lays down identity-conditions for symbols, but the images used – of a 'method of projection' (3.11) and of a 'way of signifying' (3.321) – strongly echo those of Frege himself. So it is not unreasonable to take Wittgenstein as being committed to thesis 3 as well. But as we have also seen, he relegates differences in modes of signifying to the realm of the inessential in language (so long as the *Bedeutungen* signified are the same). This can easily be understood if we assume that he takes communication to be of the essence of language. For then we can see his remarks on communication as denying that in order to understand the statements of another you have to know the particular mode of projection employed. On the contrary, knowledge of the truth-conditions will suffice.

I thus interpret the *TLP* contrast between what is essential

(*Bedeutung*) and what inessential (differences of symbol) in language, to be denying that mutual knowledge of modes of determination of *Bedeutung* is required for communication (which would have required mutual knowledge of cognitive content, in virtue of the identity conditions for sense). So differences in symbol (in the mode of projection employed) are inessential from the point of the view of successful communication. What is essential is not the thought expressed (not the sense which the sign expresses in the speaker's idiolect), but rather the truth-condition represented. Wittgenstein's thesis is that, at least in the case of non-atomic (compound or general) sentences, two speakers may be said to understand one another in the use of such a sentence if and only if they know each other's use of it to be at least logically (analytically) equivalent¹.

The position could be expressed somewhat loosely (as Wittgenstein does at 5.141) in the claim that all logically equivalent sentences express the same proposition (say the same thing)². Alternatively it could be expressed by saying that the semantic content of a sentence is a division within the set of all possible worlds, between those in which the sentence is true and those in which it is false – all sentences which effect the same division having the same semantic content. But note that speakers would not be supposed somehow to have a direct cognitive grasp on a set of possible worlds. On the contrary, their grasp would be effected, in each case, by the sense which they attach to the sentence. It is simply that two speakers may be said to attach the same semantic content to a sentence so long as it would, in their respective idiolects (cognitive content) be true in just the same possible worlds; and they may be said to understand one another provided they know this to be the case.³

Although I have been explaining the essential/inessential contrast in connection with the requirements for successful communication, this is in fact only a more visible manifestation of something which is equally true at the level of the individual idiolect. For what matters to me about my own thoughts is not the particular way in which they represent what they do, but rather *what* they represent and whether what they represent is in fact the case. For example, I should not be greatly concerned to learn that, as a result of some mental defect, I am continually shifting the senses (cognitive contents) of the expressions of my idiolect, but in such a way as to preserve logical equivalence (i.e. in such a way as to preserve

semantic content). So long as I can hold onto *what* my thoughts express, it is of small importance whether or not I am capable at later times of recovering the particular manner in which they express what they do.

We have thus, on the current interpretation of *TLP*, a disagreement between Frege and Wittgenstein concerning the essence of linguistic communication (whether the communication be with oneself over time or with another person). Frege believes it to require mutual knowledge of sense (of cognitive content), whereas Wittgenstein denies this, claiming that it requires only mutual knowledge of truth-conditions (*Sinn*). We must now consider which of them is right. I shall confine the discussion to the understanding of molecular and general sentences and of predicative expressions, holding over consideration of names to chapter 12.

5.2 THE POINT OF COMMUNICATION

The *TLP* account of communication is intuitively more plausible than the Fregean. Consider the following example. Suppose that I have been introduced to the sentential connective in 'P or Q' by means of its equivalence with ' $\neg(\neg P \ \& \ \neg Q)$ ', and that I always rely upon that definition in particular cases. You, on the other hand, have been introduced to the connective in the usual way, perhaps by means of the standard truth-table. Now suppose that you say to me 'It will either rain today or tomorrow'. Do I understand you? Frege is committed to denying that I do, since the sentence will have different cognitive contents in our respective idiolects. (It is of course possible for someone to understand both 'P or Q' and ' $\neg(\neg P \ \& \ \neg Q)$ ', where both are understood in terms of the truth-table definitions of the connectives, without realizing that they are equivalent.) But at the very least, we lack any convincing reason for going along with Frege here. Intuitively it would seem that we do succeed in communicating.

