CRISS-CROSSING A PHILOSOPHICAL LANDSCAPE

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CRISS-CROSSING A PHILOSOPHICAL LANDSCAPE

Essays on Wittgensteinian Themes Dedicated to Brian McGuinness

Edited by

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intuitionistic anti-realism would admit, and that is the tendency to assimilate the mathematical proposition to an ordinary descriptive proposition which confers on it an appearance of meaning independent of the possibility of proving it, and not, as Dummett would say, that it is a decision concerning the kind of meaning it has which gives it the status of a proposition describing a determinate objective reality.

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John Watling) which is responsible for A's being prepared for B's behaviour (as accounted for by those mental facts); for one and the same person this capacity would be idle except for cases where she plays a double role.

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PREFACE

For thirty-five years the international community of philosophers have known Brian McGuinness as a major authority on the philosophy of Wittgenstein and neighbouring fields. His bibliography bears ample witness to his great merits as commentator, editor, translator, and biographer. His importance as a teacher cannot be stressed enough: a large number of professional philosophers, in and out of Oxford, had their views on the *Tractatus* shaped in the demanding, almost yearly, seminars on that work that Brian McGuinness offered at Queen's College. He has been a frequent and well-seen participant in innumerable meetings where his erudition and precision of thought have greatly contributed to the quality of the meetings concerned.

These circumstances make it inevitable that a number of scholars, comprising pupils, co-workers, colleagues, and friends, should want to honour him with a *Festschrift* of papers directed to topics that have had his strong attention. Accordingly we are most grateful to Rudolf Haller, the editor of the *Grazer philosophische Studien*, for putting his pages at our disposal. The two editors first came to know Brian McGuinness as a tutor during the time they held Florey Studentships at Queen's College, Oxford. It is therefore a particular pleasure for us to convey the very best wishes of all the contributors that have joined together in order to honour him and to express the hope that the community of scholars shall long be able to benefit from Brian McGuinness's learning and industry.

Joachim Schulte Göran Sundholm

THE HAPPY MAN

Joachim SCHULTE
Bologna

In Wittgenstein's *Tractatus* the happy man is mentioned only once. The relevant passage occurs in 6.43:

> If the good or bad exercise of the will does alter the world, it can alter only the limits of the world, not the facts – not what can be expressed by means of language.
>
> In short the effect must be that it becomes an altogether different world. It must, so to speak, wax and wane as a whole.
>
> The world of the happy man is a different one from that of the unhappy man.[1]

There is a slight problem about the continuation of this remark in 6.431, which says: "So too at death the world does not alter, but comes to an end." It is obviously difficult, if not impossible, to read 6.431 as correctly connected by "so too" with the sentence about the happy and the unhappy man. A look at the corresponding pages of the third *Notebook* (15.4.1916-10.1.1917) and the *Prototractatus* makes it clear, however, that 6.431 is the proper continuation of the sentence *preceding* the remark about the happy man, for in both earlier sources 6.431 immediately follows the sentence about waxing and waning.

1. Translated by David Pears and Brian McGuinness (London: Routledge & Kegan Paul, 1961). The translation of the *Notebooks* (edited by G. H. von Wright and G. E. M. Anscombe) is by G. E. M. Anscombe (Oxford: Blackwell, 2nd edition 1979). A facsmile edition of the *Prototractatus* (together with an edited text and a translation) has been produced by B. McGuinness, T. Nyberg, and G. H. von Wright (London: Routledge and Kegan Paul, 1971). An edited transcription of the *Prototractatus* has been published in the critical edition of the *Logisch-philosophische Abhandlung* (*Tractatus Logico-Philosophicus*), edited by Brian McGuinness and Joachim Schulte (Frankfurt am Main: Suhrkamp, 1989).

In the *Notebooks* (5.7.16) the sentence about waxing and waning is further elucidated by the remark that this process of waxing and waning is to be understood in terms of adding or subtracting a "sense" or "point" (*Sinn*). This elucidation is dropped in the *Prototractatus* and is hence missing from the *Tractatus* too; and the sentence about waxing and waning and that about death are separated by means of the numbering, which was effected at a later stage, after the remarks had been penned into the manuscript book. Through the numbering the sentence about death (6.442) is presented as the next sentence of the same status as that about waxing and waning (6.441), thus marking the intervening text as subordinate to 6.441. (The remark about the happy man, which in the manuscript of the *Prototractatus* comes a page after that about waxing and waning, is here numbered 6.4411).

The traceable history of these remarks makes it clear that the sentence about the happy man is meant as an illustration of the remark about waxing and waning, while 6.431 mentions a kind of limiting case of waning, namely death; in the case of death the world as a whole shrinks to zero extension, as one might say. By characterizing death as a limiting case of waning or contraction one seems to suggest that the world of the happy man is larger than that of the unhappy man,[2] and the idea thus suggested may also agree with one's intuitive understanding of Wittgenstein's remark.[3] In the *Tractatus* and in the *Prototractatus*, however, the order of words points the other way: waning corresponds to the happy man, waxing to the unhappy man. Such a reading too could be made to agree with our intuitive notions if we remember that what appears large may frighten us, while small things tend to leave us unimpressed and thus cause no disagreeable feelings.

2. Heinrich Gomperz, in his brillant "Einige Beiträge zum Verständnis der Mystiker" (printed as an appendix to his *Die Lebensauffassungen der griechischen Philosophen und das Ideal der inneren Freiheit* [Jena/Leipzig: Diederichs, 1904, pp. 302-318]) speaks of "eine 'Schwellung' des allgemeinen Lebensgefühls" resulting from transcending (*Überwindung*) the "personal self".

3. Someone who takes a thoroughly Schopenhauerian line would not agree, however. If one regards non-being as preferable to any form of suffering, the disappearance of the world would have to be placed on the side of happiness rather than on that of unhappiness.

As a matter of fact, Wittgenstein does not make it clear whose world expands and whose contracts; he merely states that the world of the happy man is *different* from that of the unhappy man. And as this statement figures as an elucidation or illustration of the remark about waxing and waning, it is evidently legitimate to assume that the relevant difference is one of "size" or "extension", as it were. There is a more or less obvious difficulty about this reading, however. This is pointed out by Brian McGuinness in his biography of young Ludwig Wittgenstein when he writes: "Wittgenstein says of the world of the happy or unhappy man: It can wax or wane as a whole – expand or contract (6.43). Literally, of course, this would be nonsense – if everything expands, nothing does; yet the terms have often been used by mystics to describe hope and despair."[4] An example from the writings of a Muslim mystic is quoted in McGuinness's article "The Mysticism of the *Tractatus*".[5] In this instance the "expanded man" is the one for whom nothing fearful exists.

Another way of trying to understand what Wittgenstein says about the world's waxing and waning as a whole is the following. We all know that one and the same town or countryside may now strike us as much smaller or larger than they appeared to us on an earlier occasion. In such a case we may be certain from the very outset that no real change of size has taken place in the meantime and yet have the ineradicable feeling that things – and that often means: the scene in its entirety, not merely one object or a few objects compared with a number of other objects – have expanded or contracted. This kind of experience is frequently, and often obviously, connected with a change in our outlook or attitude, and such a change may in its turn affect, or depend on, our happiness or unhappiness. An experience of this type is similar to that of seeing things in a certain light (everything appears "dark" or "pink" to me, etc.). These feelings may go along with my having discovered a new sense in what I am doing or with my considering something or even everything to have become pointless. And it may well be this kind of situation which Wittgenstein has in mind when he speaks of the

4. Brian McGuinness, *Young Ludwig* (London: Duckworth, 1988), p. 312.

5. Brian McGuinness, "The Mysticism of the *Tractatus*", *Philosophical Review*, pp. 324-5.

addition or loss of a sense or point (*Notebooks* 5.7.16 [5]).

As has already been observed, this last-mentioned remark from the third *Notebook* figures neither in the *Prototractatus* nor in the *Tractatus* itself. It was dropped by Wittgenstein together with the vast majority of his early remarks about happiness or unhappiness. Whatever his reasons for cutting all this material may have been, most commentators find it helpful to have recourse to the *Notebooks* in their attempts to shed some light on difficult passages from the *Tractatus*. This, I think, may indeed prove a useful strategy. But it is not always an easy one to adopt, if only for the simple reason that the *Notebooks* themselves are often hard to understand, which in part is naturally due to their being a first, or at any rate an early, draft of what was to become the only book by Wittgenstein published in his lifetime. If difference of opinion between expert commentators counts as indicating real difficulties inherent in the text in question, it may turn out that several passages from the *Notebooks* will have to be regarded as utterly mysterious, since there appears to be complete disagreement as to what these passages are about.

One such set of remarks appears to one commentator to concern the happy man. This commentator writes:

> The *Notebooks* make clear that both the realization that the world is my world (2.9.16, 15.10.16) and the ability to "live in the present" (8.7.16 [13]) are essential parts of happiness. The insight which Wittgenstein expresses by the words "I am my world" is in part a refusal to identify oneself with one part of the world rather than another (2.9.16 [7, 8]; 12.10.16 [1, 8]). One who has this insight does not identify himself with the physiological or psychological peculiarities and life of a particular individual human being. The higher or metaphysical self feels itself identical with the whole world (11.8.16 [2], 12.8.16 [1]), and its happiness is the goodness – the expansion – of the whole world.[6]

This reading is vehemently contested by another commentator, who writes:

6. McGuinness, "The Mysticism of the *Tractatus*", p. 318. References to the *Notebooks* have throughout been adapted to the style used in the critical edition of the *Tractatus*.

> McGuinness suggests that realization that the world is my world is an essential part of happiness, that "I am my world" is a refusal to identify oneself with the physiological or psychological peculiarities and life of a particular individual. He supports this interpretation primarily by reference to Notebooks 2.9.16 [7, 8] and 12.10.16 [1, 8], and associates it with traditional mysticism. The last two passages are concerned with combatting Schopenhauer's doctrine of the privileged status of our own bodies in relation to our knowledge of our intentional actions. The first is concerned with identifying the philosophical self with the transcendental subject. These doctrines have little to do with attribution of importance to parts of the world, or with the happiness of the Stoic attitude.[7]

Before going into some details of these two readings it will be appropriate to quote the remarks that represent the real bone of contention:

> (1) The philosophical I is not the human being, not the human body or the human soul with the psychological properties, but the metaphysical subject, the boundary (not a part) of the world. The human body, however, my body in particular, is a part of the world among others, among beasts, plants, stones etc., etc. (2.9.16 [7])
>
> (2) Whoever realizes this will not want to procure a pre-eminent place for his own body or for the human body. (2.9.16 [8])
>
> (3) A stone, the body of a beast, the body of a man, my body, all stand on the same level. (12.10.16 [1])
>
> (4) I am my world. (12.10.16 [8])

In speaking of the "last two passages" Hacker presumably means (2) and (3). His claim that these passages "are concerned with combatting Schopenhauer's doctrine of the privileged status of our own bodies in relation to our knowledge of our intentional actions" is, however, not really tenable in this form. Of course, there can be no doubt that Schopenhauer's writings influenced Wittgenstein. Schopenhauer's terminology is used in a number of remarks of the *Notebooks*; some phrases and examples look as if they had simply been lifted from *The World as Will and Representation* and trans-

7. P. M. S. Hacker, *Insight and Illusion* (Oxford: Clarendon Press) revised edition (1986), p. 99 n. 17, first edition (1972), p. 76, n. 1.

planted into the landscape of Wittgenstein's thought. Thus it may very well be that, as Hacker writes, there "can be little doubt that the last of the three extant notebooks was written while Wittgenstein was re-reading Schopenhauer".[8] But all that does not mean that Wittgenstein was in the summer and autumn of 1916 busy trying to refute a doctrine, or several doctrines, propounded by Schopenhauer. Hacker is wrong insofar as he is suggesting that Wittgenstein was thinking within anything like a Schopenhauerian framework. What Wittgenstein did was trying to absorb certain striking notions into his own way of thinking, thereby transforming them into something different and, in particular, depriving them of the specific roles they play in their original contexts.

