WHEN THE WHISTLING HAD TO STOP

P.M.S. Hacker

1. The Tractatus doctrine of saying and showing

In a letter to Russell dated 19.4.1919, written shortly after he had finished the Tractatus, Wittgenstein told Russell that the main contention of the book, to which all else, including the account of logic, is subsidiary, 'is the theory of what can be expressed (gesagt) by prop[osition]s -- i.e. by language -- (and, which comes to the same, what can be thought) and what cannot be expressed by prop[osition]s, but only shown (gezeigt); which I believe is the cardinal problem of philosophy' (CL 68). This was emphasized in both preface and conclusion of the book. The preface observes that the whole sense of the book can be summed up in the following words: 'what can be said at all can be said clearly, and what we cannot talk about we must pass over in silence' (TLP p.3). The conclusion of the book (TLP 7) simply repeats this. The preceding three remarks, however, are noteworthy. They make three claims. First, 'There are, indeed, things that cannot be put into words. They make themselves manifest. They are what is mystical' (TLP 6.522). This reiterates the leitmotif of the book, namely that there are things that cannot, by the very nature of representation, be said. But though they cannot be said, they are shown by features of the relevant system of representation. Secondly, the correct method in philosophy would really be to say nothing except what can be said, i.e. empirical propositions that have nothing to do with philosophy, and then, when someone wanted to say something metaphysical, to demonstrate to him that he had failed to give meaning to certain signs in his propositions (TLP 6.53). This method, of course, is not the method that has been followed throughout the book, which consists almost exclusively of modal assertions concerning what must, can or cannot be thus and so in reality, in language and in the relation between language and reality. Hence, thirdly, the propositions of the book clarify in as much as anyone who understands their author recognizes in the end that they are nonsense. The reader must use them as steps to climb up beyond them. He must, so to speak, 'throw away the ladder after he has climbed up it' (TLP 6.54).

This dramatic conclusion unsurprisingly baffled the early readers of the *Tractatus*. For it looks remarkably like a *reductio ad absurdum*. For the very argument to establish that the kinds of 'propositions' of which the book consists are illegitimate pseudo-propositions is itself part of the book, couched in the very same kinds of 'propositions' that are condemned as nonsensical attempts to say what cannot be said but is shown. Russell remonstrated in his introduction to the book that 'after all, Mr Wittgenstein manages to say a good deal about what cannot be said, thus suggesting to the sceptical reader that possibly there may be some loophole through the hierarchy of languages, or by some other exit' (Introduction, p.xxi). Ramsey famously objected that what we can't say, we can't say, but then we can't whistle it either. If the chief proposition of philosophy is that philosophy is nonsense, then 'we must take seriously that it is nonsense, and not pretend, as Wittgenstein does, that it is important nonsense.'

Over the years there have been various attempts to defend Wittgenstein's Tractatus

¹ F.P. Ramsey, 'General Propositions and Causality' in *The Foundations of Mathematics*, ed. R.B. Braithwaite (Kegan Paul, Trench and Trubner, London, 1931), p.238. I am indebted to Professor D.H. Mellor for locating the quotation for me.

ii F.P. Ramsey, 'Philosophy', Ibid., p.263.

from this apparent reductio ad absurdum. Some have argued that the book may not say anything, but its propositions surely show us a great deal about the nature of logic and language.ⁱⁱⁱ Others have argued that the book's self-condemnation is to be taken with the utmost seriousness -- it does indeed condemn as nonsense everything that is within it, including the claim that there are things that cannot be said but only shown. The idea that there are ineffable truths at which the nonsensical sentences of the book gesture is itself a rung upon the ladder which is to be thrown away. Pace Ramsey, Wittgenstein was not trying to whistle it at all.iv I have argued elsewhere that although we should indeed take seriously the claim that the sentences of the Tractatus fail to conform with the logical syntax of language and are accordingly nonsensical, we should take equally seriously the claim that those sentences are a self-conscious attempt to say what can only be, and indeed is, shown by features of the relevant symbolism. Only thus conceived can they be thought of as a ladder up which we can climb to attain the correct logical point of view; however the metaphor of the ladder is to be taken, we can hardly claim that a 'ladder' consisting of mere gibberish can lead anywhere. We should take seriously the claims of the preface and conclusion that what we cannot speak about we must pass over in silence, i.e. that there are things we cannot speak about, and indeed that these are things which make themselves manifest. Accordingly, in the Tractatus Wittgenstein was, as Ramsey suggested, 'trying to whistle it'. I shall not repeat the arguments in favour of this. My present concern is with the afterlife of the conception of 'what can only be shown'. For in the course of the couple of years after his return to philosophy in 1929, Wittgenstein came to realize that the position he had defended in the *Tractatus* is untenable. When the whistling had to stop, what became of the numerous ineffable truths which the book had tried to articulate in its self-confessed pseudo-propositions?

2. What could not be said but manifested itself

The rationale for the doctrine of the ineffable must be seen against the background of what can with some justice be said to be a, if not the fundamental putative insight of the whole book, namely the principle of the bipolarity of the proposition. Vi It is a cardinal claim of the

iii M. Black, A Companion to the Tractatus (Cambridge University Press, Cambridge, 1964), pp.378ff.

iv C. Diamond, 'Throwing Away the Ladder: How to Read the Tractatus', repr. in *The Realistic Spirit* (MIT Press, Cambridge, Mass., 1991).

^v See chapter 4 'Was He Trying to Whistle It?' above.

Vi To be sure, this is not Wittgenstein's judgement but mine. He characterizes as his Grundgedanke the idea that the 'logical constants' are not representatives — that there can be no representatives of the logic of facts (TLP 4.0312). This is an allusion to Russell's doctrine according to which logical forms, for example particular, relation, dual complex, etc., are the logical constants which result from abstraction and with which we must be acquainted by logical experience (see B. Russell, Theory of Knowledge — the 1913 Manuscript, ed. E.R. Eames and K. Blackwell, Volume 7 of The Collected Papers of Bertrand Russell (Allen and Unwin, London, 1984), Part I, chap. IX). This is not to be confused with TLP 5.4, where the claim that there are no logical constants alludes more specifically to the logical connectives. The insight that logical forms are not kinds of entities for which names go proxy is doubtless fundamental for the philosophy of logic of the Tractatus, but I suggest that bipolarity is no less

book that it is of the essence of a proposition with sense not merely to be bivalent, i.e. either true or false, but to be bipolar, i.e. to be capable of being true and capable of being false. While Frege had ensured bivalency for any proposition in his artificial concept-script, he had argued that natural languages unfortunately permit the formation of sentences expressing thoughts with no truth-value because they contain expressions lacking a reference. Russell, invoking the theory of descriptions to eliminate apparent singular referring expressions lacking reference, argued that bivalency was a defining feature of a proposition. But neither Frege nor Russell dreamt of the principle of bipolarity. That is not surprising, since the propositions with which they were above all concerned, viz. the propositions of logic and mathematics, are patently not bipolar. Yet both Frege and Russell thought of such propositions as having a sense, as describing relations between abstract objects or as describing the most general facts of the universe.

Wittgenstein's principle of bipolarity was built into his conception of the general propositional form, viz. 'Thus and so is how things stand' ('Es verhält sich so und so'). This variable, the general propositional form, gives the essence of the proposition; also the essence of all description, and hence too the essence of the world (TLP 5.471). It is of the essence of reality that it consists of the existence and non-existence of states of affairs (TLP 2.06). It is of the essence of a proposition to describe a state of affairs; and it is of the nature of states of affairs that they may exist (obtain) or not exist (not obtain). The proposition, therefore, is a logical picture of a possibility — which may or may not be instantiated. proposition with a sense must be capable of being true (and is so if the state of affairs it describes obtains) and capable of being false (and is so if the state of affairs it describes does not obtain). Of course, the propositions of logic are not bipolar. They are tautologies molecular propositions combined by means of truth-functional connectives in such a manner as to be true come what may, no matter what the truth-values of their constituent elementary propositions are. They are well-formed, but are unconditionally true — which is why they say nothing at all. Their truth rules out nothing — hence they lack any sense. They are not nonsense, but senseless, i.e. have, in a manner of speaking, zero sense.