However it is generally unsatisfactory in philosophy to remain at the level of intuitive plausibility.⁴ For one thing, people's intuitions can conflict. For another, even if we manage to reach agreement we should only have learned something about ordinary English usage. What is really required is some account of the function and importance of the concept under investigation. For of course our classifi-

cations do not exist in a void, but are always connected with some interest which we have. So simply to describe our intuitive grasp of a concept can provide no insight into why it is that we employ that mode of classification rather than another. Moreover there is always the possibility that our actual concept may diverge, to greater or lesser extent, from the one which would be in accord with the point of our making such a classification in the first place. So the real question is not what our concept of communication actually is, but what it should be. Our most basic task is an instance of the doctrine I call 'conceptual pragmatism': it is to elucidate the purposes which lie behind the contrast between communicating and failing to communicate, so that we may see which concept would be most appropriate.

Thus when we say that knowledge of semantic content is what is required for mutual understanding through the use of language, just what purpose is it that is to be subserved? What purpose is it that communication itself subserves? Clearly, at least a partial answer is that it is communication which enables us to acquire new beliefs through the statements of other people. In normal circumstances a statement will provide its audience with some reason to believe what is asserted; and it is obvious that one can only safely make an addition to one's stock of beliefs if one knows *what* has been asserted. So from this perspective the notion of semantic content, and of mutual understanding, will be given to us as: whatever a person needs to know if they may be confident in relying on the statements of another person in making alterations to their own stock of beliefs. But this can only take us as far as: understanding requires mutual knowledge of *material* equivalence. If I could somehow know that sentences in my idiolect always have the same truth-values as they do in yours, then each of your statements would give me reason to add to my own stock of beliefs.

It might be said that the only way in which two speakers could know their idiolects to be such that their respective tokens of the same sentence types do always share the same truth-values, would be for them to know at least that they are logically equivalent. But this is not necessarily so. For example, suppose that we provide Mary, who is completely colour-blind, with a hand-held machine for detecting colour. It is sensitive to wavelengths of light between ultra-violet and infra-red, and vibrates in the hand with an intensity proportional to the wavelengths being received from the direction

in which it is pointed.⁵ We then teach Mary how to use the machine, providing what are in effect ostensive definitions for the use of the colour words. Then by 'is red' Mary will mean something like 'is an object which causes the machine to vibrate like *this*'.

It is clear that Mary and any normally sighted speaker would have every reason to suppose one another's understanding of sentences involving colour words to be materially equivalent (at least in transparent contexts).⁶ Indeed they could use one another as reliable sources of new information: an assertion of Mary's that something is red would give other people reason to make an addition to their stock of colour beliefs, as expressed in their own idiolects. Yet I think we should be intuitively inclined to deny that Mary and the others would really succeed in understanding one another.⁷ But this intuition will be of little importance unless it can be grounded in an account of the purpose of communication which goes beyond the acquisition of new beliefs.

There is in fact more to communication – even of that form of communication whose sole concern is truth – than the bare exchange of information. Factual communication is not simply a matter of swapping statements. We also challenge (demand evidence for, or provide arguments against) the statements of others, and attempt to justify our own. Since it is a matter of common experience that people often say what is false, we cannot reasonably add everything which they say to our own stock of beliefs. Indeed the point subserved by mutual understanding is surely the acquisition of *rationally grounded* beliefs. In which case communication will require a shared conception of what is to count as a rational ground. There will then have to be more to mutual understanding than merely knowing what alterations the statements of another give one (weak) reason to make within one's stock of beliefs. One must also have sufficient knowledge to mount a challenge to the statements of others, and to provide evidence which will be an attempted justification of one's own. This will require at least mutual knowledge of logical equivalence. For only thus will any challenge which I mount actually be a challenge to the statement as you understand it, and any evidence with which you respond be evidence for the statement as *I* understand it.⁸

Thus if, in our example above, I try to challenge Mary's statement that a certain object is green by saying 'How do you know, you have not even looked?', this simply is a not a challenge to the

statement as she understands it. Not only that, but the question will be unintelligible to her, leaving her unable to see what possible bearing it might have on the statement which she made. Nor *will* she be able to see this in advance of knowing something of my method for determining the extension of 'green'. Moreover, if she does reply 'I have had my hand pointed at it all the time', then this is no justification for the statement as *I* understand it.

We have reached an account of the point of communication which supports the *TLP* position. Since our basic purpose is to acquire rationally grounded beliefs we require sufficient mutual knowledge to facilitate the giving and receiving of reasons. This in turn seems to require (at least in the case of non-atomic propositions and predicates) mutual knowledge of logical equivalence. Which is to say: the identity-condition for semantic content should (in these cases at least) be sameness of truth-condition, or of contribution to truth-condition.