To be sure, it is in the nature of this kind of exegetical question that I cannot fully establish a negative statement to the effect that Wittgenstein's thinking was essentially independent of Schopenhauer's; that he merely employed and assimilated formulations, images, attitudes, and examples taken from this author for purposes of his own. But it may be useful to remind the reader of the fact that this was invariably Wittgenstein's way of using authors he liked and respected, for instance Frege, Russell, Weininger, Spengler, and William James. The most he ever did was to take a problem from these thinkers and transform it into a problem for himself, immediately turning it into something that was eminently characteristic of himself, Ludwig Wittgenstein.

What may help to see that this is the appropriate way of looking at the *Notebooks*, and at the passages cited above in particular, is the following consideration. We may grant that Wittgenstein was influenced by his reading of Schopenhauer's work to note that the human body (including my own body) is to be treated on a par with all other objects: "beasts, plants, stones etc." But what does he say that for? What is his point in saying that?[9] It is true that the statement that my body is in all respects to be regarded as standing on the same level as other bodies is incompatible with Schopenhauer's idea that there is a privileged way in which I am aware of my own body.[10]

8. Hacker, op. cit., p. 88 (first ed., p. 64).
9. A partial answer is suggested below.
10. As a matter of fact, in the passages quoted above Wittgenstein does not

But even if it is correct to say that Wittgenstein, influenced by what he has read in Schopenhauer's work, makes a statement which is in contrast with Schopenhauer's theory, this does not mean or in any way amount to implying that Wittgenstein makes this statement in order to contradict or refute or "combat" Schopenhauer's doctrines. His point in making this statement is likely to be fairly independent of and hardly related with any theory Schopenhauer wished to defend.

Now it looks as if Hacker's reading of certain passages from the *Notebooks* might at least partly be reconciled with McGuinness's interpretation, according to which the man aspiring to, and perhaps about to achieve, happiness is here among other things expressing his "refusal to identify [him]self with one part of the world rather than another". This is a point which will be touched on later. First I shall discuss a second point where the interpretations put forward by McGuinness and Hacker meet but fail to go along with each other.

The point where they meet is the notion of the self but the ways they speak of it and the contents of their remarks about it diverge radically. While McGuinness uses Wittgenstein's expression and speaks of the higher or "metaphysical" self, Hacker says that quotation (1) "is concerned with identifying the philosophical self with the transcendental subject". McGuinness for his part sustains that it is the metaphysical self which "feels itself identical with the whole world" and is the bearer of the happiness discussed by Wittgenstein. And here one may well wonder whether this can be right; intuitively speaking, the *metaphysical* self seems after all not the right kind of candidate for happiness or unhappiness. "Happy" or "unhappy" do not seem to be permissible predicates to use of a metaphysical entity.

Hacker, on the other hand, seems to be guilty of misconstruing Wittgenstein when he writes that the latter is in (1) attempting to identify the philosophical self with the transcendental subject. What

claim that my own body is *in all respects* to be regarded as standing on the same level as the bodies of other animals and as inanimate objects. And in view of the circumstance that Schopenhauer goes out of his way to assert that *as representation* my body stands on absolutely the same level as all other objects a completely general claim by Wittgenstein would be needed for one's being able to say that his view fully contradicts Schopenhauer's conception. This, however, is a detail which I do not want to go into in this context.

Wittgenstein says is that the philosophical I is the metaphysical subject in the sense of being the limit of the world. It is true that Wittgenstein calls "the subject" a presupposition of the existence of the world (2.8.16 [11]),[11] but even this statement does not justify the claim that the subject meant by Wittgenstein is in any specific sense a "transcendental" one; it does not justify this claim because Wittgenstein makes no transcendental use of that statement. To the extent that Hacker is trying to suggest that Wittgenstein is thinking within a transcendental framework in Kant's or Schopenhauer's sense, there simply is not enough evidence for his claim.[12] Little wonder that, after arguing that Wittgenstein's remarks about death (*Tractatus* 6.431ff.) can only by reference to Schopenhauer's doctrines about death and eternal life "be taken to have a limited degree of intelligibility",[13] Hacker must admit that the notebooks contain next to nothing (he says "very little")[14] about the nature of time, in particular nothing about the ideality of time, a notion which he regards as crucial for making sense of Wittgenstein's remarks in terms of transcendental idealism. So in view of this complete lack of evidence for his thesis Hacker should have come to the conclusion that either he had made a mistake or that Wittgenstein's remarks possess not even that "limited degree of intelligibility" which he had thought he could ascribe to them.[15]

11. I think that the feeling that the subject is a presupposition of the world is to be understood in the sense alluded to by Gomperz, who describes it as part of a mystical experience and writes that while for the expanding self there is nothing but the world, the world in its turn is dependent on the self: "Denn außer der Welt ist nichts. Die Welt aber ist von ihm [the person who has transcended his individual self] abhängig. Es kann also nichts geben, was außer ihm ist, was ihn bedrohen könnte, wovor er sich fürchten müßte, was ihn unruhig oder unsicher zu machen vermöchte; sondern in absoluter Ruhe, Sicherheit und Zuversicht wird er sich völlig befreit und erlöst fühlen" (op. cit., p. 306).

12. My view that Hacker exaggerates the (Kantian) transcendental elements in Wittgenstein's thinking is shared by Rudolf Haller. Cf. his "Was Wittgenstein a Neo-Kantian?", in his *Questions on Wittgenstein* (London: Routledge, 1988) pp. 44-56.

13. Hacker, p. 95 (first ed., p. 72).

14. Ibid., p. 99 *n.* 18 (first ed., p. 76 *n.* 2).

15. It is remarkable that Hacker thinks that recourse to transcendental idealism

Of course, it is practically impossible to discuss questions as to the nature of the self which in Wittgenstein's eyes may be regarded as the ligitimate bearer of happiness without touching on that vast set of exegetical problems posed by Wittgenstein's pronouncements on solipsism. This whole issue is highly perplexing, also because no two commentators seem to see eye to eye on the meanings of the key words, nor do they appear to feel obliged to clarify them. An interesting and extremely vexing question which poses itself in this context is whether Schopenhauer may be regarded as a possible source of Wittgenstein's notion of the solipsistic self. Hacker for one construes Schopenhauer's dismissal of "theoretical egoism" in § 19 of the first volume of *The World as Will and Representation* as a rejection of solipsism in general while Weininger for instance, whose voice is quite clearly audible in a number of remarks of Wittgenstein's *Notebooks*, implies that Schopenhauer himself was a sort of solipsist.[16] I suspect that the problem is largely verbal. Probably there is one sense of "solipsism" in which it coincides with "theoretical egoism", and it is likely to be *this* sense in which solipsism is the target of some of Wittgenstein's later criticisms.[17] And there is at least one other sense of the word – but more likely

is needed for making at least some sense of Wittgenstein's "puzzling" claim that at death the world ends. In the mystical tradition this claim is fairly standard. In view of the first two remarks noted on 1 August 1916 ("Wie sich alles verhält, ist Gott. / Gott ist, wie sich alles verhält.") it is just a step to the famous distich "Gott lebt nicht ohne mich" by Angelus Silesius: "Jch weiß daß ohne mich Gott nicht ein Nun kan leben / Werd' ich zu nicht Er muß von Noth den Geist auffgeben." (*Cherubinischer Wandersmann*, I.8, ed. L. Gnädinger [Stuttgart: Reclam, 1984, p. 28].) Hacker's insistence that those "darkly mysterious" passages of the *Tractatus* and the *Notebooks* require an explanation through transcendental idealism must be due to his refusal to consider Wittgenstein's indebtedness to "traditional mysticism".

16. Cf. Hacker, p. 94 (first ed., p. 70); Weininger, *Über die letzten Dinge* (Wien and Leipzig: Wilhelm Braumüller, fourth ed. 1918 [first ed. 1907]), p. 138.

17. A number of commentators have attempted to use Wittgenstein's later criticisms of solipsism, especially the relevant passages of the *Blue Book* and of the "Notes for Lectures on 'Private Experience' and 'Sense Data'", to shed light on the meaning of Wittgenstein's early remarks on solipsism. The results have not persuaded me that such attempts can contribute much to our understanding of those parts of the *Notebooks* and the *Tractatus*.

there are several senses – in which solipsism can be seen as a Schopenhauerian position and as compatible with the idea alluded to in *Tractatus* 5.62: "what the solipsist *means* is quite correct; only it cannot be *said*, but makes itself manifest."

What may be more surprising than the fact of the existence of such divergences of interpretation is the circumstance that there appear to be at least two radically different ways of getting from a Schopenhauerian conception of the self to a Wittgensteinian sort of solipsism. The first and more standard route leads from Schopenhauer's knowing and willing subject to Wittgenstein's metaphysical subject as the limit of the world. The second and surely less orthodox route leads from Schopenhauer's noumenal will to live, which manifests itself in every individual object, to Wittgenstein's I as a limiting point. This notion is adumbrated and placed in a Schopenhauerian context in an article by J. S. Clegg, who writes that the "metaphysical ego is not a part of the world itself but is related to it as an eye is related to what lies in its field of vision (5.633, 5.6331). In one sense of the pronoun 'I' everyone is the ego-eye that perceives the world from an extensionless point at the border of space and time (5.64)."[18] Thus the solipsistic position is not reached by excluding everything and everyone from the locus of my I but by way of coming to see that in a certain sense everyone is me and I am everyone. Something of this sort, I suppose, is the kind of subject which Wittgenstein means when on 23.5.15 he speaks of the *Weltseele* and says that there "really is only one world soul, which I for preference call my soul and as which alone I conceive what I call the souls of others".[19]

The concept of a *Weltseele*, with which Wittgenstein may have

18. J. S. Clegg, "Logical Mysticism and the Cultural Setting of Wittgenstein's *Tractatus*", *Schopenhauer-Jahrbuch* (1978) p. 39.

19. The concept of a *Weltseele* is critically discussed by Schopenhauer in § 28 of the second volume of *The World as Will and Representation.* It is likely that his adverse attitude is at least partly due to the fact that the word was a favourite term of Schelling. Another occurrence of the word "*Weltseele*" which Wittgenstein is likely to have seen is in Weininger's *Über die letzten Dinge*, p. 139. And then, of course, there is Goethe's famous poem "*Weltseele*". – As far as I know, there is no evidence as to whether Wittgenstein was at that time familiar with the passage about the world-soul in Plato's *Timaeus* (34b).

become familiar through Goethe's poem with that title, is at the time of writing the remarks published in the *Notebooks* clearly connected with his thoughts about solipsism and the self. Interestingly enough Goethe, in a letter of about thirty years after the composition of that poem, writes that it was the product of a time when his "abundant youthful spirit still identified with the universe and believed to fill it, even to re-create it in its parts".[20] The key notion of identification is not mentioned but used in Wittgenstein's above-quoted remark of 23 May 1915, and the whole issue comes up again in the context of his discussion of a certain "conception" on 15.10.16. Here he deals with questions regarding the possibility of drawing inferences from my body to my mind or spirit (*Geist*) and by way of analogy to the spirit of other beings – Wittgenstein mentions snake, lion, elephant, fly and wasp. He wonders (in a language somewhat reminiscent of Goethe's spirit-dispensing subject in the poem mentioned) "why I have given a snake just this spirit" and continues:

> But the question arises whether even here, my body is not on the same level with that of the wasp and of the snake (and surely it is so), so that I have neither inferred from that of the wasp to mine nor from mine to that of the wasp.
>
> Is this the solution of the puzzle why men have always believed that there was one spirit common to the whole world?
>
> And in that case it would, of course, also be common to lifeless things too. (15.10.16 [18-20])

It may not be immediately clear what Wittgenstein means by the "solution of the puzzle" of the traditional belief in a kind of *Weltseele*, but I think that the train of thoughts to which he alludes is roughly the following. We find that we understand neither ourselves nor others by means of anything like an inference from our own case to that of others or from theirs to ours. All bodies (including

20. Goethe to Zelter, 20.5.1826: "Es [the poem "Weltseele"] ist seine guten dreißig Jahr alt und schreibt sich aus der Zeit her, wo ein reicher jugendlicher Mut sich noch mit dem Universum identifizierte, es auszufüllen, ja es in seinen Teilen wieder hervorzubringen glaubte." (Quoted in the editor's note to "Weltseele" in Goethe's *Werke*, Hamburger Ausgabe (München: C. H. Beck), vol. I (ed. E. Trunz, fourteenth ed., 1989), p. 647.)

my own body) stand on the same level and no inferential bridge can connect them. Still, the fact of my understanding other beings remains, and this understanding has an element of immediacy which may lead me to the idea that one and the same soul or spirit lives in me and all these other beings. This soul knows itself directly, without requiring or being able to make use of any inferences involving the bodies it animates. Thus the statement that all bodies stand on the same level serves to express this dual insight: that, on the one hand, there is no way of bridging the gaps between different beings by way of inferential reasoning and that, on the other, there is something which all these beings have in common and allows them to come to know and perhaps understand each other or, at least, to form some sort of idea of each other.