The bipolarity thesis rules out any necessarily true propositions other than the vacuous tautologies of logic. In particular it rules out the possibility of any elementary propositions which are necessary truths. For they would not meet the condition of bipolarity. There are in natural language numerous *apparent* elementary propositions, i.e. apparent propositions which do not contain a truth-functional connective, which appear to state necessary truths. For example, that red is a colour, that space is three dimensional or that time is linear. Indeed, the *Tractatus* itself consists largely of such. If these are illegitimate pseudo-propositions, and not simply counter examples to the bipolarity thesis, reasons must be given for their illegitimacy. Wittgenstein offers two general reasons.

First, any proposition in which a formal concept occurs other than as a bound variable is ill-formed. Formal concepts are categorial concepts. They include, with respect to our descriptions of the world, such concepts as 'object', 'complex', 'property', 'state of affairs', 'fact', but also more specific concepts such as 'space', 'time', 'colour (being coloured)', and so presumably also 'pitch', '(degree of) hardness (warmth, etc.)', 'taste', and so on (cf. TLP 2.0131). With respect to descriptions of symbolisms, such expressions as 'proposition', 'concept', 'function', 'number' are all characterized as formal concept-words. As these are represented in natural languages, they look like proper concept-words. But they are in effect variable-names, and would be so represented in a perspicuous notation. Forms are not kinds of objects, and variable names are not real names. So one cannot say of *a* that it is an object, not only because the pseudo-proposition '*a* is an object' is not bipolar, but also because this form of words is not well-formed since 'object' is not a name. It has a use as an expression for a form (formal concept), but we have given it none as a name of an object. Expressions for

forms, which Russell had called 'logical constants' (see footnote 6 below), are not representatives (*vertreten nicht*), i.e. are not proxies for forms, but variables; there can be no representatives of the *logic* of facts (TLP 4.0312). *Every* variable is the sign for a formal concept, for every variable represents (*darstellt*) a constant form that all its values possess. Its constant form is a formal property of its values (TLP 4.1271). The characteristic marks of a formal concept are formal properties which are not expressed by means of functions, but rather by features of the symbols whose meanings fall under the formal concept. So one cannot say of objects, for example, that they are spatial, since being spatial is a formal property, a characteristic mark of the formal concept 'object'.

Secondly, one cannot ascribe internal (structural) properties and relations to things (objects, situations, facts). Internal properties and relations are properties and relations which are such that it is unthinkable that the thing should not possess them. It is unthinkable that Cambridge blue should not be lighter than Oxford blue, or that the proposition $p \vee p$ should not be a tautology, or that $p \otimes (p \in q)$ should not imply q. In so far as the property or relation in question is not exhibited by a variable (as being a tautology, or being lighter than are not), it seems that Wittgenstein is here relying upon the principle of bipolarity to exclude ascriptions of internal properties and relations from well-formed propositions with a sense. Internal properties are structural, and they are shown by the structure of the propositions describing the relevant possible situations. Internal relations between possible situations are shown by structural relations between the propositions representing those possible situations (TLP 4.124, 4.125).

In the course of the book, Wittgenstein asserts many different kinds of truths which stricto sensu cannot be said, but which are held to show themselves in features of the symbolism. To be sure, they only do so perspicuously in a correct concept-script. Among the numerous kinds of truths which allegedly cannot be stated we can distinguish the following ten topics:

The harmony between language and reality: The heart of the picture theory of representation consists of the alleged insight that there is a harmony (or, as he later put it, with Leibnizean allusion, a 'pre-established harmony' (BT 189)) between language and the world. This harmony, he later remarked, seems evident in the fact that 'if I say falsely that something is red, then, for all that, it isn't red' (PI §429). Even if a proposition is false, it describes something, in particular it describes how things are not. The 'harmony' does not consist in the agreement of a true proposition with reality, since there are also false propositions. According to the Tractatus, it consists in the agreement of form between a proposition and the reality it depicts truly or falsely. For a proposition to represent a possible situation, it must have the same logical form as what it depicts, no matter whether the situation obtains or not, and must have the same logical (mathematical) multiplicity. The names in a fully analysed proposition have as their meanings the simple objects in reality which they represent, and the combinatorial possibilities of those names in logical syntax mirror the combinatorial possibilities of their meanings, i.e. of objects, in the world. However, neither the shared form (TLP 2.171) nor the multiplicity (TLP 4.04 - 4.041) can be depicted. For the harmony between language and reality is an internal relation between a proposition and what makes it true or false. It is unthinkable that the proposition that p should not be made true by the fact that p, and equally unthinkable that it should be made false by anything other than the fact that $\sim p$. Propositions can represent the whole of reality,

vii At least in cases in which the internal relation or property in question is not ascribed to a form, as in the case of light blue being lighter than dark blue (as opposed to the ascription of tautologousness to a *proposition*).

but they cannot represent what they must have in common with reality in order to be able to represent it, viz. logical form. Rather it is mirrored in them. Propositions *show* the logical form of reality (TLP 4.12 - 4.121).

ii. Semantics: One cannot say what the meaning of a name is. A name has both form and content, its form being its logico-syntactical combinatorial possibilities, represented by the variable of which it is a value, and its content being its meaning, the object for which it goes proxy. But one cannot say of a name, e.g. of a simple colour R, that it is the name of a colour, or that it means such-and-such a colour. viii For one would be using the formal concepts of name and colour in order to do so. Objects can only be named. Propositions can only say how things are, describe the contingent states of affairs in which objects are concatenated. They cannot say what they are (TLP 3.221). To say what a thing is would be to describe its essential nature, which would involve describing the thing in terms of its internal properties (see below). Similarly, it is impossible to assert the identity of meaning of two expressions (TLP 6.2322). For expressions of identity are neither elementary propositions nor reducible to such (TLP 4.243). Nor can one say what the sense of a proposition is, e.g. that the proposition 'fa' has as its sense the situation which contains the objects a and f in concatentation, for that again involves the use of formal concepts. Rather, a proposition shows its sense — 'fa' shows that f and a occur in its sense. A proposition shows how things stand if it is true (indeed, that is what it represents (darstellt) — its sense (TLP 2.221)), and it says that they do so stand (TLP 4.022).

iii. Internal properties of things, situations and propositions: One cannot ascribe internal properties or relations to things. For any attempt to do so would result in a form of words which did not satisfy the requirement of bipolarity on a proposition with sense. So one cannot say that a proposition is a tautology, both because the concept of a proposition is a formal concept and because being a tautology is a formal, structural, property of propositions that are tautologies — they would not be the propositions they are were they not tautologies. But every such proposition shows that it is a tautology (TLP 6.127). Similarly, one cannot say that Oxford blue is darker than Cambridge blue, since this is an internal relation between these two colours. The existence of this internal relation between the possible situations that a is dark blue and b is light blue is expressed by an internal relation between the propositions describing the two situations, viz. 'a is dark blue' and b is light blue' (TLP 4.123 - 4.125).

iv. *Internal relations between propositions*: One cannot say that one proposition follows from another or that one proposition contradicts another. For these are internal relations between propositions. But that the propositions 'p' and ' $\sim p$ ' in the combination ' $\sim (p, \sim p)$ ' yield a tautology shows that they contradict each other. That the propositions 'p e q', 'p' and 'q', combined with one another in the form '(p e q).(p):e : (q)' yield a tautology shows that 'q' follows from 'p' and 'p e q' (TLP 6.1201). A tautology shows the internal relations between its constituent propositions. Rules of inference, which seemed necessary to Frege and Russell in order to justify inferences, are neither necessary nor possible (TLP 5.132). For it makes no sense to attempt to justify internal relations, i.e. to try to justify what, by its essential nature, cannot be otherwise.