5.3 THE ESSENCE OF LANGUAGE

There is an obvious rejoinder to the argument we have sketched on Wittgenstein's behalf. It is that there is a great deal more to language, and our use of language, than mere fact-stating and the attempt to acquire rationally grounded beliefs. We also: give and obey orders, tell stories, make jokes, solve problems in arithmetic, thank, curse, greet and pray – to name but a few of our linguistic activities.⁹ Would not each of these have to be considered before we could pronounce upon what is essential for communication in general?

To this rejoinder Wittgenstein has a reply: it is that factual discourse (and only factual discourse) belongs to the very essence of language and linguistic representation.¹⁰ The exact form of this reply, and the arguments supporting it, will be considered in detail in chapter 7. Here let us note only that the claim is at any rate plausible. For we can surely imagine a language in which people never give one another orders, nor tell stories, make jokes, curse, greet, or pray. But can we conceive of a language without a factual component? We might perhaps, at a stretch, be able to imagine a language with no assertoric mood, in which people never try to communicate their beliefs to one another. Perhaps they only ever

issue orders. But for anyone who holds that thinking is essentially language-involving (as I shall argue in chapters 8 and 10 Wittgenstein does), it surely follows that such people must at least use language assertorically in the context of their own private thoughts. The idea of an agent who is intelligent enough to possess a language, but who never uses it to formulate hypotheses, or to represent to themselves some aspect of the real world, is surely unintelligible. For these activities belong to the very essence of rational agency. An organism which made use of public signs, but which was incapable of using those signs in the context of its own thinking, must surely fail to have the background of intentional structures necessary to count as a genuine language-user.¹¹

5.4 INDIRECT DISCOURSE

We may confine ourselves now to questions concerning factual discourse. Having reason to move from material to logical equivalence, is there any reason for narrowing our concept of semantic content still further, insisting that communication requires, in addition, mutual knowledge of cognitive content? One argument sometimes suggested, and attributed to Frege, is that one needs such a concept of semantic content to serve as the reference of expressions within opaque contexts, such as reports of belief.¹²

The issue is complicated, because there are in fact two quite different perspectives that we can (and do) take towards descriptions of propositional attitudes. Sometimes our interest in the matter is belief-acquisitive, being closely analogous to the interest which we take in the statements of others. Being told what someone believes can give me reason to make an alteration within my own beliefs about the topic their belief concerns, just as can someone's outright assertion on the matter. If Mary is something of an amateur meteorologist, and you tell me 'Mary believes that it will rain either today or tomorrow', then you give me some reason to add such a belief to my own stock. From the standpoint of this perspective, it is of no importance whether or not the report of Mary's belief respects the exact cognitive content of her mental state. All that matters is that it should convey the correct truth-condition. For example, if you had chosen to describe Mary's belief by saying 'She believes that it isn't the case that it will neither rain

today nor tomorrow' then you would not, in such a context, have said something false, despite the fact that Mary herself might have denied holding any such belief (that is, because she fails to notice the equivalence between the two). Indeed, as we shall see in chapter 13, it is reports of belief made from this perspective which are *de re*.

The other kind of interest which we take in descriptions of propositional attitudes is explanatory.¹³ Often we wish to know what someone believes because we seek an explanation of some aspect of their behaviour. Here it will generally be crucial that the description should convey the precise cognitive content of the subject's belief, and not just its truth-condition. For this may make all the difference if their behaviour is to be rendered intelligible. For example, Mary may both be taking steps which presuppose precipitation in the near future, and yet reply in negative to the question 'Do you think that it is not the case that it will neither be wet today nor tomorrow?' This combination will be explicable only if we report the content of her belief by saying 'She believes that it will either be wet today or tomorrow'.

Now it is perfectly true that from the explanatory standpoint a description of a propositional attitude can be accurate, and be expressed in the form of a simple that-clause, only if the cognitive content which we attach to the sentence within the that-clause is the very same as the content of the subject's propositional attitude. But it does not follow that failure in this respect would mean that we should fail to understand the person if they were to assert that sentence directly. For it may be that one needs to know more to understand an opaque occurrence of a sentence than suffices for understanding its transparent use, just as one arguably needs to know more about the word 'black' to understand 'That was a black day for me' than one does to understand 'The dog is black'.¹⁴ And indeed there is every reason to believe that this is the case, given that the function of communication, in transparent contexts, is to facilitate the acquisition of rationally grounded beliefs about the world.