Wittgenstein then goes on to say that "in that case" – which presumably is the case of there really being one spirit which is common to the whole world – this spirit would "of course" be common to inanimate things too. It is not clear what function this remark is supposed to fulfil within the overall picture sketched by Wittgenstein. It is somewhat reminiscent of Schopenhauer's claims that even in the power inherent in the falling stone we may discover something of that will which we know from our own case[21] and that the appearance not only of human beings and beasts but also of plants and inanimate things can be recognized as an appearance of the noumenal will.[22] In Schopenhauer these claims serve systematic purposes concerning, among other things, teleology while Wittgenstein's remark about the attributability of the spirit to lifeless things seems to be little more than a mere aside. We must after all remember that he does not say that the conception of a *Weltseele* is the right one or that he wishes to defend it; he merely indicates that if we look at the matter in a certain way, we may well be able to see the rationale for such a conception and that holding this conception entails that one may have to draw certain consequences.[23]

21. *The World as Will and Representation* I § 19.

22. Ibid. 28. Cf. Wittgenstein's remarks about the world-will in *Notebooks*, 17.10.16.

23. This reading is meant to apply to the relevant remarks of the third *Notebook*. The quotation from 23.5.15, on the other hand, is more positive; here Wittgenstein at least tentatively embraces a notion of a *Weltseele*.

Consideration of the conception of a *Weltseele* is by no means idle. It illuminates something that Wittgenstein wishes to express, something that is closely connected with an aspect emphasized by Hacker in a passage quoted above. As we have seen, there are several remarks in which Wittgenstein affirms that my body stands on the same level as all other bodies, that my body "is a part of the world among others". By seeing my own body this way I in a sense distance myself from my own body, and by doing that I – somewhat paradoxically – come to be in closer rapport with the world. By distancing myself from my own body I reduce the distance between my body and all other objects, thus making it possible to see them all as entities belonging to the same category. I come to understand that there is no real barrier between all these objects, no matter if I am thinking of my own body or of my cat or my chair. Or, to put it the other way around, if I have to overcome a barrier in order to make sense of the cat or the chair, I shall also have to overcome the same barrier in order to make sense of my own body and its behaviour.

There is a further element involved in distancing myself from my own body, and it is here that a parallel with the *Weltseele* conception becomes visible. If I want to make sense of my body – that is, if I want to understand what it is doing, what it appears as, what it expresses –, I shall evidently have to see it as an animated body; and to see it that way is not a very difficult thing to do in view of the fact that it is my body. But having decided to treat all bodies – my own body, your body, that cat('s body), that stone('s body) – as standing on the same level, I shall have to proceed in a similar way if I want to make sense of them. And that means that I shall have to invest them with part of myself;[24] my soul becomes their

24. Schopenhauer writes: "Wenn man . . . die ganze Macht seines Geistes der Anschauung hingiebt, sich ganz in diese versenkt und das ganze Bewußtseyn ausfüllen läßt durch die ruhige Kontemplation des gerade gegenwärtigen natürlichen Gegenstandes, sei es eine Landschaft, ein Baum, ein Fels, ein Gebäude oder was auch immer; indem man nach einer sinnvollen Deutschen Redensart, sich gänzlich in diesen Gegenstand VERLIERT, d.h. eben sein Individuum, seinen Willen, vergißt und nur noch als reines Subjekt, als klarer Spiegel des Objekts bestehend bleibt; so daß es ist, als ob der Gegenstand allein da wäre, ohne Jemanden, der ihn wahrnimmt, und man also nicht mehr den Anschauenden von der Anschauung trennen kann, sondern beide Eines geworden sind, indem das ganze Bewußt-

soul and by looking at them I am in a way looking at myself: "Only remember that the spirit of the snake, of the lion, is your spirit. For it is only from yourself that you are acquainted with spirit at all." (15.10.16 [14])

Of course, all this is very sketchy, and I do not pretend that it is easy to comprehend, let alone that any convincing reasons have been given for accepting it. All I have been trying to do so far is indicating the outlines of a picture traceable in some of Wittgenstein's remarks in his notebooks. There is one aspect of this picture which needs to be mentioned straight away before continuing our discussion. What I mean is that Wittgenstein's speaking of the insight that my body is a part of the world among others and that my body stands on the same level as all other bodies involves a kind of exhortation. He is enjoining himself to make a great conscious effort to enable himself to see his own body and the world in such a way that this body and all other bodies come to stand on the same level. It is after all neither natural nor easy for me to distance myself from my own body to such a degree that I can conceive of it as being on a par with your body or that cat or that table. To achieve such distancing an effort is needed, and once a sufficient distance has been reached, identification with my body and its movements can lead to similar questions as identification with anything else in the world or with the world as a whole.

The topic of identification and its attendant problems is mooted in the context of Wittgenstein's discussion of happiness. He says

seyn von einem einzigen anschaulichen Bilde gänzlich gefüllt und eingenommen ist; wenn also solchermaaßen das Objekt aus aller Relation zu etwas außer ihm, das Subjekt aus aller Relation zum Willen getreten ist: dann ist, was also erkannt wird, nicht mehr das einzelne Ding als solches; sondern es ist die IDEE, die ewige Form, die unmittelbare Objektität des Willens auf dieser Stufe: und eben dadurch ist zugleich der in dieser Anschauung Begriffene nicht mehr Individuum: denn das Individuum hat sich eben in solche Anschauung verloren: sondern es ist REINES, willenloses, schmerzloses, zeitloses SUBJEKT DER ERKENNTNISS." (*Die Welt als Wille und Vorstellung*, I § 34, ed. L. Lütkehaus (Zürich: Haffmans, 1988), p. 244-5. This magnificent passage is surely reminiscent of several remarks in Wittgenstein's *Notebooks* (cf. e.g. 8.10.16 [1, 2]). But I wish to insist that the similarities are similarities of formulation, attitude, and image, not of theoretical content and framework. Cf. Gomperz, op. cit., p. 310, on "sich verlieren".

that in order to live happily I must be in agreement with the world. And this statement is presented as a kind of definition of happiness. Being in agreement with the world, Wittgenstein says, amounts to being in agreement with the will of God, while being not in agreement with something involves unhappiness, as Wittgenstein suggests (8.7.16 [17, 18, 20]). A happy life is harmonious or at any rate more harmonious than an unhappy life (30.7.16 [7, 6]).

But who or what is that self which is, or fails to be, in agreement or harmony with the world? We cannot at this point simply answer that it is "the self" or "the subject" or "the ego" because Wittgenstein himself makes relevant distinctions in his notebooks by speaking severally of the empirical self,[25] the knowing (thinking, representing) self, and the willing self. In talking of the self which is in harmony with the world he cannot mean the empirical self, which is the ego to which psychological properties are ascribed. This ego, I take it, is part of the world inasmuch as it can be the subject of meaningful sentences, but it does not stretch any further, beyond the limit of the world as it were.

Another candidate that is to be excluded is the knowing, thinking, representing subject, which is found to be mere superstition and illusion: "It is true that the knowing subject is not in the world, that there is no knowing subject." (20.10.16 [4]). In contrast with the empirical self, the thinking or representing subject is not to be found in the world: no meaningful factual statements are to be made about such a subject. But the assumption of such a subject is not even necessary for providing a unique point of view from which the world is perceived and talked about. All I can do to give the world a certain orientation is to describe it (the world); there is no way of individuating the world I perceive by means of sentences about an alleged perceiver standing outside the world.

The centre of the world – what individuates the world – is the self as bearer of ethics. Only this self, but not the world, can be said to be good or evil. This self is the willing subject, of which Witt-

25. Wittgenstein does not call it that. But he contrasts the philosophical subject with "the human soul with its psychological properties". It seems legitimate to call the human soul in this sense "the empirical self".

genstein says that it *does* exist (5.8.16).[26] And on 4 November 1916 he even maintains that the subject is nothing but the willing subject [6]. The willing subject in its turn is what we call "the will" or "my will"; it is not to be found in the world but confronts the world. There is, as far as I can make out, no difference between it and the "philosophical" or "metaphysical" self (2.9.16 [7], 5.641), and sometimes Wittgenstein simply calls it "the subject" or "the I". This subject is not a part of the world but "the limit" of the world. Thus it does in a way "confront" the world, and Wittgenstein need not postulate an entity existing on the other side of the limit, facing the world, and taking a stance towards it.

Is this subject the bearer of happiness or unhappiness? I think the answer to this question must be "yes"; at any rate, this is what Wittgenstein's text suggests. The happy man faces or confronts the world; thus he cannot be a part of this world. He is in harmony with the world (8.7.16 [17]); his world is different from that of the unhappy man, his world is a happy world (29.7.16 [1, 14]) – this too shows that the happy man is not part of the world. Thus in a sense it is not quite right to call him a "man" (which would suggest that he is here considered as a human being and thus naturally as part of the world).[27] His way of contemplating the world is like that of the creator of works of art: he sees the world *sub specie aeternitatis*, and this means that he does not see it in space and time but *together with* space and time (20.10.16 [7], 7.10.16 [1-4]). In sum, according to what he has said so far, Wittgenstein has to draw the

26. However, on 19.11.16 Wittgenstein wonders whether there is any reason for assuming a willing subject. He asks if here again (that is, I presume, here as in the case of the thinking, representing subject) the answer would have to be that *my world* is sufficient for individuation. No answer to this question is given in the *Notebooks*. *The Tractatus* affirms that a thinking, representing subject does not exist but it avoids mention of a "willing subject". The "will", however, does play an important role in the *Tractatus*. When in 6.373 Wittgenstein says that the world is independent of my will, the will he is speaking of may surely be said to be that of a willing subject. So we are probably justified in thinking that for the author of the *Tractatus* my world is not sufficient for individuation; that a willing subject is needed for that purpose.

27. Wittgenstein speaks of "der Glückliche" not of "der glückliche Mensch". But in ordinary usage "der Glückliche" would of course be a human being.

conclusion that it is the willing subject – and hence, I should think, the metaphysical subject – which is happy or unhappy: happiness and unhappiness cannot be part of the world (2.8.16 [10]).

Here there are plenty of real difficulties to be found, and it is doubtful if Wittgenstein's remarks in the *Notebooks* and the *Tractatus* are sufficient to remove them all. A certain uneasiness was felt and expressed above by saying that predicates like "happy" and "unhappy" do not seem to express legitimate attributes of a *metaphysical* entity. This uneasiness may increase further if one remembers that Wittgenstein gives a number of fairly concrete hints how to lead a happy life. Thus he says that the "life of knowledge is the life that is happy in spite of the misery of the world", that the "only life that is happy is the life that can renounce the amenities of the world" (13.8.16 [5, 6]), and that "the beautiful is what makes happy" (21.10.16 [2]). How can this sort of hint be addressed to a metaphysical self? A self which can accept and follow the advice conveyed by these remarks does not seem to have anything very metaphysical about it. – To this kind of question and doubt one may reply that the word "metaphysical" is merely used to indicate that no meaningful factual statements can be made about the willing self qua entity. In any case, it will be helpful to disregard most of the characteristics one has learned to associate with philosophical uses of the word "metaphysical"[28] if one wants to understand Wittgenstein's thought and to develop a feeling for his concerns at the time of writing the remarks published in the *Notebooks*.