v. Categorial features of things and type classifications: One cannot say of a thing that it

viii I am disregarding here, as Wittgenstein himself does in TLP 2.0131, 2.0251 and 4.123, the fact that colours, at least 'gross colours', are not objects. He probably thought of minimally discriminable shades of colours as among the objects of the *Tractatus*, and only later realized that determinates of a determinable do not satisfy the independence requirement on objects (and hence on elementary propositions). But once that is recognized, the whole conception of objects collapses — as it did for him in 1929/30.

belongs to a given category, e.g. that red is a colour. For the ontological category of a thing is given by its logical form, which consists in its combinatorial possibilities with other objects. A spatial object must have some spatial location, a visual object must have some colour, a sound must have some pitch (TLP 2.0131). But the form of an object cannot be named, since it is not itself an object, but the common features of a whole class of objects. The formal concept *colour* is the common form of all colours, their shared combinatorial possibilities with spatial objects (and their combinatorial impossibilities with auditory objects). This, as we have seen, is represented in a perspicuous notation by the variable of which colour names are values. One cannot, therefore, say that red is a colour, but that it is so is shown by any proposition of the form 'a is red'. In particular, the combinatorial possibilities of 'red', which is the form of the name, show this. Hence one cannot say of an object of a certain kind that it belongs to one type rather than to another.

vi. The limits of thought: One cannot, as Wittgenstein emphasized in the preface, circumscribe the limits of thought in language. For it is nonsense to say that such-and such cannot be thought. Nor can one justify excluding a form of words by reference to reality, as Russell had done in the theory of types. But one can circumscribe the limits of thought from within, by drawing the limits of language. One can explain the nature of symbolism and thereby indicate which forms of words are licit. Forms of words that are not permitted are not descriptions of the unthinkable nor are they descriptions of logical impossibilities. For there cannot be such a thing as an intelligible description of something that cannot be thought. To be sure, these claims immediately condemn the propositions of the *Tractatus* as nonsense, since they employ formal concepts and describe internal relations -- a paradox which its author gladly embraced. They are attempts to say what cannot be said, but manifests itself. Their role is fulfilled when one comes to understand both that they are nonsense and that what they were trying to say is shown.

vii. The limits of reality and the logical structure of the world: Empirical reality is limited by the totality of objects. This limit makes itself manifest in the totality of elementary propositions (TLP 5.5561). The limits of the world are also the limits of logic, i.e. the limits of all possible worlds are the limits of logical possibility. Tautologies and contradictions constitute as it were the upper and lower limits of what is possible. Between these two limits, the possible truth-functional combinations of the constituent propositions exhaust the range of possibilities describable by those propositions. But, of course, one cannot say that the world contains such and such possibilities and not such and such other possibilities. For that would appear to presuppose that we were excluding certain possibilities (TLP 5.61), whereas no possibility is excluded. But the fact that the propositions of logic are tautologies shows the formal, logical, properties of language and the world.

viii. The metaphysics of science: The laws of causality, of least action, of conservation, of continuity, etc. which have been thought of as the metaphysical principles of natural science are neither logical truths nor empirical propositions. They are forms of law. One cannot say that there are laws of nature, but it makes itself manifest in the fact that it is possible to describe nature by means of propositions of these forms (TLP 6.32 - 6.36).

ix. The metaphysics of experience: What the solipsist means is quite correct, only it cannot be said, but makes itself manifest in the limits of my language being the limits of my world (TLP 5.62). What shows that what the solipsist means is correct? Apparently the fact that 'the world is my world', that the limits of language (of my language, the only language which I understand) mean the limits of my world (TLP 5.62). Arguably what Wittgenstein had in mind is that signs (names) become symbols for me only through my using them to signify things, by meaning by the sign such and such an object. Sentential signs become symbols, propositions, for me only through thought (and understanding). The signs serve as a projection of what they represent, and the method of projection is 'thinking the sense of the

sentence', i.e. thinking that p (TLP 3.11), and hence meaning by the sentence 'p' the state of affairs that p which is its sense. This could not be otherwise, hence it cannot be said. If so, then the ineffable truth of solipsism is manifest in the relation between the proposition and reality -- as he was later to remark in the Big Typescript: 'the I is replaced by the proposition and the relation between the I and reality is replaced by the relation between the proposition and reality' (BT 499). Whether the relation between the proposition and reality can be said to be a feature of the proposition is perhaps debatable. It would have been more plausible to argue that the truth of solipsism is shown by the structural difference between a fully analysed first-person experiential proposition and a third-person one. For the first-person pronoun will not be a constituent of the fully analysed first-person proposition ('the subject does not belong to the world: rather it is the limit of the world' (TLP 5.6342). 'I have ...' will disappear on analysis, to be replaced by 'There is ...'. And the analysed third-person psychological proposition will only mention the behaviour of bodies. 'He has ...' will disappear, being replaced by 'Such and such a body behaves ...' (as in the methodological solipsism of *Philosophical Remarks*, ch. VI).

Similarly, one cannot say that there is no soul 'as conceived in the superficial psychology of the present day', but this is shown by the logical form of such propositions as 'A believes that p'. For they do not involve the correlation of a fact with an object (an ego), but rather the correlation of facts by means of the correlation of their objects (TLP 5.5542 - 5.5421).

x. Ethics and aesthetics: Propositions can express nothing that is higher. Hence it is impossible for there to be propositions of ethics or aesthetics (TLP 6.42 - 6.421). The argument for this is thin. Everything in the world, everything that is the case or that takes place, is contingent, accidental. But absolute value is non-contingent. So what makes it noncontingent must lie outside the world (TLP 6.41). On the assumption that statements of absolute value are non-contingent, they obviously cannot be bipolar. But if absolute value is thus ineffable, it ought, presumably, to manifest itself in the forms of some set of well-formed propositions. Wittgenstein gives us no indication of what these might be. If the concepts of absolute ethical and aesthetic value are formal concepts, then they ought to be expressed by variables which are the constant forms of their values. But Wittgenstein nowhere suggests what might be the values of these variables. It is clear from his correspondence at the time that he thought that such values manifest themselves. In a letter to Paul Engelmann apropos Uhland's poem 'Graf Eberhards Weissdorn', he wrote: 'The poem by Uhland is really magnificent. And this is how it is: if only you do not try to utter what is unutterable then nothing gets lost. But the unutterable will be -- unutterably -- contained in what has been uttered!'x But although the poem may express something that cannot be put into words, it is by no means clear that it does so in virtue of features of the symbolism employed in it. If the claim is that 'the unutterable' is manifest in attitudes and actions, then this form of ineffability is independent of the official doctrine of saying and showing, since what shows the ineffable is not a formal feature of a well-formed formula.

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^{ix} The constituent objects of the representing fact are the psychical constituents of a thought, and they are correlated with the objects of the represented fact. (It would have been more accurate here to talk of correlating a fact with a state of affairs, since what one believes may not be a fact.)

^x Paul Engelmann, *Letters from Ludwig Wittgenstein with a Memoir*, trans. F. Furtmüller (Blackwell, Oxford, 1967), p.7. Wittgenstein's expression here is 'das Unaussprechliche', as in TLP 6.421 and 6.522.

Although it is (allegedly) not possible to say, describe or put into words the kinds of truths above classified, there can be no doubt that Wittgenstein thought that there are such truths, and indeed that they can be apprehended. They manifest themselves, and can be seen to do so, if one understands correctly what the author of the Tractatus means. Thus, for example, we cannot say that 'p' and '~p' contradict each other (since that is an internal relation), but that they yield a tautology in the combination ' $\sim(p \cdot \sim p)$ ' shows that they contradict each other. One cannot say that 'q' follows from 'p' and 'p e q', but that these propositions combined in the form '(p e q).(p):e :(q)' yield a tautology shows that 'q' follows thus (TLP 6.1201). One cannot say that a proposition is a tautology, but it is a mark of the propositions of logic that 'one can recognize that they are true from the symbol alone' (TLP 6.113). To recognize that a proposition of the propositional calculus is (ineffably) a tautology, we can employ Wittgenstein's method of brackets (heir to his ab-notation) which shows whether a proposition is a tautology (TLP 6.1203). Indeed, proof in logic is merely the mechanical expedient to facilitate the recognition of tautologies in complicated cases (TLP 6.1262). One cannot say what the meaning of a name is, but one can explain it by means of an elucidation, which is a proposition containing the primitive sign (TLP 3.263). One cannot say that dark blue is darker than light blue, but one can see it to be so. So what cannot be said is not ineffable in the sense of being either incommunicable or imperceptible — it just cannot be expressed by the sense of a significant proposition.