What is true is that because of their shared background of linguistic practices and explanations, the idiolects of the speakers of a natural language will in many cases coincide. Where this can reasonably be assumed, it may then be exploited in describing the precise content of someone's belief. But it is not true that precise description can *only* be given in such a manner. To revert once

again to our earlier example, if you wished to convey to a normal person the precise content of the belief which colour-blind Mary would express by saying 'That tulip is red', you obviously could not use the statement 'She believes that it is red'. But you could say something rather more complicated, like 'She has a belief concerning that tulip, where the content of the predication is given to her in virtue of her colour-detecting machine vibrating in her hand with its least intensity'.

I suggest that we in fact operate with the following convention governing ascriptions of belief made from the explanatory standpoint: in cases where we may reasonably assume that we attach shared senses to a sentence, placing that sentence within a clause of the form 'A believes that. . .' is to be understood to ascribe to the subject a belief with the cognitive content which that sentence has for us all. But there is nothing in this suggestion to force us to say that understanding, in general, requires mutual knowledge of cognitive content.

5.5 EASE OF PERSUASION

One further motive for adopting a narrower conception of semantic content would be this: only if we share mutual knowledge of cognitive content can I be confident that any evidence which I provide for the truth of my statement, or any challenge which I mount to the truth of yours, will immediately be recognized as evidence, or as a challenge. Thus suppose I object to your statement that P, by drawing your attention to the fact that not Q, where P implies Q. Only if we both attach the same cognitive content to the sentence 'P' can I be confident that you will immediately recognize, as I do – without the need for any sort of demonstration – that the truth of 'P' is inconsistent with the falsity of 'Q'. Only if this is so can I be confident that you will immediately see the relevance of what I at say, and recognize my challenge as such.

However, Wittgenstein could reply, and with justice, that we have here left the realm of the theory of meaning and have entered the province of psychology. The point of communication surely cannot lie in its guaranteeing me the ability to convince anyone of the truth of my (true) beliefs, if only because nothing *could* provide such a guarantee. Even mutual knowledge of cognitive content cannot guarantee that any challenge, or any proof, will immediately

be recognized as such. For it my challenge takes several steps – with our mutual knowledge of cognitive content ensuring that you see the relevance of what I say at each step – you may still be unable to recognize the totality of what I say as a challenge to your belief. It is a familiar fact that one can be convinced by every step in a proof and yet fail to be convinced by the whole, precisely because one is unable to command a clear view of the whole.¹⁵

It is undoubtedly the case that mutual knowledge of cognitive content may ease the passage to conviction. But the point of making statements is to convey how things stand in the world, and to provide our beliefs about the world with a rational ground. Whereas what I should learn, when I come to know the cognitive content you attach to a sentence, would not be anything relevant to the acquisition of knowledge about the aspect of the world with which that sentence is concerned, but rather a truth about you. I should learn in what circumstances you might be surprised to be told of the truth of the sentence, in what circumstances you must see its truth straight away, and so on. Such knowledge surely plays no essential part in factual communication, unless of course (as in reports of belief from the explanatory standpoint) it is to be exploited to convey the precise cognitive content of someone's propositional attitude. Rather, what is important in factual communication is that it should be guaranteed that the evidence which I provide for the truth of my statement (as I understand it) should be evidence for the statement as you understand it, even if you cannot immediately see it as such. Just how easy it turns out to be to get you to see the relevance of what I am saying, is a comparatively trivial matter of psychology, having to do with convenience rather than with essentials.

SUMMARY

We have provided an interpretation of the *TLP* idea that differences in Bedeutung (and hence of Sinn) are differences in what is essential, whereas differences in symbol are inessential. It contains an important criticism of Frege's theory of sense. Wittgenstein is acknowledging that every speaker must employ some mode of projection of the Sinn of each sentence, but is denying that mutual knowledge of modes of projection is necessary for communication. All that really matters is mutual knowledge of truth-conditions (Sinn).

many of them are suspect, in that they make unreflective use of Wittgenstein's early Notebooks and later writings to establish claims about *TLP*. Moreover many of the passages in *TLP* which he cites, in fact do not obviously support his case. For example, he cites 3.3 in support of the claim that every Satz has Sinn (which he translates as 'sense'), when 3.3 merely says that *only* Sätze have Sinn (ibid. p. 46). And he cites 5.143 in support of the claim that tautologies and contradictions are not Sätze, omitting from his quotation that 5.143 says that 'in a manner of speaking' contradictions vanish outside all Sätze (ibid. p. 48).