Another reason why the word "metaphysical" seems unfortunate in this context lies in Wittgenstein's claim that the happy man manages permanently to live in the present and thus outside the dimension of time. This claim implies that the unhappy man does live in time – he is afraid of things that may happen in the future and perhaps he hopes that certain events will take place. But if it is right to say that he lives in time, then calling him a metaphysical self cannot entail his standing outside the temporal dimension – and that would surely be an unusual employment of the expression "metaphysical".

28. 30.7.16 [8] seems to suggest that Wittgenstein does not distinguish between "metaphysical" and "transcendent". But even if this is so, it does not help us to understand his use of either word.

But these may eventually prove to be minor problems. A serious difficulty which remains concerns the epitomizing statement "I am my world". If this is taken literally as an identity-statement equating the self and its world, then one may despair of finding a reasonable interpretation of those remarks which suggest that the self is not to be identified with anything in the world. The only way of avoiding this difficulty consists in laying great stress on the fact that Wittgenstein does not claim that I am something *in* the world but maintains that I am my world in its entirety. If I am my world as a whole, then the distance between me and various parts of the world is the same in all cases, namely nil – or rather, it does not make sense to speak of such a distance –, and this fact serves to obviate the "intolerable" possibility that part of the world turn out to be closer to me than another (4.11.16 [34]). But if this is the right way of reading the statement that I am my world, then it applies to the unhappy man just as much as to the happy one; and in that case it is difficult to see how it is possible to hold that the happy man – in contrast with the unhappy man – is in agreement with the world (Wittgenstein's "definition" of happiness, 8.7.16 [17]). After all, if there is no distance between me and my world (= the world [12.8.16 (1), 5.641]), how can there be any lack of agreement – of harmony – between me and it, independently of how happy or unhappy I am?

At this point, I think, no attempt at grasping Wittgenstein's thought can avoid becoming rather speculative and allusive. Wittgenstein's claim is that even if there is virtually no difference between the facts of the happy man's world and those of the unhappy man's world, their respective worlds are none the less enormously different.[29] In view of what has been said so far, this crucial difference must be due to the attitude of the willing self towards the world, and that means: towards the microcosm it itself is. One way of expressing this is to say that happiness or unhappiness consist in the mode of identifying with the world, i.e. oneself. And that this is the right way of expressing it is confirmed by the numerous mystical

29. I take it that the comparison need not be made between two different people at the same time but may for instance be made between my unhappy self yesterday and my happy self today.

and pantheistic elements which Brian McGuinness has shown to be present in Wittgenstein's thought.

The self which succeeds in identifying with the world as a whole is unbiased; it has no preference for any part of it, nor does it reject anything: its will has truly become the world-will (cf. 17.10.16 [3]). A self which achieves this has solved the problem of life, and this means that for it there is no such problem any more (6.7.16 [3]), 6.521). The sense of life has thus become clear to this self, but it will be "unable to say what constituted that sense" (7.7.16 [1], 6.521).

TROUBLE IN PARADISE?
ON THE ALLEGED INCOHERENCE OF THE *TRACTATUS*

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With completion of the *Tractatus Logico-Philosophicus* [*TLP*] Wittgenstein had achieved the final solution to what he called "the problems". As to what these are he remains silent. External evidence and the argumentation of *TLP* itself suggest that foremost in his mind was the nature of the proposition. We can, in fact, think of *TLP* as something like an extended theory of the proposition. A notorious consequence of the theory, registered in proposition 7, is that one cannot entertain, meaningfully, the individual propositions of the theory – including proposition 7. This consequence is given a kind of double indemnity by Wittgenstein's opinion that his theory was "unassailable and definitive". For what possible point could there be to further reflection on the nature of the proposition, or any other of the "problems" laid to rest in *TLP*? So it is hardly surprizing that Wittgenstein retired from philosophy for a decade following *TLP*.

What would occasion his return were doubts about a thesis so fundamental to *TLP* that its demise would spawn philosophical work of an altogether different kind. The thesis in question is the mutual independence of elementary propositions [*MI*], namely, the thesis that the truth (or falsity) of any elementary proposition is compatible with the truth (or falsity) of any other elementary proposition. Wittgenstein's rejection of *MI* has become an article of faith among commentators. Some, howevever, doubt that *MI* is essential to *TLP* and even urge that without it the book's message survives in a new and improved form.[1]

1. Gale, *Negation and Non-Being*. Oxford (1976), especially pp. 88-105 and "Could Logical Space Be Empty?" *Acta Philosophica Fennica* 28 (1976) 85-104, and Carl Ginet, "An Incoherence in the *Tractatus*", *Canadian Journal of Philosophy* 3 (1973-74) 144-151.

Such an appraisal is hard to square with the text of *TLP*. Consider, thus, 2.021,

> Objects make up the substance of the world. That is why they cannot be composite.

with its glosses, 2.0211,

> If the world had no substance, then whether a proposition had sense would depend on whether another proposition was true.

and 2.0212,

> In that case we could not sketch any picture of the world (true or false).

In the space of three short passages, *MI* is unambiguously linked with the picture theory of the proposition, on the one hand, and with substance and simple objects, on the other hand. This is apparent from a closer look at 2.0211, which can be be formulated as

1. The world has no substance $\rightarrow$ (p has sense $\rightarrow$ q is true),

where q is a proposition different from p.[2] Assuming for the moment that it is not to be written as an equivalence, 1 is equivalent to

1A. $\sim$(p has sense $\rightarrow$ q is true) $\rightarrow$ the world has some substance.

In light of 2.021. 1A is equivalent to

2A. $\sim$(p has sense $\rightarrow$ q is true) $\rightarrow$ the world has simple objects.

In other words, a sufficient condition for the existence of simple objects [*TLP* objects] is the existence of propositions whose sense does not depend on the truth of another proposition. Now these propositions may satisfy *MI*, so long as the following, at least, is true

3. p is an elementary proposition $\rightarrow$ $\sim$(p has sense $\rightarrow$ q is true).

2. Context makes clear when I am using and when I am mentioning p. So it will be convenient to drop quotation marks, except where a serious use-mention confusion might arise.

Because *TLP* appears to regard *MI* as definitive of elementariness, it might seem that 3 can be supplanted by

3A. p is an elementary proposition $\leftrightarrow \sim$(p has sense $\rightarrow q$ is true),

and that 3 and 3A involve *MI* because in *TLP* every proposition is true or false and the sense of a proposition is given by its truth conditions. Thus, the truth conditions will be satisfied or not and, thus, for a proposition to have sense is for it to be true or false. So from 3A we would appear to get

4. p is an elementary proposition $\leftrightarrow \sim$(p is true or false $\rightarrow q$ is true).

However, 4 falls short of capturing *MI*. For this we need a modified right hand condition, something like

4A. p is an elementary proposition $\leftrightarrow \sim$(p is true or false $\rightarrow q$ is true or false),

which makes the truth *or falsity* of an elementary proposition independent of the truth or falsity of any other proposition.[3] Now 4A might be what is intended in 4. On the other hand, 4 might have in mind something quite definite as the proposition, q, whose truth is required for the truth or falsity of p. Although the literature has produced several possibilities, the issue need not be decided.[4] What is important is the connection between *MI* and the picture theory of the proposition.

The most natural way to approach this is to link 2.0212 with 2.0211 as follows.

5. (p is true or false $\rightarrow q$ is true) $\rightarrow$ $\sim\Diamond$(p depicts [a part of] the world).

3. Indeed, if we stay with the necessary condition of 3, then, rather than 4A, it might be sufficient to have 4B: p is an elementary proposition $\rightarrow \sim$(p is true or false $\rightarrow q$ is true or false).

4. I return to this at the close of the essay.

Thus, if p can depict a state of affairs, then its truth or falsity cannot depend on the truth of another proposition and, by 2A, there must be simple objects. As it stands, 5 might be thought unacceptable because p could, after all, be a truth-function of elementary propositions. So it may be better to replace 5 with

5A. (p is true or false $\rightarrow$ q is true) $\rightarrow$ $\sim\Diamond(\exists p')(p'$ depicts [a part of] the world).

5A says that if every proposition has truth value only in virtue of another proposition being true, then no proposition can depict the world or a part of it. Certainly, this would be the case were every proposition a truth-function of a different proposition. This suggests that only elementary propositions depict or, at least, that non-elementary propositions depict only because their elementary bases depict. As 5A implies, the possibility of depiction requires propositions whose truth or falsity depends on the truth of no other propositions and, as 2A implies, the existence of such propositions requires substance or simple objects. The first is tantamount to tying depiction to *MI* and the second ties *MI* to the existence of simples. So *MI* connects the picture theory of the proposition to the ontology of simple objects. Without *MI*, *TLP* breaks apart. So it is obvious that *MI* is essential to the message of *TLP*.[5]

Independence and the Picture Theory

As far as the argument of 2.021-2.0212 is concerned, the notion of sense plays a role slightly different from the notion of depiction.

5. Contra Ginet and Gale. Ginet does not seem to appreciate the consequences of relinquishing *MI*. Gordon Baker, on the other hand, describes them well in his *Wittgenstein, Frege and the Vienna Circle*, Oxford (1988), for example, 95. If one gives up *MI*, one gives up the claim that every line of a truth table corresponds to a genuine possibility for the world. Without *MI* special rules will be needed to exclude those lines of a truth table that don't represent such possibilities. This fractures the power and simplicity of *TLP*'s entire program and we inherite the kind of messy problems that befell Carnap's state descriptions with their awkward need for meaning postulates. (For how this problem connects with 2.0211 and Wittgenstein's later philosophy, see the end of the final section of the paper.)

For where, as in 1, the world has no substance, a proposition's sense is said to depend on the truth of another proposition. But Wittgenstein does not say that a proposition's ability to depict will depend on the truth of another proposition. It will, simply, not depict at all. In short, the notion of depiction is the stopper in the argument. It is not unfair to characterize Wittgenstein in *TLP* as possessed by a powerful image, namely, the image of a proposition as a kind of picture. It was this image that drove his program and promised solutions to a host of problems blocking a satisfactory account of the proposition. The existence of mutually independent elementary propositions and simple objects can then be thought of as essential features of the theory that articulates the core image. So, naturally, if either of these goes, so goes the theory itself. Most critics of the system of *TLP* have concentrated on its objects, worrying, for example, about the very coherence of the notion of an absolute simple or about the possibility of there being anything that meets the constraints of *MI*. I shall consider some of these views below. First, however, I would like to look at a different kind of attack on *MI*, one that challenges its connection with the picture theory of the proposition.

So far we have argued only that *TLP* endorses the dependence of the picture theory of the proposition [*PIC*] on *MI*. This holds whether the depicting proposition is elementary or non-elementary. It is widely accepted that *TLP* is also committed to a direct dependence in the other direction, namely,

6. p satisfies *MI* $\rightarrow (\exists e)(p$ depicts $e)$,

where e is the Sachverhalt or elementary state of affairs, whose obtaining makes p true.[6] It is the challenge to 6 that I wish to examine. The strongest and, so far as I know, still unrebutted attack is due to Carl Ginet. He argues for the outright falsity of 6 and, hence, for the wholesale scrapping of *MI*. His claim is not, for example, that Wittgenstein simply tired of his early view or found

6. Here I follow conventional wisdom, according to which a Sachverhalt is an elementary state of affairs. A situation or Sachlage consists of more than one Sachverhalt and is that whose obtaining (Bestehen) is a fact (Tatsache).

it aesthetically displeasing or even that he came to regret its narrow scope. These would be good reasons for relinguishing *TLP*'s doctrines but they are external reasons. As such, they leave the *theory* itself intact. In challenging 6, Ginet challenges the internal coherence of *TLP* itself. Now Wittgenstein did turn his back on *TLP* because of misgivings about certain fundamental tenets. But Ginet's view of what is wrong with *TLP* is unsatisfactory – if only because the arguments he gives in support of the view fail. So let us look at them.