3. When the whistling stopped

It is evident that when Wittgenstein returned to philosophy in 1929, he had by no means abandoned the idea that there are ineffable truths about language, reality and the relation between language and reality. In his lectures of 1930, he remarked that there are no logical concepts, e.g. 'thing', 'complex', 'number', for such terms are expressions for logical forms, and are not concepts. They are properly expressed by a variable (LWL 10). He insisted that language cannot express what cannot be otherwise. What is essential to the world cannot be said about the world; for then it could be otherwise, since any proposition can be negated (LWL 34). The same thought is expressed in his notebooks of that time: 'What belongs to the essence of the world cannot be expressed by language. For this reason it cannot say that everything flows. Language can only say those things that we can also imagine otherwise. That everything flows must be expressed in the application of language' (Vol.IV, 1 = PR 84). He continued for a while to insist that language cannot describe internal relations between situations, but that these manifest themselves in structural relations between the descriptions of the situations (WWK 54f.). Hence the ineffable isomorphism of proposition and what it describes continues to be affirmed. The relation of proposition to fact is internal (LWL 9); what the expression of expectation and its fulfilment must have in common is shown by the use of the same expression to describe both what we expect and its fulfilment, but this common element in expectation and fulfilment cannot be described or expressed in any proposition (LWL 35f.; cf. Vol.V, 31, 53). So too the ineffability of absolute value is reaffirmed both in the 'Lecture on Ethics' of 1929 and in conversations with Schlick and Waismann in December 1929 (WWK 68f.) and again in December the following year (WWK 115-17). By the time he had written the Big Typescript, however, his philosophy had become transformed (although here and there one can still find residues of the earlier ideas sticking to the new thoughts, like pieces of the eggshell out of which he has broken (cf. CV 23)). Categorial concepts are no longer 'on the Index'; the metaphysics of logical atomism disappears without a trace; the refrain 'but that cannot be said' is no longer audible; the 'harmony between language and reality' is now orchestrated within language — not between language and reality; internal relations are specified by grammatical statements — which are no more than statements of grammatical rules. And grammar, far from ineffably reflecting the logical

structure of the world, is 'arbitrary' — it owes no homage to reality. What were the underlying reasons for this astonishing transformation?

To trace in detail the story of the change in Wittgenstein's views between 1929 and 1932/3 is a task for a book-length study. It would have to trace simultaneous developments on *many* fronts, noting how some lagged behind when Wittgenstein initially failed to realize the implications of some of his advances. And it would have to examine his extensive writings on the philosophy of mathematics in this period, for that work played an important role in the general change of his ideas. All that I shall attempt here is to pinpoint some of the major insights that led to the collapse of his old philosophy, to the rejection of most of its major theses and to the transformation of many others into elements of a diametrically opposed philosophical viewpoint that comes to fruition in the *Philosophical Investigations*.

The realization that colour-exclusion cannot be budgeted for by the logical apparatus of the *Tractatus* was the first domino to topple. Ascription of a determinate of a determinable to an object has logical implications that are not attributable to any hidden truth-functional combination embedded in the proposition. 'A is red' implies that A is not green, not yellow, etc. So what had been conceived of as elementary propositions need not be logically independent. But if so, not all logical relations are determined by truth-functional composition. Hence too, the logical connectives are not topic-neutral, since different truth-tables must be laid down for propositions containing determinates of a determinable (in the case of 'A is red & A is green' the line TT must be deleted, since it is not possible for an object to be both red all over and green all over simultaneously). But the logical theory of the *Tractatus* rested firmly upon the independence thesis for the elementary proposition, on the thesis that the logical connectives (and quantifiers) are topic-neutral, and on the idea that all logical relations are determined by truth-functional composition.

The independence thesis had also been the linch-pin of the Tractatus account of the quantifiers. They had been construed as operators on finite or infinite classes of elementary propositions. '(x).fx' expresses an operation of simultaneous assertion of all propositions of the form 'fx'. Quantified propositions were thus construed as finite or infinite logical sums or products. And the quantifiers were assumed to be topic neutral. On the assumption that all propositions of the form of 'fx' are logically independent, then '(x).fx', '($\Box x$).fx', '(x) \sim fx', ' \sim ($\square x$).fx', ' \sim (x).fx' and '($\square x$). \sim fx' all make sense. Moreover, the explanation of universal quantification applied to higher-order quantification too. For the proposition 'fa' not only determines the class of all propositions of the form 'fx' but also the class of all proposition of The simultaneous assertion of all propositions of the form 'Na' is the proposition '(N).Na'. But if 'fa' ascribes a determinate of a determinable to a, then other determinates of the determinable f are incompatible with the truth of 'fa' and the truth-table representing '(N).Na' will contain excessive logical multiplicity, and so be nonsensical.xi Hence the thought that the quantifiers are topic neutral must be relinquished in response to the realization that there are non-independent elementary propositions. It is evident 'There is a circle in the square' $\lceil (\Box x) \cdot fx' \rceil$ makes sense, whereas 'All circles are in the square' [' $\sim \square x. \sim fx$ '] does not (PG 266), or that it makes sense to say 'Write down any cardinal number', but not 'Write down all cardinal numbers' (ibid.). Far from generality being topic neutral, Wittgenstein concluded, there are as many different 'alls' as there are 'ones', i.e. as many different forms of generality as there are forms of singular propositions, so 'it is no use using the word "all" for clarification unless we know its grammar in this particular case'(PG 269).

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xi For a detailed discussion see G.P. Baker, *Wittgenstein, Frege and the Vienna Circle* (Blackwell, Oxford, 1988), ch.4, to which I am indebted.

With the disintegration of his earlier conception of the elementary proposition and of the topic neutrality of the logical operators, the idea of a general propositional form collapsed too. The concept of a proposition is not a formal concept determined by formal properties which are its characteristic marks. Rather, it is a family resemblance concept. Some propositions are indeed bipolar, but others are not. There are many different kinds of empirical proposition, including expressions (in the first-person present tense case) and ascriptions of experience, of memory and intention, descriptions of objects of experience, of the past, of our 'world-picture', hypotheses, etc. and many further kinds of non-empirical ones, including the propositions of logic and mathematics, of ethics, aesthetics and religion.

Not only is the concept of the proposition demoted to the ranks, but so too are all the other 'formal concepts' of the *Tractatus*. The concepts of space and time, of object, colour, sound and taste, of shape and number, etc. may indeed have different roles from such concepts as 'in central Oxford', 'at 2 pm', 'tree', 'red', 'F-sharp', '24', but they are not 'metalogical concepts' or 'super concepts' between which a super-order holds, mirroring the logical form of the world, correctly represented in an ideal notation by variables. Rather these terms have a use, which 'must be as humble a one as that of the words "table", "lamp", "door" (PI §97). And so too do such concepts as 'darker than', 'follows from' or 'tautology'.

With this rude awakening, Wittgenstein came to realize that what he had conceived of as *objects* are in fact *elements of representation* (WWK 43). The sempiternal objects of the *Tractatus* had been postulated to ensure determinacy of sense (impossibility of reference failure, vagueness, and hence of truth-value gaps) and had been conceived to be the substance of the world. But the legitimate needs which objects were postulated to fulfill are satisfied by the use of samples in ostensive definitions. And the samples belong to the means of representation; they are instruments of the language. The ostensive definition does not *describe* the sample it invokes in explaining the meaning of the word it defines. As he later wrote: 'What looks as if it *had* to exist, is part of the language' (PI §50). Simples were merely samples 'seen through a glass darkly'.