7 In addition to the evidence mentioned above, it is worth also noting 3.13, where Wittgenstein writes: '(The content of a proposition' means the content of a proposition that has Sinn.)' The qualification here is redundant unless there can be propositions which lack Sinn (and so lack content). Note also 5.5351, where Wittgenstein uses 'non-proposition' in such a way as to imply that non-propositions are nonsensical sentences, as opposed to those which are merely senseless (such as contradictions and tautologies).

CHAPTER 5 ESSENTIAL SENSE

- 1 Since the *TLP* thesis is that the semantic contents of names are exhausted by their bearers, and since names are rigid designators (referring to the same individuals with respect to all possible worlds) it might be suggested that the *TLP* account of semantic content can be characterized in terms of logical equivalence for all categories of expression without restriction. For then if two names have the same bearer (and so the same semantic content), sentences which differ only in that the one has been substituted for the other will share the same truth-value with respect to every possible world. Note, however, that such an equivalence is metaphysical rather than conceptual or analytic – having to be established by empirical investigation. Whereas the argument which I shall give shortly would only warrant equating sameness of semantic content (for expressions other than proper names) with analytic equivalence. So it is better to characterize the *TLP* position by saying that understanding requires mutual knowledge of truth-conditions – where two names make the same contribution to truth-conditions just in case they have the same reference, whereas all other types of expression make the same contribution to truth-conditions just in case they are analytically equivalent.
- 2 This is loose because, in the normal terminology of *TLP*, propositions are sentences with their modes of projection (their Fregean senses), and propositions can be distinct from one another whilst being logically equivalent.
- 3 This my reply to the charge Dummett makes against the Wittgenstein of *TLP*, that by taking sameness of Sinn to be given by analytic

equivalence he is prevented from giving any account of linguistic understanding (see Dummett 1973, pp. 633–4). On the contrary, Wittgenstein's contribution lies in distinguishing sharply between speaker understanding (idiolectic sense) and the knowledge required for communication (semantic content). It is only the latter which may be characterized in terms of analytic equivalence.

- 4 I owe the ideas expressed in this paragraph to Dummett. See his (1978), pp. 3 and 435. For further discussion see my (1987b).
- 5 This example ought properly to be somewhat more complicated, since there is no simple correspondence between perceived colours and wavelengths of light. But this in no way affects the point being made.
- 6 Note that their understandings are certainly not more than materially equivalent. They are not even causally equivalent, since if the machine malfunctions their correct usage will diverge.
- 7 It is crucial to this example that neither of the parties should know the position the other is in. For it is designed to be a case in which speakers know nothing beyond the material equivalence of one another's statements. It is of course a truism that two people can, in general, attach different contents to a given expression and yet still understand one another in its use, in virtue of knowing the content which the other attaches to it.
- 8 Note that the argument given here suggests that the notion of logical equivalence involved in the account of semantic content should be explicated in terms of analytic, as opposed to metaphysical, necessity. For only so will speakers who attach the same semantic content to an expression possess a shared conception of what is to count as a reason for or against their statements involving it, in advance of exchanging further information. So someone who understands 'water' as a definitional equivalent of 'H₂O' (perhaps a foreign laboratory technician), and someone who understands it in the usual way, ought not to be counted as communicating successfully by means of statements involving the term 'water', despite the fact (if Kripke and others are correct) that water is necessarily H₂O.
- 9 The alert reader will have noticed that this list is culled from *PI* 23.
- 10 Wittgenstein can reply similarly to quite another sort of objection, that discourse (including factual discourse) is governed by conventions of conversational implicature which require, for their operation, mutual knowledge of cognitive content. He can, while acknowledging the existence of such conventions, claim with some plausibility that they do not belong to the essence of factual communication. But in any case it is by no means obvious that such conventions really do require mutual knowledge of cognitive content. For example, one convention seems to be that less information should not be provided on a given topic than can easily be done. Thus if my mother asks me about my love-life and I reply that I have a girl-friend when in reality I have several, then I may be said to have spoken misleadingly, despite the fact that what I said was literally true. But the notion of 'information'