Ginet begins with an appeal to the general nature of depiction. He says, for example (145), that, given a method, say *M*, for assembling elements so as to represent how things might be, (a) *M* must also be a method for producing competing possible representations of how things might be. Thus, if (b) *M* produces a representation, *r*, correct or incorrect, of how things might be, then (c) *M* must produce both correct and incorrect representations. Point (c) is, then, taken as sufficient for the claim that (d) *M* must produce, in addition to *r*, an incompatible representation *r**. The point is that the very notion of depiction is incompatible with depiction by mutually independent propositions. It is notoriously difficult to evaluate arguments that operate at this level of generality. Nonetheless, the argument is clear enough to invite rejection on two grounds. First, even granting (d), the incompatible pairs may consist simply of an elementary proposition and *its* negation. (And, as everyone knows, the negation of an elementary proposition is not itself elementary.) To deny this without argument is, simply, to beg the question. Moreover, what is the second ground for rejection, (c) does not entail (d). For *r* may correctly represent something's being round and *r** may incorrectly represent that same thing's being blue. Yet, surely, these are not incompatible. So from just the general nature of depiction one cannot conclude that *MI* is false.

Perhaps, however, the situtation changes when the vehicle of depiction is the elementary proposition. This appears to be Ginet's view and, with it, we are brought to the heart of his argument. He says (147): "If an elementary proposition falsely depicts the arrangement of the objects named in it, then there must be another, incompatible elementary proposition that presents *what instead* actually is the arrangement of those objects." We can formulate this more economically as

G1. If (i) p falsely depicts the arrangement, R, of objects named in it, then (ii) $(\exists p')(p' \neq p \ \& \ p'$ depicts instead the actual arrangement of those objects).

Obviously, G1 is incompatible with *MI* because it allows that the falsity of one elementary proposition entails the truth of another.

Is G1 defensible? I think not. Notice, first, that (i) is fatally ambiguous. If what elementary propositions depict are Sachverhalte, then, (i) is simply false. It would be self-defeating to require that an elementary propositon falsely depict *this* because it is essential to a proposition that it depict a (its) Sachverhalt independently of whether the Sachverhalt obtains (2.22-2.221). Suppose, on the other hand, that the arrangement of objects alluded to in (i) is an arrangement in a fact rather than a mere state of affairs. That is, suppose, rather than G1, we have

G1′. If [i′] $(p)(\exists R)$(R is the [actual] arrangement of objects named in p & p falsely depicts R), then [ii] $(\exists p')(p' \neq p \ \& \ p'$ depicts the actual arrangement R).

Now (ii) does follow from (i′). But it does so only because (i′) assumes that every elementary proposition mentions objects that *in fact have an actual arrangement*. This is the point of the bracketed insertion in (1′), without which the move to (ii) is blocked.

G1′ is, thus, to be contrasted with a third possibility,

G1″. If (i″) p depicts an arrangement, R, of objects & R does not obtain, then [ii] $(\exists p')(p' \neq p \ \& \ p'$ depicts instead the actual arrangement of those objects).

G1″ clearly contains the most plausible antecedent condition of the three formulations. But it is just as clearly false. For there is no temptation to move to (ii) on the basis of (i″). From the fact that a possible arrangement of objects doesn't obtain, it does not follow that a different arrangement of those objects does obtain. This would follow only on the assumption, registered in (1′) of G1′, that these objects *have* an actual arrangement – an arrangement gotten wrong by p. But this assumption is absent from *TLP*. The only

arrangments that are locked in are the arrangements of objects in Sachverhalten or states of affairs. But these need be no more than possible arrangements of objects. As 'physical' space is constituted by spatial points so logical space is constituted by Sachverhalten. And just as the first will be empty should nothing occupy a spatial point so will logical space be empty should no Sachverhalt obtain. As Wittgenstein says at 2.013,

> Each thing is, as it were, in a space of possible states of affairs. This space I can imagine empty, but I cannot image the thing without the space.

Moreover, the mutual ontological independence of states of affairs entails the possibility that *no* states of affairs obtain. So far as I can see, any principle introduced to foreclose this would be, from the point of view of *TLP*, entirely *ad hoc*. This includes G1′. Indeed, just such a possibility seems to be covered by 4.27's assertion that *any* combination of Sachverhalten can exist and the remainder not.

In *TLP* there is, in effect, a single truth-maker for each elementary proposition. The proposition is falsified not by a negative state of affairs obtaining but simply by the depicted state of affairs *not* obtaining. Here, *pace* Ginet (147), there is no need to talk of $\sim p$ as depicting the non-obtaining of p in a way that puts it on a par with p and, hence, no call to worry about counting the negation of an elementary proposition as itself elementary. The negation does not, again *pace* Ginet (147), represent "the falling apart, as it were, of the structure" of the objects, as if what one then had were objects in search of a structure. Rather, the negation of an elementary propositon says only that a depicted and, we may suppose, unified arrangement of objects does not obtain.

So Ginet's central argument against 6 fails. He offers a supporting argument that appears to fare no better. The supporting argument attempts to exploit indeterminacy in the way the negation of an elementary proposition represents its truth conditions. He says that $\sim p$ represents indeterminately because "its truth requires just that the objects named in the negated elementary proposition be arranged *in some other* way than the one pictured in the negated propostion ... it says that reality coincides with *somewhere else*" in logical space (148). Moreover, he finds this asserted in 4.0641

> One could say that negation must be related to the logical place determined by the negated proposition. The negating proposition determines a logical place *different* from that of the negated proposition. The negating proposition determines a logical place with the help of the negated proposition. For it describes it as lying outside the latter's logical place.

Now, as Ginet himself says, this – lying outside *p*'s logical space – is *all* the proposition *~p* determines. But then he is surely wrong to conclude that *~p says* that "reality coincides with *somewhere else*" in logical space. For all such places may be empty. And although Ginet correctly observes that "within that surrounding space there are definite places and these may be pointed to determinately by other elementary propositions," he wrongly takes this to establish that "elementary propositions cannot be independent" (149). For nothing demands that any of these other elementary propositions be true; nor does the fact that they are determinate have anything to do with their actual, as opposed to possible, truth. But the former is required for his conclusion.

Finally, there is 2.05, a passage Ginet thinks is sufficient to defeat *MI*:

> The totality of existing states of affairs also determines which states of affairs do not exist.

The idea is that if existing states of affairs can determine those which do not exist, then surely they cannot be ontologically independent and, thus, neither can the corresponding elementary propositions be logically independent. This would be a troubling result. For we have here no hidden incoherence that emerges only after extensive logical excavation but one that rides on the surface of the text. But the matter is worse still. For Wittgenstein proceeds, at 2.061 and 2.062, to assert in plain and unmistakable language the mutual ontological independence of Sachverhalten. So the contradiction comes in virtually a single breath. By the same token, however, this ought to inspire skepticism regarding Ginet's argument. In fact, the argument fails. For it assumes that the way *T* (the totality of existing states of affairs) determines *T** (the totality of states of affairs that do not exist) is through incompatibility relations between individual members of *T* and *T** and, hence, their corresponding elementary propositions.

The trouble with this assumption can be seen from 4.26:

> If all true elementary propositions are given, the result is a complete description of the world. The world is completely described by giving all elementary propositions, and adding which of them are true and which false.

Pretty clearly, 4.26 is intended to match, on the logical level, what 2.05 assserts, on the ontological level. The totality of true elementary propositions gives a complete description of the world simply because there are no such things as existing negative states of affairs. But the way this complete description is determined does not fit Ginet's account. Inspection of true elementary propositions is not recommended as a way of determining the false ones, i.e., those that are incompatible. Rather, a complete description is gotten by listing *all* elementary propositions and then indicating which are true and which are false. This proceedure is called for precisely because from the truth (or falsity) of one elementary proposition we can know nothing about the falsity (or truth) of a different one. Unsurprisingly, 4.27 immediately confirms this when it asserts that of the totality of states of affairs *any* combination can exist and the remainder not exist. And this includes the case where none exist.

Objects and Independence

We can, I think, safely conclude that the trouble with the *Tractatus* is not to be sought, at least not in the first instance, in the *relation* between *MI* and the picture theory of the proposition. Of course, there is no doubt that Wittgenstein came to give up *PIC*. The primitive "slab and block" language game that dominates the early pages of the *Philosophical Investigations* pillories the idea that statements must have a complexity that matches the complexity of the situation or state of affairs they are connected with. With this goes the isomorphism crucial to *PIC*.

The initial target of Wittgenstein's discontent was *MI* itself. For when he returned to philosophy in 1929 it was with a paper, "Some Remarks on Logical Form," that renounced *MI* because of the problem of color incompatibility. What our attitude should be to-

ward the renunciation of mutual independence is not transparent. What we make of it will depend on which of two suppositions we make on his behalf:

W1. The conception of an elementary proposition as a mutually independent and not further analyzable proposition is itself flawed,

or

W2. The conception of an elementary proposition as mutually independent and not further analyzable is superceded by the simpler notion of a proposition that is not further analyzable.

On W1 Wittgenstein would, in effect, be admitting that a central, indeed, defining, feature of *TLP* was incoherent. Not so on W2. Although it would represent a fundamental shift away from *TLP*, W2 does not invite the charge of internal inconsistency. The difference is not slight, for W1 entails, but W2 does not, that there can be no consistent account of the truth-makers for elementary propositions. This, in turn, would mean that no coherent account of *TLP* objects is possible because no objects can make up configurations that are, ontologically speaking, mutually independent. It is consistent with W2, on the other hand, that Wittgenstein simply came to prefer, for whatever reasons, a different conception of an elementary proposition.

Some of Wittgenstein's commentators resign themselves to W1 but a number of his more resourceful expositors resist it and propose models of the *TLP* ontology tailored to accord with *MI*. The problem may be put as follows. Elementary propositions are mutually independent with respect to truth value – the truth or falsity of one is compatible with the truth or falsity of any other. States of affairs (Sachverhalte) are mutually independent with respect to existence or non-existence – the existence or non-existence of one is compatible with the existence or non-exsitence of any other. States of affairs are nothing other than (elementary) configurations of objects. Thus, the problem is what objects must be like in order

to make up such mutually independent configurations. Not until we are certain that there is no solution, ought we to seriously entertain the charge that the semantics of *TLP* is fundamentally incoherent. Certainty of this variety is notoriously hard to come by. Perhaps, the best we can do is canvass and assess available options. These fall, roughly, into three kinds:

I. *TLP* objects are exclusively particulars,
II. *TLP* objects are exclusively universals,
III. *TLP* objects are a mixture of particulars and universals.

I shall not consider, at any length, type-III proposals because I am persuaded that no type-I version can work. Although I have argued this elsewhere,[7] I revisit the issue immediately below because of a recent type-I proposal that advertises compatibility with *MI* as one of its chief virtues. After this I turn to consider the prospects for a type-II proposal.

A Case for Particulars

Let me begin with a sketch of the argument I call the Violation Argument and then move to the new type-I proposal, due to Peter Carruthers.[8] Recall our problem. Elementary propositions are simply concatenations of names of objects. Corresponding to such concatenations are states of affairs. These are configurations of objects. An elementary proposition is true just in case the appropriate state of affairs exists (besteht); otherwise, it is false. Thus, the mutual logical independence of elementary propositions turns on the mutual ontological independence of configurations of objects.

The question of immediate interest, then, is whether such objects can be particulars. The Violation Argument suggests that they cannot.

7. Most recently, "What Objects Could Not Be", in *Wittgenstein – Towards A Re-Evaluation*, Proceedings of the 14th International Wittgenstein-Symposium *Centenary Celebration*, ed. R. Haller and J. Brandl, Vienna (1990) 51-63.

8. In *Tractarian Semantics*, Oxford (1989) and *The Metaphysics of the Tractatus*, Cambridge (1990).

To see this, let *A*, *B*, and *C* be *TLP* objects suited to configure with one another and let 'A', 'B', 'C' be their names. Suppose, then, that 'AB' and 'AC' are elementary propositions or parts of elementary propositions. If *A*, *B*, and *C* are particulars, then these configurations will be configurations at given spatial locations. But, now, it is easy to construct an elementary proposition incompatible with, say, 'AB'. For let 'AB' be taken to represent *A*'s configuring with *B* at, say, s_1 and let 'AC' represent *A*'s configuring with *C* at s_2 or, depending on the nature of the objects, with *A*'s configuring with *C* at s_1 as well. Now, of course, s_1 and s_2 might be such as to allow for both configurations. This shows just that a particular *could* be a constituent of more than one configuration. But this is not enough to save *MI* because *MI* requires mutual logical independence for *all* elementary propositions. So if *TLP* objects are particulars, we can easily construct a proposition that is incompatible with a given elementary proposition. In short, *MI* is routinely violated.