If so, then the connection between names and objects had to be reconsidered. Far from simple names being connected to sempiternalia in reality by mental acts of meaning by such and such a name THIS L object (cf. NB 53, 68, 70), such names as 'red', 'hard', 'sweet', 'hot', etc. (cf. PI §87), are not 'indefinables' -- they are merely not defined by analytic but by ostensive definitions. The meanings of these names are not objects in reality with which they must be connected by mental acts of meaning (the meaning of an expression is never an object in reality, and there is no such thing as an act of meaning). They are given by reference to a sample. So the ostensive definition forges no connection between language and reality. In the sense in which he had thought that there is 'a connection between language and reality', there is no connection (WWK 209f.). Ostensive definitions are rules, and they connect the definiendum with a sample, ostensive gesture and the indexical phrase 'This C' (where 'C' specifies the grammatical category of the definiendum, for example, that it is a colour word). These together constitute a symbol, which can indeed be used in place of the definiendum as in the sentence 'The curtains are this colour L 9' — hence the ostensive definition can be viewed as a substitution rule. So there is no exit from language: 'What is spoken can only be explained in language, and so in this sense language itself cannot be explained. Language must speak for itself (PG 40). There are doubtless indefinitely many connections between language and reality, between names and nominata (we stick names on bottles, write names on doors, hang nameplates on objects, wear name-labels on lapels, etc.) but none of them determine sense.

If there is, in the requisite sense, no *meaning-endowing* or *sense-determining* connection between language and reality, then the thought that representation and what it represents share a common logical form, that the form of a name shows the form of the object which is

its meaning and that the form of the proposition shows the form of the situation which it describes, must be revised too. Initially, it seems, he continued to think that the essence of the world is ineffable, but rather than being shown by the forms of legitimate propositions, as he had suggested in the *Tractatus*, he now suggested that it is exhibited by the *rules* of language. 'The essence of language is a picture of the essence of the world; and philosophy as custodian of grammar can in fact grasp the essence of the world, only not in the propositions of language, but in the rules for this language which exclude nonsensical combinations of signs' (PR 85). This suggests that the rules of grammar manifest the ineffable essence of the world. But although Wittgenstein briefly toyed with this idea, he rapidly abandoned it. For, as he came to realize, the rules of grammar are, in an important sense, arbitrary — they owe no homage to reality. They are not answerable to reality, to objective, language-independent essences of things, for their correctness. On the contrary, grammar determines what we call 'the essence' of a thing. And what appears to be a necessity in the world, far from being *reflected* in the rules of grammar, is merely the *shadow* they cast upon the world.

The realization that grammar is thus autonomous necessitated the rejection of the fundamental thought informing the *Tractatus* conception of the nature of representation, the repudiation of its account of intentionality (viz. the picture theory of the proposition) and hence too of the metaphysics of logical atomism and the attendant metaphysics of symbolism (i.e. that the proposition is a fact, that only facts can represent facts, that only simple names can represent simple objects, that only relations can represent relations, etc.). This meant that all the claims concerning what he had told Russell was the main point of the *Tractatus*, viz. 'the theory of what can be expressed by propositions ... and what cannot be expressed by propositions but only shown' had to be abandoned or radically transformed.

4. The after-life of the ineffable

Against this background we can now return to the list of kinds of things which, according to the *Tractatus*, cannot be said, but make themselves manifest. I shall not follow the above list exactly, since some of the items can be dealt with conjointly.

i. The harmony between language and reality: The idea of an ineffable harmony between language and reality which is shown by the logical form of a proposition but cannot be described, was an illusion. It is a paradigmatic case of mistaking the shadow of grammar for the form of reality. It was a mistake to take the world to consist of facts — that was a distortion of the grammatical proposition that a description of the world consists of a statement of facts not of a list of things. Facts are not in the world (or anywhere else), and factual propositions do not describe the facts, but state them. One cannot point at, but only point out a fact (PG 200). Facts do not consist of objects concatenated together like links in a chain. The fact that there is a red circle at such and such a place does not consist of a concatenation of a circle (or of circularity) and redness, since facts do not consist of anything (ibid.). It makes no sense to talk of the language-independent logical form of facts (or states of affairs). Hence the thought that the factual propositions of language mirror the logical forms of facts is misconceived. Similarly, the thought that a proposition must possess the same logical multiplicity as the state of affairs it describes was confused. 'For what I said really boils down to this: that every projection must have something in common with what is projected no matter what is the method of projection. But that only means that I am here extending the concept of "having in common" and making it equivalent to the general concept of So far from identical logical multiplicity being a condition of projection' (PG 163). projectibility, he had rendered projectibility a criterion for possession of identical logical multiplicity, and invented an elaborate metaphysical mythology to satisfy the consequent demand. Nevertheless, one fundamental insight was retained and transformed. It had been correct to insist that the relation between a proposition and the fact that makes it true is an

internal one. Similarly, the relation between an expectation and the event whose occurrence fulfils it, between an order and the act performance of which complies with it, between a desire and what satisfies it are all internal relations. Failure to grasp that these relations are internal wreaks havoc with any account of the nature of intentionality, of belief, expectation and desire — as in the case of Russell's theory of desire and Frege's account of belief. But internal relations are autonomously determined by grammar. They are not de re relations between language and reality or between thought and reality. It is a rule of grammar that 'the proposition that p' = 'the proposition made true by the fact that p', and similarly it is a grammatical rule that the expectation that p is the expectation that is fulfilled by the occurrence of the event that p (PG 161f.). Expectation and its fulfilment make contact in language (PI §445) — not between language and reality. 'Like everything metaphysical the harmony between thought and reality is to be found in the grammar of the language' (PG 162). There is nothing that is to be shown, and nothing that cannot be said by spelling out such grammatical rules. But what is said is not a description of a relation between proposition and fact but a convention, namely that the expression 'the proposition that p' is equivalent to the expression 'the proposition made true by the fact that p'. 'It is in language that it's all done' (PG 143).

ii. Semantics: It had been a dire error to conceive of the meanings of names as objects in reality for which names go proxy. Meanings are not objects of any kind. And names do not go proxy for what they name, since unlike proxies which can be replaced by that for which they go proxy, nominata cannot replace their names in sentences.xiii Rather the meaning of an expression is given by an explanation of its meaning. And an explanation of meaning is a rule for the use of the explanandum. So of course one can explain what a word means. But such an explanation does not 'link language and reality'. Of course, one may explain that red is a colour, namely THAT L colour. The concept of colour is misconstrued as a variable name representing the constant form of all its values. Different colour names need not have the same logical form, since they are not everywhere intersubstitutable salva significatione — it makes sense to say that the traffic lights shone red, but not that they shone black, just as it makes sense to talk of transparent red glass but not of transparent white glass. 'Colour' is not, to be sure, the name of a determinate, but of a determinable. Nevertheless, it has a perfectly respectable use in the language. For we can say that the window-pane is colourless glass or that the church windows are coloured glass, as we can admire the colour of a rose or tell a child to colour the black and white drawing in his drawing book, ask someone what his favourite colour is or tell someone to look at the colour of the sunset.

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Russell's theory of desire is elaborated in *The Analysis of Mind* (Allen and Unwin, London, 1921), Lecture III, and is criticized by Wittgenstein in *Philosophical Remarks*, ch. III. Frege's account of belief is in 'On Sense and Meaning', repr. in *Collected Papers on Mathematics, Logic, and Philosophy* (Blackwell, Oxford, 1984), pp.157-77. On Russell's account, what satisfies a desire (its objective) is to be discovered in experience, and cannot be read off the characterization of content of the desire. On Frege's account what is believed is the customary sense of a sentence, which is distinct from what is the case if one's belief is true. But when one believes that p, and it is the case that p, then that is precisely what one believed to be the case; what one believed is not something — a *Gedanke* — which stands in some obscure relation to what is the case.

xiii Although an ostensive gesture, the indexical 'this' and the object pointed at can replace the word defined by the correlative ostensive definition in a sentence, as when we say 'The curtains are this L 9 colour'.