- here is not especially cognitive, being characterizable rather in truth-conditional terms.
- 11 This may be taken as a criticism of the simple one-word imperative language-games of the early sections of *PI* if, as seems plausible, Wittgenstein's intention is that these are the only uses of signs in which the players engage.
 - 12 See the account of opacity which Frege provides in 'On Sense and Reference'. (See for example Frege, 1984.)
 - 13 In fact there are yet other perspectives on descriptions of propositional attitudes not relevant to the present issue, such as the one I characterize in my (1987b) as 'The Practical Reasoner's Perspective'.
 - 14 I intend to take no particular stance here on the semantics (or lack of semantics) for live metaphors, since this metaphor would appear to be dead.
 - 15 This is an idea which plays an important part in Wittgenstein's later philosophy of mathematics. See the discussion of surveyability in Wright (1980).

CHAPTER 6 SENSE AND NONSENSE

- 1 See his 'Function and Concept' in Frege (1984).
- 2 See for example Frege (1984), p. 193.
- 3 See Frege (1984), p. 147. Roger White first pointed this remark out to me.
- 4 Although I originally owe this suggestion to Tim Williamson, I have since found just such a purely-causal account in Favrholt (1964), p. 142, in the course of which he likens philosophical propositions to bird-song!
- 5 This suggestion is made by Hacker in his (1986), p. 26.
- 6 Just such a view is taken by McDonough, who argues that the tautology ' $P \vee \neg P$ ' does not really contain the symbols for negation or disjunction, nor the proposition P , at all. See his (1986), pp. 81–9. This goes too far, making it difficult to keep track of the distinction between nonsense and senselessness. McDonough is correct in attributing to Wittgenstein the view that the signs in a tautology are in one respect not performing their usual role. For that role is to contribute to the semantic content of sentences in which they occur; but since a tautology is lacking in such content, there is nothing for the component expressions to contribute to. This in itself is sufficient to explain Wittgenstein's remarks about the 'disintegration of signs'. Yet it does not follow that the signs in a tautology do not constitute their usual symbols (do not express their usual senses). Nor does it follow that they do not serve to introduce their usual semantic contents (that they are not about anything). Rather, the symbols in a tautology are 'combined' in such a way that their contents fail to be combined into the sort of semantic content that significant sentences have – a Sinn.

- 7 I here rely upon the general tenor and subject-matter of *TLP* rather than upon specific remarks. But see 3.3421 and 5.641.
- 8 That Wittgenstein speaks of 'logical form' of both pictures (propositions) and reality, might seem to count against the suggestion canvassed in ch. 4, that the form of a proposition is in effect the predicative element in a sentence (see also in ch.11). But in fact a form is a possibility. The form of reality is the set of possible truths about the world; the form of an object is the set of its possible combinations with other objects; and the form of a sentence is a possible mode of combining proper names, realized in the structure of the sentence (each such mode of combination providing a mode of comparison with reality – i.e. the semantic content of a predicate, as we shall see in chs. 15 and 16). In the exposition which follows I employ a restricted (Fregean) notion of logical form for the sake of simplicity.
- 9 See Anscombe (1959), p. 164 for further examples of this sort.
- 10 An argument for such a view is given by Pears (1987), p. 143, in the course of his exposition of the Picture Theory.

CHAPTER 7 UNITY OF CONTENT

- 1 Since both formal argument and mathematical calculation occur frequently in science, it might be argued that we do after all have sufficient reason for insisting on mutual knowledge of cognitive content as the condition for communication in scientific discourse. Yet it can be replied, with some plausibility, that the matter is merely one of convenience. What is important is that our respective interpretations of scientific theories and of the statements of the evidence which support them should be logically equivalent. How easy it proves to be to get one another to follow the course of our calculations is an inessential matter of psychology.
But what of simplicity-considerations in science? On any adequate account of the scientific enterprise these must surely play an essential role. Yet do not they too presuppose mutual knowledge of cognitive content? I think not. Since appeals to simplicity are introduced into accounts of scientific method in order to explain how we may rationally choose between empirically equivalent but logically non-equivalent theories, the notion at issue is not an especially cognitive one. It will rather involve, for example, such things as the postulation of fewer types of theoretical entity.
- 2 It is then no accident that Frege proposes to take mutual knowledge of cognitive content as the condition for communication, since his main interest is in logical and mathematical knowledge.
- 3 The allusion to the ideas of the later Wittgenstein here is intentional. For it is one of the themes of the early sections of *PI* that understanding is a family resemblance (and hence fragmentary) concept. See *PI* 65, 108 and 164.