The argument just sketched, the Violation Argument, certainly holds for ordinary particulars or anything else similarly individuated. It holds also for 'internal objects' such as sense data because, for example, the color patch appearing at a given place in my visual field cannot also appear at a different such place. (Wittgenstein says as much at 6.3751.) The argument also tells against Ishiguro's view that objects are instantiations of irreducible properties. For whatever else they may be, such objects will be *instantiations* – even if of a non-standard sort.[9] Thus, given an elementary proposition mentioning an instantiation, *i*, we can always construct a proposition incompatible with it. For instantiations must be instantiations at someplace or other. Thus, *i*'s occurrence in a configuration at s_1 could, by the Violation Argument, exclude, and be excluded by, its occurrence in a configuration at some other place, s_2. Consequently, from the perspective of *MI*, instantiations are little better off than ordinary obejcts. Further, the properties instantiated at different worlds are what are common. By definition their instantiations are not and, hence, on this score neither they can be the objects of *TLP*.

9. See Ishiguro, "Use and Reference of Names", in *Studies in the Philosophy of Wittgenstein*, ed. Peter Winch, London (1969) 20-50. For what is involved here and for a detailed critique of her position, see Wedin 1990.

Most type-I interpreters fail even to report the possibility of conflict with *MI*. This is hardly true of Carruthers (1989, especially chapter 11), who makes the possibility a central part of his account. After suggesting that the background and text of *TLP* lobby in favor of there being a type-I interpretation, he proposes a theory of objects and states of affairs designed to escape the clutches of the Violation Argument.

Let me begin with the background considerations and textual evidence. This, he says, argues for the narrow reading of "object" required by (I) and against the wide reading required by (III). Consider, first, one of the background arguments. Wittgenstein could not have counted both particulars and also properties and relations as objects because, argues Carruthers, he esteemed Frege and Frege sharply distinguished between object and concept. This is not persuasive. Even as early as 1913 Wittgenstein announced in a letter to Russell that there could not be different types of things,[10] and it is pretty clear that his target was Frege's division of the world into objects and concepts.[11] So the alleged authority of Frege can hardly carry the point.

Carruthers's main brief for (I) is that the text and language of *TLP* demand it. He argues, for example, that the work's spatial metaphors are inappropriate, if objects are properties and relations as well as particulars. But, surely, if the use of spatial notions is metaphorical, caution is called for in their interpretation. Besides, sometimes it is clear that a spatial notion is used simply because it makes, in a plain way, a point that applies in a non-spatial context. Thus, 2.013's remark that every object is given in a space of possible states of affairs, i.e. logical space, is glossed in 2.0131 by plainer cases – a spatial object [räumlicher Gegenstand] being necessarily in physical space, a visual object being necessarily in color space, a note in acoustic space, etc. There is no suggestion here that the logical space of states of affairs, the space in which *TLP* objects are

10. Quoted in Brian McGuinness, "The So-called Realism of the *Tractatus*", in *Perspectives on the Philosophy of Wittgenstein*, ed. I. Block, Oxford (1988) 164.

11. See the excellent discussion of this in chapter 8 of J. Alberto Coffa's *The Semantic Tradition from Kant to Carnap: To the Vienna Station*, Cambridge (1991).

situated, is spatial in any way that favors their particularity. For the point is just that objects of a given kind cannot be countenanced apart from the space appropriate to their kind, *whatever the kind.* The space is essential to their being what they are. Thus, the use of spatial notions in 2.013-2.0131 does not justify the assimilation of objects in logical space to spatial objects or, more generally, particulars.

So spatial metaphors are not enough to justify the assimilation. This is important because the assimilation buttresses Carruthers's attack on the mixed view of (III):

> For to speak of the relationship between an individual and a universal under which it falls as analogous to a spatial configuration would embody a fundamental confusion between a formal relation (which this is), and a relation proper (such as a spatial relation between two physical objects)[1989] 110.

Two points are blended here. First, a formal relation, namely, the instantiation relation, is held to be confused with a proper relation and, second, the arrangements of objects in a state of affairs is held to be spatial (not just logically spatial). The second point merely assumes that, for the examples in question, the assimilation can be made. But this seems false. For Wittgenstein's use of the notions, configuration of objects, and objects fitted together like links in a chain, and, even, 4.0311's image of a *tableau vivant*, are designed to impress upon the reader the point that objects fit together immediately, without anything additional, in particular, without any entity corresponding to the Sachverhalt's structure. Structural glue is not needed. Any 'spatial' connotations attending these notions is purely fortuitous and irrelevent to their function. What the use of these notions means to counteract, I believe, is the impluse to include in states of affairs standard relations[12] and, perhaps, even something like the formal relation of instantiation.[13]

Now it may follow from this that (III) is false, that is, that *TLP*

12. And here I am in full agreement with Carruthers (1989).

13. Recall that Russell's ill-fated 1913 manuscript, *Theory of Knowledge*, had included the form of a proposition as one of its constituents alongside objects and properties and that this was very likely the point on which Wittgenstein launched the attack that, in Russell's words, left him paralyzed.

objects cannot include both particulars and also general properties and relations. I think, in fact, that this is correct. For either there are different kinds of objects or there are not. The point of the first alternative, we may suppose, would be to permit a way for objects to immediately combine. It was in this way that Frege conceived of the relation between objects and concepts. Concepts are incomplete or unsaturated; objects are complete or saturated. Hence, the first are capable of immediate completion by the second. But Wittgenstein's rejection of differences in kinds of objects excludes this. Thus, we are left with the second alternative. Now it is clear how some of these objects, namely, particulars could stand in immediate relation to one another, namely, spatial relations. But the other objects, the non-particulars, need help. Because they are not of the 'same level', they can be linked to particulars only by way of formal relations such as instantiation, participation, exemplification, or whatever. But Wittgenstein found such relations mysterious. So is it equally mysterious how Sachverhalte could consist of particulars and also general properties and relations. From this correct point of interpretation, Carruthers concludes, further, that *TLP* objects, the constituents of Sachverhalte, must be particulars and particulars only.

This last conclusion is, however, unwarranted. Even if the above argument tells against the wide reading of "object" required by (III), it may well be without force against (II). For on (II) *TLP* objects are all non-particulars. Thus, there may be a type-II proposal that could honor Wittgenstein's constraint that there are no differences in kinds of objects and yet avoid the 'levels' problem that infects type-III proposals. Indeed, I shall propose just such an account.

For reasons such as these, Carruthers cannot be said to have shown that background considerations and textual grounds establish the need for a type-I interpretation.[14] This may not be fatal to his overall view, however, if the new type-I *theory* he proposes succeeds in avoiding the Violation Argument.[15] At least, this would eliminate a major obstacle to the thesis that the objects of *TLP* are particulars.

14. I have by no means exhausted Carruther's arguments and evidence. But most of what remains assumes that the only alternative to (I) is (III).

15. In Carruthers (1990), especially chapter 14, "Modelling Elementary Propositions".

A signal virtue of Carruthers's account is his appreciation for the scope of the Violation Argument. Nothing that is in space and time could be a *TLP* object. Yet, on his account, *TLP* objects are particulars. This is possible only for a quite non-standard kind of particular, namely, particulars that *constitute, but do not occur in*, space and time. He, thus, proposes the following model (call it *MOD*) for an elementary proposition. The form of an elementary proposition is *abct*, where *a* is the name of a plane of space on a parent axis, *b* the name of a plane at right angles to *a*, *c* the name of a plane at right angles to both *a* and *b*, and *t* the name of a point of time. A given elementary proposition, say '$a_1b_2c_3t_4$', says that at t_4 a point mass exists at the intersection of a_1, b_2, and c_3. Now a point mass is a standard particular, that is, a particular occurring *in* space and time or individuated by something so occuring. As such it would fall victim to the Violation Argument. But on *MOD* point masses are what result from configurations of objects. At first glance, then, *MOD* does appear to be consistent with *MI*. For from the existence or non-existence of a given point mass at a given time nothing follows regarding the existence or non-existence of another one at another time.

There are, however, a number of problems with Carruthers's proposal. First, it comes virtually without textual support. 2.0251 is listed as the sole "explicit endorsement".[16] Although I hold, with Carruthers, that 2.0251 says that space, time, and coloredness are kinds of objects (as opposed to properties *of* objects), the passage can hardly contain the explicit endorsement Carruthers needs. For it is compatible with, and, to my mind, more plausibly explained by, a type-II interpretation (to be introduced below) that countenances color objects as full-blown *TLP* objects. Moreover, *MOD* drops coloredness from the ranks of *TLP* objects and the attempt to extend it to color objects is, as Carruthers admits, marginally successful at best.[17]

Second, *MOD* requires that elementary propositions be existential statements of an austere nature. Each asserts no more than the existence of a point mass. Since conjunctions of such propositions

16. Carruthers (1990), 142.
17. See Carruthers (1990), especially 144-147.

must give *truth-functional* analytical equivalences of ordinary propositions and since the latter describe the world in all its variety and splendor, *MOD* is committed to the radical reductionist proposal that collections of point masses can yield the requisite informativeness and qualitative diversity. This problem may be more acute than Carruthers, who mentions it, allows. It is, for example, not open to say that qualitative distinctions are somehow emergent with respect to point masses or that their occurrence is explained by point masses plus certain physical laws, say, laws of optics. For *TLP* eschews any causal connection between Sachlagen or situations and accordingly insists that ordinary propositions can be built up solely by the operation of *truth-functional* compounding. It is a mystery how propositions of the form stipulated by *MOD* could manage this.

A third, and more fundamental problem, is whether *MOD* can account for the distinction between a state of affairs obtaining and its not obtaining. Now what Carruthers *says* is that this is the difference between a point mass existing and its not existing. This may sound straightforward but it is not. Strictly speaking, the elementary proposition '$a_1b_2c_3t_4$' says just that at t_4 the planes a_1, b_2, and c_3 intersect. According to 2.01 these objects are combined in the Sachverhalt, whose existence would make the proposition true. But, of course, they *remain combined* in the Sachverhalt also when the proposition is false. Now, obviously, the space-time point determined by the proposition may be occupied or empty. We might even say that these correspond to the existence or non-existence, respectively, of a point mass at the determined space-time point. But this is not what is *shown* by the proposition and, hence, not what constitutes its sense [Sinn]. Rather, it amounts to substantive interpretation of what the proposition proper says. Suppose, on the other hand, that '$a_1b_2c_3t_4$' were to say that there exists a space-time point determined by the quadruple $<t_4, a_1, b_2, c_3>$. This is certainly a more plausible candidate for what the proposition says. But trouble arises when we try to account for the proposition's falsity. For this requires that the space-time point not exist and it is unclear what this even means. But, if it means anything, it appears to commit *MOD* to the possibility of space-time gaps and, further, to the coming and going of space-time points. This is an undesirable result. Moreover, the problem cannot be solved by legislating that space is relational or

absolute. It, thus, appears that *MOD* cannot be squared with Wittgenstein's settled views about Sachverhalte, the very items that underpin the mutual independence of elementary propositions. By the same token, the claim that *MOD* is compatible with *MI* loses interest.

The Strict Derivation View of MI

Before turning to a more promising approach, we should consider a final attempt to save the particularity of objects. I call this the Strict Derivation View because it takes the notion of logical independence in a very strict sense. On this view p and q are logically independent in the sense that neither q nor its negation can be *logically derived* from p and vice versa. Thus, where the incompatibility of 'ABC' and 'ABD' is due to the fact that A, B, C, D are particulars, it is to be explained by physical or, perhaps, metaphysical considerations. Hence, it is no threat the mutual independence of 'ABC' and 'ABD'.

Is there any evidence for the Strict Derivation View? One might take it to be suggested by passages such as 5.134, which denies that one elementary proposition can be deduced from another, and 5.135, which extends the analogue of this to states of affairs. But these passages are not giving exclusive or defining properties of elementary propositions. As comments on 5.13,

> When the truth of one proposition follows from the truth of others, we can see this from the structure of the propositions,

they simply draw a boundary condition on the range of application of such derivability. It does not apply to elementary propositions.[18] Moreover, when we are given what appear to be explicit definitive properties, mutual independence is not restricted to strict derivability. Consider, for example, 4.211

> It is a sign of a proposition's being elementary that there can be no proposition contradicting it

18. For a remark on the connection between 5.13 and the eventual demise of MI, see the paper's final section.

and, especially, 4.27

> Of these states of affairs [namely, elementary states of affairs] any combination can exist and the remainder not exist.