It is possible to assert the identity of meaning of two expressions; but to do so is not absurdly to assert that two objects are one object. Rather, to do so is to give a rule for the use of the two expressions, a rule which permits the transformation of 'Fa' into 'Fb' salva veritate, and excludes 'Fa & \sim Fb'. 'a = a' is a nonsensical degenerate identity statement which results from applying the substitution rule 'a = b' to itself. And 'Everything is identical with itself' is a nonsensical proposition, like 'Everything fits into itself' or 'Everything fits into its own shape' (PI §§215-6). Again, there is nothing here that cannot be said by spelling out grammatical rules, and there is nothing ineffable to be shown.

Similarly, one *can* say what the sense of a sentence is. To do so is not to link the sentence with a possible state of affairs the constituent objects of which are the meanings of the simple names in the analysed sentence. Rather it is to paraphrase the sentence by another which means the same. The sense of a sentence is not a possibility correlated with it by a method of projection (which was held to be *thinking the sense*, i.e. meaning by 'p' the state of affairs that p), and the question 'What is the sense of this sentence?' merely asks for the translation of the sentence into another sentence which can be used in its place and which is understood by the questioner.

iii. Describing objects: According to the Tractatus, (simple) objects cannot be described, but only named. Propositions cannot say what things are, only describe how they are, for to say what an object is would be to describe it in terms of its internal properties. But this is confused. First, the term 'object' is being used here to signify the reference of an expression that is not defined by analytic definition. Examples of such are red, dark, sweet (cf. PI §87), which appear to constitute the terminus of analysis, where analysis hits the bedrock of simple terms which are directly connected to reality. But, as Wittgenstein came to realize, the term 'object' was being misused here, there is no 'connection between language and reality' in that sense, and the samples of red, sweet, etc. which we employ in giving ostensive definitions of such terms are instruments of language. They are being employed as part of the means of representation, and are not described or represented by the ostensive definitions which explain what the terms 'red' or 'sweet' mean and which constitute rules for the use of these words. One can say that red is a colour, or that sweetness is a taste, but this is not to describe redness or sweetness by their internal properties. It is rather to give further rules for the use of these terms, namely that if something can be said to be red, it can also be said to have a colour, and if something can be said to be sweet it can be said to have a taste. What appeared to be illicit non-bipolar propositions describing objects by their internal properties and relations were in fact grammatical propositions (in Wittgenstein's sense of the term). To say that red is darker than pink is to assert that if one object is red and another object is pink, then one may say without more ado that the first is darker than the second. This is not a description of red, but a rule for the use of the word 'red' which is partly constitutive of its meaning, as is the (grammatical) proposition that red is more like orange than it is like yellow — which merely means that if A is red, B orange and C yellow, then one may say without more ado that A is more similar in colour to B than to C (and one need not look to see). What appeared to be ineffable necessary truths about colours were no more than conventions for the use of colour words and colour-relation words.

Where does this leave the claim that such 'objects' cannot be described? We are tempted to say such things as 'The aroma of coffee is indescribable'. And in the spirit of William James, we may add: 'Our vocabulary is inadequate' (PI §610). But this is confused. For if we attribute the indescribability of the aroma to the inadequacy of our language, then, first, it is surely open to us to invent a new language, to introduce a more refined terminology; and secondly, we must have some conception of a description which a more subtle language would provide, i.e. we must think that the aroma is describable, only not in our inadequate language. Whence then this conception of a description? And what is it that it would be able

to say which we cannot say? Wittgenstein's discussion of this issue can be seen as taking up again the idea of ineffability and reaching the opposite conclusion to the *Tractatus*. That idea of ineffability confused indefinability by analytic definition with absolute indefinability, indefinability with indescribability and the awesome or impressive (see also (ix) below) with the ineffable.

Is it true that we cannot describe the aroma of coffee? After all, we can say that the aroma in the coffee shop is fresh, well-roasted, rich and delicious, that the aroma of the old coffee in the coffee-jar is faint and stale, or that the aroma of this coffee is fresher, richer, better roasted than the aroma of that coffee. Such a description may be insufficient to enable unerring identification, but that does not imply that it is not a description. If the defender of the ineffability thesis insists that it is not really a description of an aroma, that it does not describe the essential thing — which cannot be put into words, then it is evident that his inclination to say that the aroma is indescribable has nothing to do with the poverty of our language, but is rather concerned with a paradigm of description which such description do not satisfy. That the aroma is indescribable amounts to the claim that one form of description is inapplicable to this kind of case, and to the rejection of the form of description which does apply to this kind of case. He refuses to count what is describable about the aroma of coffee, i.e. what it does make sense to call 'a description of the aroma', as a description.

What is the paradigm of description, presupposed by the ineffability claim, which leads one to reject as inadequate the descriptions of the aroma which can be given? It is the description of a substance by specification of its properties. We describe a table as being circular, made of mahogany, three feet in diameter, etc., just as we describe a cup of coffee as being black, hot, bitter, with a rich aroma. To describe a substance is to give its properties. But obviously, when asked to describe properties rather than substances, this paradigm does not apply. The question is: What do we call 'the description of a property'? We might compare the description of the cup of coffee as being hot, black and sweet, with the description of the aroma of coffee as fresh, rich and well-roasted as we might compare the description of a rose as well-shaped, sweet-scented and red with the description of its colour as dark and matt. It is a perfectly decent analogy, but only an analogy. For being dark and matt do not stand to being red as being red stands to a rose. For being matt red as opposed to glossy red can also be said simply to be two different complex properties which coloured things may have. A different analogy would be that between describing a substance by specifying its properties and describing a property by specifying the substances that have it. We often do just that, as when we say that red is the colour of our true love's lips. But again, it is only an analogy. Far from being the same as describing a substance in terms of its properties, we are inverting that paradigm. To be sure, one cannot force an analogy upon a person who has set his face against it. But it is evident that his claim that an aroma, a colour or a sound is indescribable simply means that there is no such thing as describing properties in the manner of a favoured paradigm, namely the paradigm of describing a substance. Even if we are willing to pay heed to such qualms, it is clear that the 'indescribability' in question has nothing to do with the limitations of language, but only to do with the convention we are willing to accept regarding what is to be called 'a description (of a property)'.

Of course, one might say that words cannot convey the quite particular character of, for example, the aroma of coffee or the glorious flaming colours of a sunset. It is true that words are no substitute for what they describe. A description of the aroma of coffee is no substitute for the aroma itself. But then words are no substitute for a cup of coffee either -and the latter is uncontroversially describable. It is also true that we often say that a description is no substitute for acquaintance. No matter how well X is described, one cannot properly appreciate its wonder or horror unless one experiences it. But that too is no peculiarity of simple ostensively defined properties. Words cannot convey the glory of the

Sistine ceiling or the horrors of 'Guernica' — you must see it for yourself. For the *impression* of such a description is different from the impression of what it describes. But to go further and say that only one who has experienced such a thing really knows its quite particular character, is in possession of a distinctively ineffable kind of information, is again confused. For, as we shall see below, this use of 'quite particular character' is what Wittgenstein calls 'intransitive'. It is not as if someone who has smelled the aroma of coffee or seen the Sistine ceiling is in possession of ineffable information which others lack. But precisely because 'the quite particular character' is intransitively used, there is nothing ineffable here which can be attributed to the limitations of language.

iv. Categorial features of things and internal relations: Since the conception of what can, loosely speaking, be called 'categorial (or formal) concepts' as variables is rejected, the idea that one cannot say that, for example, 3 is a number or that red is a colour, had to be reevaluated. It should be noted that Wittgenstein not only insisted that such concepts have a perfectly respectable use, he also came to realize that such concepts, far from being sharply circumscribed by the essential forms of a class of objects, are not sharply defined at all and are typically family resemblance concepts — as are the concepts of proposition and number. The concept of colour is not determinate: for some purposes black, white and grey count as colours, for others they do not. Moreover, the rules for the use of the various colour words (or number words) are not homogeneous. In particular, as noted above, they are not uniformly intersubstitutable salva significatione.