There is no hint here of any special restrictions on the source of incompatibility. This, plus 5.152's remark that two elementary propositions give one another the probability 1/2, suggests that mutual independence is not simply a matter of failure of strict derivability. What is proscribed is any incompatibility *whatsoever.* In short, the mutual independence of elementary propositions requires that the truth or falsity of one elementary proposition have no bearing at all on the truth or falsity of another. Thus, even if 'ABC' and 'ABD' enjoy no deductive relation, they may fail to satisfy *MI*. And this will be the case, I have argued, if *TLP* objects are particulars.

Objects as Non-Particulars [NOPE]

The above two sections reinforce the case against particulars. Intuitively, this seems correct. *TLP* objects are the meanings of names (as 3.203 asserts) and they provide for determinateness of sense (as 3.23 requires). It is difficult to see how particulars of any stripe could manage this. Such a role is better suited for something like universals or properties. The same result is recommended by *MI* itself. To see this, let 'ABC' be an elementary proposition and *ABC* its truth-making configuration. *MI* requires that the truth of 'ABC' not entail the truth, or falsity, of another elementary proposition. But, if the constituents of elementary configurations are particulars, then we can construct an incompatible proposition 'ABD', in violation of *MI*. Might, then, *TLP* objects be universals? Apparently – at least as far as the Violation Argument is concerned. For, where *A* is a universal, nothing prevents its occurrence in both *ABC* and *ABD*. Thus, we can *assure* that 'ABC' and 'ABD' will be mutually independent. This view, which is yet to be developed, I call '*NOPE*'. *NOPE*'s immunity to the Violation Argument weighs heavily in its favor. But there are also positive reasons to adopt it. Consider, for example, the fundamental distinction between objects,

on the one hand, and facts, states of affairs, and complexes, on the other. In part, this reflects *TLP*'s conviction that objects are the fundamental and simple entities. But the deliberateness with which Wittgenstein draws the dichotomy suggests, further, that he rejected the possiblity that there might be different types of objects. He continues, in short, to endorse his January 1913 remark to Russell: "There cannot be different types of things! In other words, whatever can be symbolized by a proper name must belong to one type."[19]

It is likely that Wittgenstein arrived at this view by reflecting on and rejecting a Fregean analysis of the proposition into expressions for objects and expressions for concepts[20] because such an analysis divides the world into two irreducibly different *types* of entities. Notice that the general principle underlying Wittgenstein's comment to Russell is that two things designated by the same type of symbol must themselves be things of the same type. At least this is so in a correct symbolism. In *TLP* the correct way to symbolize an elementary proposition is with an appropriate concatenation of names. There is not the slightest hint that these names come in different types. By the same token, then, *TLP* objects are not to come in different types.[21]

Wittgenstein rejects the Fregean distinction between concept and object. But he needs to preserve the unsaturatedness associated with the former in order to account for the manner in which objects configure, namely, as links in a chain. Let me suggest how Wittgenstein might have conceived of this. Begin with the fact that he joins Frege and Russell in holding (3.318) that a proposition is a function of the expressions contained in it and, thus, that an elementary proposition is a function of the names it contains (4.24). It is natural to introduce the notion of a propositional function here and to say that it is what yields a proposition when completed by an object. I do not think that Wittgenstein would quarrel with this. Hesitation over the point would have less to do with propositional functions,

19. Quoted in McGuinness (*op. cit.*), p. 164.

20. See McGuinness, *ibid.*, pp. 164-65, for useful remarks on this.

21. Here I am in agreement with Carruthers (1989). His further claim that such names are names of particulars only, rests, at least in part, on the assumption that otherwise they would name a mixed class of things. As already indicated, I reject both the claim and the assumption.

the *TLP* seems reasonably comfortable with the notion, than with the tendency to regard objects as things of a different kind from propositional functions. In particular, to see them as complete entities.

My claim is that *TLP* objects must be repeatable properties, that is, they must be items capable of occurring in distinct states of affairs without prejudice to the mutual ontological independence of the states of affairs they occur in. They must also be capable, *on their own*, of configuring in such states of affairs. Only so can they fit together like links in a chain. My suggestion is that we may think of these objects as a kind of propositional function or, at least, as an analogue of them (perhaps, Fregean senses come closest).[22]

This needs explanation. *TLP* objects are the constituents, indeed, the only constituents, of elementary situations. Perhaps, then, we can bring the two notions together in the following definition.

CON. An object o is a constituent of elementary situation $p \equiv$ for some objects, $o_1 \ldots o_n$ & a propositional function F, the result of applying F to o, $o_1 \ldots o_n$ is p.

A more familiar view is forthcoming, if we require that functions not be objects. But, as far as CON itself is concerned, nothing prevents F's being an object. In this case, we get something closer to the view of *TLP*. But F still might be a different kind of object. So to get the *TLP* view we allow that any object in an elementary configuration may be thought of as F, since any object can be thought of as providing the final link in a state of affairs. It is because any object can be thought of as a function that *TLP* objects are intrinsically incomplete entities, a sort of propositional function whose arguments are just other such functions.[23]

Such entities are ill-suited for independent existence. This is a mark in favor of *NOPE*. Just as a name has meaning only in the context of a proposition, or propositions, containing it, so an object

22. The caveat is to head off the thought that they are linguistic entities. Nor are they quite what Russell had in mind by propositional functions.

23. It is, perhaps, worth mentioning that this does not violate Wittgenstein's prohibition (at 5.251) against functions taking themselves as arguments. No more than a link in a chain would be thought to link with itself.

exists (besteht) only in the context of a configuration, or configurations, containing it. Only, that is, in the context of a Sachverhalt. And this, in effect, is the message of 2.0122: "Things are independent in so far as they can occur in all *possible* situations, but this form of independence is a form of connexion with states of affairs, a form of dependence." So objects are independent of what is the case but not of what is possibly the case.

For this reason, also, such objects are better suited than particulars to provide meanings for words. To understand a word 'w' is to understand its possible uses in sentences of the language. In *TLP* this is to understand the contribution 'w' makes to the truth conditions of any sentence in which it occurs. And this is just to understand the configurations in which the object signified by 'w' can occur (2.0123 and, especially, 4.431). This hardly makes sense if objects are particulars. It makes more sense if they are non-particulars of the sort countenanced by *NOPE*. For, now, not to know an object's combinatorial possibilities is simply not to understand the language. Wittgenstein may well have this in mind at 5.4732 when he says, "We cannot give a sign the wrong sense."

Let me close this section by meeting the following objection to *NOPE*, namely, that the Violation Argument can be turned against it because universals simply aren't the sorts of things that can be associated with particular places. Rather, it is their instances that are so associated and these are particulars. Hence, configurations such as $ABC@s_1$ will, after all, consist of particulars. Those who accept this extension of the Violation Argument would, no doubt, give up on the possibility of *anything* counting as a *TLP* object. Presumably, they would also adopt supposition W1, three sections back, and so resign themselves to the impossibility of a coherent semantics for *TLP*.

However, this extension of the Violation Argument fails. Suppose that the difference between *ABC* and $ABC@s_1$ is just the difference between a possible fact and a fact. That is, suppose that facts are just situations at particular places. In this way we eventually get the world "as we know it". Now if what is particular is the fact and if the fact's particularity is traceable to its having spatial indices, then the constituents of the fact could be non-particular items. The situation is similar to the more standard case, where it is the

particular thing itself, say an apple, that is taken to instantiate various universals. Here nothing prevents our saying that the object has the property or universal as a whole. Lewis, for example, characterizes universals as things that are "wholly present as non-spatiotemporal parts in each of the things that instantiate some perfectly natural property".[24] Where, as in *TLP*, the fact is what is particular, we say that universals are wholly present as non-spatio-temporal constituents of the particular elementary facts they compose. Unlike the more standard case, where particularity is accounted for by the existence of a particular object that instantiates the universals in question, the particularity of the fact is accounted for simply by the instantiation at a particular spatial place of the requisite universals.[25] Thus, given that $ABD@s_2$, we can allow that *A* is present at s_2 as a whole because it can also be present at s_1 as a whole. Thus, the objection is incorrect in claiming that particulars are, but universals are not, to be associated with particular places. What makes all the difference is the manner of association.

Color Incompatibility Redux

NOPE appears to allow *TLP* objects to occur in more than one elementary configuration and, hence, to satisfy the requirements of *MI*. But there is a nagging worry. If objects are, ultimately, the ground of determinateness of sense, it is reasonable to suppose that they enjoy some kind of determinateness themselves.[26] Indeed, this is an additional advantage *NOPE* can claim over *MOD*'s uniformly bare point masses. Nonetheless, the requirement of determinateness

24. David Lewis, *On the Plurality of Worlds*, (Oxford: Blackwell, 1986), 67.

25. It might be that what is at a place are material properties. But, as 2.0231 makes clear, Wittgenstein denies that these are simple. Hence, they cannot be *TLP* objects. Thus, that *ABC* exists at a place brings it about that a certain material property or, perhaps, set of material properties exists. At least one might naturally say this.

26. This requirement makes it difficult to see how the names could be dummy names as Ishiguro (1969) suggests. Pears appears to voice a similar worry in *The False Prison*, vol. 1, Oxford (1987) 109-111. On Pears's own view of *TLP* objects as simple particulars, see the critique in Wedin (1990).

appears to place elementary propositions in conflict with *MI*, even as characterized by *NOPE*. To appreciate the problem take, again, 'ABC' and 'ABD' to be stock elementary propositions. Because of mutual independence it must be possible for their corresponding configurations to exist jointly. So for each configuration we can associate some place. Otherwise, the configurations cannot yield the world as we know it. Let this be indicated by $ABC@s_1$, and so on.[27] By our earlier argument, if they are configurations of particulars, $ABC@s_1$ and $ABD@s_2$ could violate *MI*. Not, however, if they are configurations of universals. But *MI* requires something stronger, namely, that elementary configurations be compatible at the same place. Suppose, in other words, that *MI* requires that $ABC@s_1$ and $ABD@s_1$ be ontologically independent.

For discussion we may think of *C* and *D* as color universals. But won't *MI* now be violated? How can blue and red, for example, co-occur at the single place s_1? Thus, insofar as *TLP* objects are determinate, universals appear, after all, to be only slightly better candidates than particulars.

There is, I believe, a solution to this problem in *TLP* – indeed, one that favors the candidacy of universals. Although some type-II theories recognize the problem, its solution has proven elusive. Eddy Zemach has recently offered a theory of *TLP* objects. On its behalf he claims detail, doctrinal centrality, and internal coherence.[28] Add the fact that his is a type-II theory and we have the promise of consistent and integrated account of *TLP* objects. Unfortunately, the theory comes to grief over the vexing problem of color incompatibility. After seeing why Zemach's solution fails, it will be easier to appreciate what is, I believe, the proper *Tractarian* response to color incompatibility.

Where *A*, *B*, *C*, and *D* are universals or repeatable primary color properties, Zemach holds that $ABC@s_1$ and of $ABD@s_1$ are jointly

27. For now I take no position on whether a place indicator ought to be included in the elementary proposition itself or occur as part of the meta-analysis of such propositions.

28. Zemach, "The *Tractatus* Theory of Objects", in *Wittgenstein – Towards A Re-Evaluation*, Proceedings of the 14th International Wittgenstein-Symposium, Centenary Celebration, ed. R. Haller and J. Brandl, Vienna (1990) 35-50.

incompatible and yet each is a Sachverhalt. Despite this, *MI* is not violated! More precisely, *MI* is not violated in a disturbing way, that is, the violation is not to be explained by saying that $ABC@s_1$ and $ABD@s_1$ are not elementary configurations or that the objects configured are not really *TLP* simple objects. Rather, the incompatibility results from convention, namely, from an *a priori* stipulation that outlaws the joint assertibility of "$ABC@s_1$" and "$ABD@s_1$".