One can say that 3 is a number or that red is a colour. To say such things is not to transgress any rule of language. Of course, the proposition expressed is not bipolar; but then it is not an empirical proposition. Nor is it either analytic or synthetic a priori. It is the expression of a grammatical rule, viz. that if an object is red then it can be said to have a colour, or that if there are 3 objects on the table, then there is some number of objects on the table. This plumbs no metaphysical depths, but merely registers a grammatical convention. One can, to be sure, say that the proposition 'if p, and if p then q, then q' is a tautology. But it is wrong to say that these propositions, thus combined by 'e', yield a tautology or that the tautology follows from the meaning of 'e'. They do not yield anything (as carbon and oxygen yield carbon dioxide), they are something; and that they are a tautology does not follow from the meaning of the conditional, but is constitutive of its meaning (PG 52). The tautology says nothing, but to say that it is a tautology is to express a rule, viz. that from 'p' and 'if p then q' one may infer 'q' (LFM 277ff.). To recognise that it is a tautology is to recognise the inference rule. For every tautology can be rewritten in the form of a modus ponens, and every such tautology is correlative to an inference rule. In this sense, as the *Tractatus* had observed, every tautology is a form of a proof. Similarly, that Cambridge blue is lighter than Oxford blue is the expression of a rule for the use of the expressions 'Cambridge blue', 'Oxford blue' and 'lighter than' — informative only to one who does not know what one or another of these expressions mean.

v. Type classifications — justifying grammar by reference to reality, and the limits of thought: The Tractatus had argued against Russell that one cannot justify rules of logical syntax by reference to reality. One cannot argue that whereas it makes sense to say that Leo is a lion, it is nonsense to say that the class of lions is a lion because no property of an object is a property of a class. According to the Tractatus what the theory of types had tried to say is ineffably shown by the symbolism. While he came to reject the thought that there are ineffable metaphysical necessities in the world as a mythology of symbolism, the thought that it makes no sense to justify grammar by reference to reality was retained. We do not need, and could not have, a 'theory of logical types' on the Russellian model. But one might say that 'grammar is a "theory of logical types" (PR 54), i.e. that what was demanded of a theory of logical types is done by rules of grammar (in Wittgenstein's use of the term) which exclude (or which we may

lay down to exclude) certain forms of words from the language. However, one cannot say that a grammatical rule which excludes a form of words from the language is ineffably justified by certain properties of things. The rule that excludes the words 'transparent white (glass)' or 'flashing black (lights)' cannot be justified by saying that white is not transparent or that black is not radiant. For if one could say this, then it would make sense, even though it would be false, to say that this white glass is transparent or that the traffic lights flashed black. A justification of grammar by reference to reality would take the form of saying that since reality is thus and so, the rules of grammar must be such and such. But then one would have to be able to say that if reality were otherwise, the rules of grammar would have to be different. But one cannot sensibly say how reality would have to be in order for a different grammar to be justified. For in order to describe such a different reality, one would have to use the very combination of words which our existing grammar excludes, i.e. one would have to talk nonsense (LWL 46f.). But if something counts as nonsense in the grammar that is to be justified, it cannot at the same time pass for sense in the grammar of the propositions purporting to justify it (PR 55).

Could one not say that the rule excluding the form of words 'transparent white' or that the rule which Russell wanted to lay down that the expression 'the class of classes that are members of themselves' is illicit are respectively justified by reference to the fact that nothing can be transparent white and the fact that no class can be a member of itself? No—for these are not facts, which might be otherwise. If they were, then the rules would not be justified, since then it would make sense for something to be transparent white or for a class to be a member of itself, even though as a matter of fact nothing is transparent white and (on Russell's view) no class is a member of itself. But if the 'can' is the 'can' of logical impossibility, then far from justifying the rule that the form of words 'transparent white' is excluded from the language, the proposition that nothing can be transparent white is an expression of that very rule. Glass cannot be transparent white just as one cannot castle in draughts.

The ineffable, but essential, answerability of the logical syntax of any possible language to the logical structure of the world was indeed an illusion. But it was the precursor to Wittgenstein's later view that there is no such thing as justifying grammar by reference to reality, and hence too to his later insistence upon the autonomy of grammar.

It had, of course, been perfectly correct to say that one cannot circumscribe the limits of thinking by saying what cannot be thought. But it was mistaken to suppose that there is anything beyond the limits of language which is shown by the features of logical syntax but which cannot be put into words. That idea illegitimately satisfies philosophers' 'longing for the super-natural // transcendental //, for in believing that they see the "limits of human understanding" of course they believe that they can see beyond them' (BT 424). That 'longing' is exhibited in the endeavour of traditional philosophical attempts to describe the essential features of the world by means of necessarily true propositions which state what must be thus and so, what is or is not possible, or what is thus and so and cannot be otherwise. The science which purported to describe such truths was metaphysics. The Tractatus had argued that metaphysical propositions are impossible. Not only do they not satisfy the bipolarity condition on propositions with a sense, they also involve the illegitimate use of formal concepts. But what they try to say is shown by features of the symbolism of any system of representation. The Tractatus circumscribed the bounds of sense in order to make room for ineffable metaphysics. But the bounds of sense do not fence us in from the ineffable, which can be apprehended from within those bounds but not described. They fence us in from the void. One can say that nothing can be red and green all over, that if something is coloured it must be extended, or that one cannot enumerate all the cardinal numbers. But these are grammatical statements, expressions of rules, not metaphysical justifications of grammar.

Such statements can mislead, if we think of them on the model of statements of physical necessity, such as 'Nothing can run faster than n mph', or 'If something is made of solid ebony it must sink in water'. But this misleading appearance can readily be dispelled:

Do not say "one cannot", but say instead: "it does not exist in this game". Not: "one cannot castle in draughts" but -- "there is no castling in draughts"; and instead of "I can't exhibit my sensation" — "in the use of the word 'sensation', there is no such thing as exhibiting what one has got"; instead of "one cannot enumerate all the cardinal numbers" — "there is no such thing here as enumerating all the members". $(Z \S 134)$

vi. *The limits of reality*: If the legitimate features of the objects of the *Tractatus* were in effect features of samples belonging to the means of representation, and if something is a sample only if we choose to use it as a sample, then obviously the thoughts that objects constitute the sempiternal substance of the world and that the limits of reality are determined by the totality of objects are incoherent. So too is the idea that the totality of elementary propositions is given by the totality of objects. Hence too the thought that the totality of elementary propositions makes manifest the limits of logical possibility cannot be sustained. Indeed, the whole conception of *de re* logical possibilities in nature collapses.

We have a picture of reality as moving in the tracks of logical possibility (PLP 341), as if the logically possible were the *Spielraum* of the actual, which is constrained by its limits, viz. by what is logically impossible. What is merely logically possible is not what is actually the case. It is what *would* be the case, were that possibility realized. Nevertheless, it seems to have a shadowy reality of its own (AWL 64f.). We know what the possibility is and can say what it is. It seems as it were potentially present, *unlike logical impossibilities*. For something that is not the case, but which might have been the case, is logically possible. And that seems *more* the case than if it *could not* be the case (TS 302, 16). So it seems as if grammar, to be correct, must mirror the objective range of possibilities in reality. For it fixes the degree of freedom in language, and a proposition must have the same degree of freedom as what it signifies -- we must be able to do as much with language as *can* happen in reality (LWL 8). The order of logical possibilities in nature must surely be determined, independently of language and of human conventions about the use of words, by the essential natures of things. And grammar must reflect that objective order if language is to be able to say everything that can be said.

This attractive picture is wholly misguided. Far from reflecting the essential natures of things, grammar determines their essential natures. In laying down rules for the use of words, in fixing what is to *count* as such and such a thing and in determining its criteria of identity, grammar tells us what kind of entity anything is (PI §373). The picture of a logical possibility as a shadow of an actuality, as something potentially present, as more real than a logical impossibility, is misconceived. The metaphor of a shadow is awry, for how can something which is merely logically possible cast a shadow? After all, it does not exist. To say that it is potentially present is merely a restatement, rather than an explanation, of its possibility (AWL 64f.). It is absurd to suppose that a logical possibility is more the case than an impossibility. For nothing in reality corresponds to a mere logical possibility, and there cannot be less than nothing to correspond to an impossibility (PI §521). Where in the world is the phenomenon of logical possibility to be found? Not in the factual constitution of things -- for that can disclose only physical, causal possibilities. Rather, logical possibility is laid down in the rules of our symbolism (AWL 162). It is not that grammar determines what makes sense, and in so doing reflects the order of possibilities in nature. Rather, in determining what makes sense, it determines what we are to call 'possible' and 'impossible'. No more corresponds in nature to a logical possibility than to a logical impossibility. What 'corresponds' to a logical possibility is a sentence with a sense. To say that such and such is logically impossible is not to exclude something from nature. For a logical impossibility is not a possibility that is impossible.

Rather, what is excluded is a form of words, and it is excluded not from nature but from language. Such a form of words has no sense, since we have *given* it no sense. To be sure, we could give it a sense — lay down criteria of application for this hitherto nonsensical form of words. But then we should be changing the meanings of its constituent words, allowing *this* combination which was previously excluded. And that change will ramify through the multitudinous uses of these words in *other* sentences.

vii. The metaphysics of science: Though there are scattered remarks on science and scientific method in Wittgenstein's later writings, there is no direct, let alone detailed, discussion of the nature of scientific explanation. Nevertheless, it is evident that he retained the core of his Tractatus view, while relinquishing the wrappings of the ineffability thesis which prohibited the statement that there are laws of nature. Fundamental principles of scientific theories, which philosophers had sometimes represented as metaphysical principles of natural science (Kant, Collingwood) are in fact norms of representation (hence, in a sense, 'about the net and not about what the net describes' (TLP 6.35). When Hertz remarks that if something does not conform to his laws of mechanics, there must be invisible masses in the vicinity of the object to account for the deviation, it appears as if he is invoking an a priori law of nature. But in fact, he is invoking a norm of description which he has laid down. The law of causality is a norm of explanation, which may or may not be fruitful. But it is not a property of the objects described in classical mechanics. Rather, it is a property of the system of description which we have chosen to adopt (AWL 16).

viii. The metaphysics of experience: What the solipsist means is anything but quite correct. It is a thoroughgoing muddle. But it is not mere folly. For confused though it is, it points to important features of our language. The first-person pronoun is a degenerate referring expression, which fulfils a role importantly unlike that of the other personal pronouns.xiv It is akin to the designation of the point of origin in a system of coordinates, whereas other referring expressions are akin to designations of points on the graph. Psychological predicates occurring in expressions (Äusserungen) of experience are employed without any criteria, whereas in third-person ascriptions they are justified by behavioural criteria for their application. An inchoate grasp of these features can be seen to underlie the solipsist's confusions, and this explains his confused dissatisfaction with our notation or system of representation (cf. BB 58f.). But there is nothing ineffable here -- only the description of grammatical rules. Similarly, there is indeed no such thing as the soul, conceived as a res cogitans. But that is not shown by the analysis of belief propositions in terms of a correlation of facts by means of the correlation of their objects. Indeed, that analysis is misconceived, inter alia because the principle of extensionality is to be rejected.

ix. Ethics and aesthetics: After the 'Lecture on Ethics' of 1929, Wittgenstein wrote nothing further on ethics, save for occasional asides. He did, however, lecture on aesthetics. It is evident that the doctrine of the ineffability of absolute value was abandoned. There is an interesting diagnosis of one impulse towards such a conception in the lectures on aesthetics (LA 37) and in the Brown Book (BB 178-83). As might be expected, the diagnosis is deflationary. The expressions 'has meaning', 'says something', 'is meaningful' all have uses in aesthetic appreciation (and elsewhere) in which we go on and say 'namely ...', explaining what meaning the object of the aesthetic appreciation has or what it says. We may say 'This melody makes a quite particular impression: it is redolent with power; it surges forward ever faster, the strings join in to increase the tension, and the blare of trumpets brings it to a triumphant conclusion' and in the case of programmatic music, we may remark how

xiv For a discussion of Wittgenstein's account of the first-person pronoun, see P.M.S. Hacker, Wittgenstein: Meaning and Mind, Volume 3 of an Analytical Commentary on the Philosophical Investigations (Blackwell, Oxford, 1990), in an essay entitled 'I and my self'.

wonderfully the music conveys the impression of calm seas, of sunrise, or of a passing summer shower. Such uses Wittgenstein calls 'transitive'. But we also use the same form of words intransitively. It sometimes occurs that we are impressed on hearing a piece of music played in a certain way, and we say 'This musical phrase, played thus, has meaning' or 'This piece of music says something'. This may be no more than an expression of how impressed we are, how striking we find the object of our attention. Or we may say that played thus and so, the musical phrase is meaningless, but played in such and such another way it is meaningful -without a 'namely'. Here one cannot ask 'What does it mean?' or 'What does it say?', although we might say that the music 'tells one itself' (PI §523), 'conveys to us itself' (BB 178). In philosophical reflection we are liable to misconstrue this rather special use of these words, and think that in such cases of aesthetic appreciation, language is too impoverished to express the impression the music makes, i.e. that the music says something, but what it says is ineffable. But this is confused, projecting the use of such expressions when they are employed transitively on to these quite different contexts in which they are used intransitively. If asked 'What impression?', one may reply 'Well, it just is very striking -- listen to it'. Here 'a quite particular impression' does not serve as a preface to a 'namely ...'. It is not a confession of the limits of language, nor an intimation that one has grasped something ineffable, but is merely a form of emphasis: the melody really did impress one.

Did nothing more remain of the *Tractatus* ineffability thesis than these deflationary explanations? There is a deliberate echo of the Tractatus in On Certainty, in the context of a discussion of the groundlessness of induction, which may incline one to think that the ghost of the Tractatus still walked. The 'law of induction', Wittgenstein remarks, cannot be grounded, but neither can one sensibly say that one knows it to be true. It would be more correct to say 'I believe in the law of induction', where 'believe' has nothing to do with surmising (C §500). He then continues thus: 'Am I not getting closer and closer to saying that in the end logic cannot be described? You must look at the practice of language, then you will see it' (C §501). But what this affirms is not the ineffability of something that shows itself, but rather that 'In the beginning was the deed'.xv Less than two weeks later, only a few days before his death, he wrote: 'Doesn't it seem obvious that the possibility of a language-game is conditioned by certain facts? In that case it would seem as if the language-game must "show" the facts that make it possible? (But that is not how it is)' (C §§617-8). Rather, 'In particular circumstances one says "you can rely on this"; and this assurance may be justified or unjustified in every day language, and it may also count as justified even when what was foretold does not occur. A language-game exists in which this assurance is employed' (C §620). The ghost of the Tractatus had been exorcised.

That there are things that cannot be said but are shown by language was an illusion. In most cases, the illusion sprang from unwittingly projecting upon reality features of the grammar of expressions of our language. In particular, much of what was thought to be ineffable was merely the shadow cast by rules for the use of words. As Wittgenstein later observed: 'We predicate of the thing what lies in the method of representing it' (PI §104). Logic appeared to present 'the a priori order of the world: that is the order of *possibilities*, which must be common to both world and thought' It was conceived to be 'prior to all experience', 'of the purest crystal', yet to run through all experience; not an abstraction, but something concrete, 'indeed, as the most concrete, as it were the *hardest* thing there is' (PI §97). The picture presented by the *Tractatus* had great beauty — like a picture illustrating a fairy

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^{xv} Cf. C §204: 'Giving grounds, however, justifying the evidence, comes to an end; -- but the end is not certain propositions' striking us immediately as true, i.e. it is not a kind of *seeing* on our part; it is our *acting*, which lies at the bottom of our language-game.' The quotation 'In the beginning was the deed' is from Goethe's *Faust*.

tale. When the tale was over, the whistling had to stop.

Footnotes

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