Zemach's strategy is to find a way to render consistent apparently incompatible ascriptions of color and, thus, to validate their status as elementary. First, the theory and then its alleged presence in *TLP*. Suppose that we add a color dimension to our familiar spatio-temporal conceptual scheme. According to Chroma, as Zemach calls the supplemented scheme, colors are counted as rock-bottom features of the world and they will be measured by chromatic as well as spatio-temporal distance. Moreover, and this is the crux, contrary to our familiar conceptual scheme, Chroma permits the joint assertibility of $ABC@s_1$ and $ABD@s_1$. Both Chroma and our ordinary conceptual scheme are strictly conventional arrangements. Hence, the impossibility of two colors occurring at the same place is not due to *their* (presumably, metaphysical) incompatibility. "Add a dimension," says Zemach, "and the problem is gone". In short, convention is the culprit.

Zemach's inventive solution needs to get a lot of mileage out of 6.3751. In particular, the passage needs to contain a commitment to thorough-going conventionalism. Here is the passage:

> For example, the simultaneous presence of two colours at the same place in the visual field is impossible, in fact logically impossible, since it is ruled out by the logical structure of colour.
> Let us think how this contradiction appears in physics: more or less as follows – a particle cannot have two velocities at the same time; that is to say, it cannot be in two places at the same time; that is to say, particles that are in different places at the same time cannot be identical. (It is clear that the logical product of two elementary propositions can neither be a tautology nor a contradiction. The statement that a point in the visual field has two different colors at the same time is a contradiction.)

The first thing to notice is that the passage does not mention convention. It mentions three, apparently equivalent, ways of pro-

scribing occurrence of a certain contradiction but in doing so it makes no appeal to different conventions let alone anything like different conceptual schemes. All three alternatives fall squarely within the same conceptual framework, namely, physics. So the most we can grant Zemach is the claim that physics proceeds within a given conceptual scheme, and that this is conventional in some measure.

The trouble with Zemach's appeal to this passage and to 6.341-6.343 and 6.36111 is that, as the expansions on 6.3 show, they consider global descriptions, *a priori* beliefs, and so-called laws of science that are explicitly said not to be part of logic or its exploration. But, as is implicit in the first sentence of 6.342 and in 6.3431, these scientific descriptions, beliefs, and laws are incapable of reaching the world. Rather, as 6.3441 says, science can speak only *indirectly* of objects. Logic, on the other hand, includes the analysis of propositions. Hence, it is able, in principle at least, to generate the elementary propositions whose constituents *directly* stand for the constituents of the elementary states of affairs pictured by the propositions. The moral is that conventional aspects of science have no role in the discussion of *TLP* objects and the Sachverhalte they make up.

Moreover, Zemach's account assumes that the incompatible propositions introduced in 6.3751 are elementary and, thus, *both* elementary and *prima facie* incompatible. The passage speaks of "the simultaneous presence of two colours at the same place in the visual field" and of "the statment that a point in the visual field has two different colours at the same time". The language here is careful and deliberate, and it is absolutely clear that Wittgenstein means to talk about visual color only, that is, about color as perceived. But the color objects of *TLP*, at least according to *NOPE*, are not *perceived* colors. They are objective items that are part of the substance of the world. Although they may stand in some relation to perceived colors, they are not to be identified with them.[29]

29. Not, to repeat, on the theory I am defending. For direct criticism of the claim that the objects of *TLP* are perceived or phenomenal, see Wedin, "Semantic Holism and the Phenomenalization of the *Tractatus*," in *Philosophy of Psychology*, Proceedings of the Ninth International Wittgenstein Symposium, ed. R. Chisholm, *et al.*, Vienna (1985) 453-458.

Finally, the closing pair of sentences removes much of the motivation for Zemach's view. They have the following forms:

7. If *p* is elementary & *q* is elementary, then '*p* & *q*' cannot be a contradiction,

and

8. If *p* asserts that *C* is at *s* & *q* asserts that *D* is at *s*, then '*p* & *q*' is a contradiction,

where *C* and *D* are incompatible colors and *s* is a point in the visual field. All that follows from 7 and 8 is that statements about *visual* colors are not elementary. Nothing here compromises the elementary status of (certain) statements involving color properties. Certainly, nothing is said about resolving the contradiction by conventional stipulation of an additional, and quite special, dimension. Zemach's solution is simply too distant from the text.

Fortunately, there is a type-II solution whose *Tractarian* credentials are quite in order. It takes very seriously the claim that objects are simple. This proved of little help when objects were taken to be particulars. But if objects are universals, nothing rules out the mutual existence of $ABC@s_1$ and $ABD@s_1$ so long as we do not take this to mean that at s_1 there are two incompatible *visual* properties. As noted, 6.3751 says only that "the simultaneous presence of two colours at the same place in the visual field is impossible". But what is possible is the presence, at a determinate place in the visual field, of a secondary color, such as purple, that results from the simultaneous underlying presence of two primary colors at that place. So if *TLP* objects are analogous to primary colors, then $ABC@s_1$ and $ABD@s_1$ will be ontologically independent.

It seems to me that this solution makes sense only on the assumption that there *really are* simple objects and that they *really do* make up the substance of the world.[30] The assumption is, of course, a central player in the early pages of *TLP*. But is there direct evidence

30. Otherwise, what propositions are the elementary ones would appear to be an entirely relative matter, even if relative to a given language.

that the Wittgenstein of *TLP* thought of properties in this way?

With this we are brought to *The Big Typescript*. The section entitled "Farben und Farbenmischung" begins with the following worry (p. 474):

> If "f(x)" says that x is now at a determinate place, then 'f(a) & f(b)' will be a contradiction. But why do I call 'f(a) & f(b)' a contradiction since the form of a contradiction is p & non-p?

Intuitively, 'f(a) & f(b)' is a contradiction because it asserts that two different colors can occupy the same place at the same time. Yet its surface form is not that of a contradiction. So, perhaps, says Wittgenstein, there is an underlying rule that explains why the sentence is contradictory. He suggests: fa = (fa & non(fb)). In this case, 'non-fb' would follow from 'fa' so 'f(a) & f(b)' would have the form of a contradiction after all.

Now Wittgenstein says,

> I believed, when I wrote the "Abhandlung" (and also even later), that fa = fa & non-fb was possible only if fa is the logical product of non-fb and some other sentence . . . and was of the opinion that fa (for example, a color assertion) could be analyzed into such a product.

Further, in extending this analysis to color assertions, he held them to be logical products whose factors were the ingredients making up the color (not, he is careful to add, the pigment or color stuff). Thus, let two colors, a and b, resolve into constituents as follows:

9. a = (r & s & t)

and

10. b = (r & s & t & u).

As they stand the propositions 'f(a)' and 'f(b)' are not incompatible because 'f(r & s & t)' and 'f(r & s & t & u)' are not incompatible, even where 'f' means 'occurs at a determinate place at a determinate time'. Indeed, the second would appear to entail the first.

According to *The Big Typescript*, 'f(a)' and 'f(b)' are incompatible only if we add to 9 and 10 a completeness condition, S, which, in effect, reads ". . . and there are no more colors":

9*. a = (r & s & t & S)

and

10*. b = (r & s & t & u & S),

Here is how Wittgenstein puts the point.

> Naturally it must also be said that these are *all* the ingredients and the closing observation S brings it about that r & s & t stands in contradiction with r & s & t & u.

Two observations are in order. The first is that neither 'fa' and 'fb' are elementary. Perhaps, 'fr' or 'fs' will be elementary or, at least, analogous to what is elementary, if 9 gives constituents that are not further analyzable. The second is that 'S' can hardly be a constituent of an elementary proposition. Thus, elementary propositions lack the feature that appears to be required for incompatibility. Assertions of two different colors are compatible insofar as they give the underlying constituents of non-simple colors. As *The Big Typescript* says (p. 475), "the assertion 'here is red and blue' ought to mean that the color of this place is a mixed color out of red and blue." This is precisely what was required by our view that *TLP* objects are certain kinds of universals. Moreover, at this point in *The Big Typescript* Wittgenstein is reporting on a partially hidden assumption of views held explicitly in *TLP*. And the targeted assumption is precisely what we pinpointed as underlying the *Tractarian* solution to the problem of color incompatibility, namely, the assumption that *TLP* objects are primary repeatable properties. With this we have finally achieved a type-II theory that satisfies the constraints imposed by *MI*.[31]

31. Use of *The Big Typescript* to argue that the *Tractarian* solution to the problem of color incompatibility favors a type-II theory, in particular, *NOPE*, was proposed in Wedin (1990). The solution itself I first put forward in my "Objects and Independence in the *Tractatus*", in *Wittgenstein and His Impact on Contemporary Philosophy*, Proceedings of the 2nd International Wittgenstein Symposium [1977], ed. E. Leinfellner, et al., Vienna (1978) 107-113. I am now pleased to report that a similar solution had been independently arrived at by John Canfield in "*Tractatus* Objects", *Philosophia* 6 (1976) 81-98. Canfield's overall account differs in two important respects. He does not make use of what I have called the Violation Argument and he takes *TLP* objects to be phenomenal. If this makes them perceived objects, then, of course, my account diverges from his.

Concluding Remark

If I am correct, then it was not Wittgenstein's opinion that *TLP* suffered from an internal incoherence inherited from incompatibility between *MI* and *PIC* or from an incoherent notion of the elementary proposition itself. Certainly, it would be implausible to suppose that during the composition of *TLP* Wittgenstein was unaware that sentences such as "This is red" and "This is blue" are incompatible and that discovering that they were is what caused him to re-enter the philosophical fray. Common sense and 6.3751 testify to the contrary. What he came to be dissatisfied with was a feature of the *Tractarian* resolution of such incompatibilities – a feature that, in fact, is fundamental to *TLP* as a whole. This is the sub-surface nature of elementary propositions, their emergence only on analysis of the surface structure of ordinary propositions. The propositions that 6.3751 holds to be incompatible are explicitly said to involve attributions of *visual* colors and, so, they cannot be sub-surface. They are also the propositions that assume center stage in 1929 and after. But in *TLP* they do not count as elementary. So Wittgenstein does not dismiss *MI* because it is incoherent in its own right or yields an incoherence. He simply adopts a new notion of the elementary proposition. Still the end points of analysis[32] but freed from the grip of *MI*, ordinary ascriptions of color come to be counted as elementary.

What came to trouble him, then, was the commitment to a class of propositions that are unfamiliar and distant from those of ordinary language. His realization[33] that rules for the syntactic use of sentential connectives could not be laid down without considering the inner structure of the connected propositions, in effect, gives the syntax of ordinary language pride of place. For, armed with the notion of simple objects that combine at the sub-surface level of elementary configurations, in the way we have suggested, *TLP*

32. As he says in *Philosophische Grammatik*, "Anhang 4", and is reported by Waismann to have said, *Ludwig Wittgenstein and the Vienna Circle*, conversations recorded by F. Waismann, ed. B. McGuinness, tr. McGuinness and J. Schulte, Oxford (1979).

33. Again, reported by Waismann, *op. cit*, p. 74.

provides no opportunity for the concern to arise. For there the inner or sub-surface structure of a proposition cannot cause conflict with *MI*. It appears, then, to put the matter plainly, that Wittgenstein came to believe that there is no other syntax than the syntax of ordinary propositions – the very propositions that *TLP*'s analyses were designed to illuminate.

Unsurprisingly, this new view of syntax lurks beneath the surface of *TLP*. For it is, in effect, just what is blocked at 2.0211, discussed at the outset of the paper. Recall that the passage asserts at least

3. p is an elementary proposition $\rightarrow \sim$(p has sense $\rightarrow q$ is true).

Should 3 be rejected, nothing prevents the sense of one proposition from depending on the truth of another. *MI*, of course, is incompatible with this and so its truth ensures the truth of 3. When Wittgenstein drops mutual independence as a condition on the elementariness of propositions, he rejects 3, in effect, adopting

3C. p is an elementary proposition $\rightarrow \Diamond$(p has sense $\rightarrow q$ is true).

Because a proposition's sense is cashed in terms of its truth conditions, 3C gives up the motivating conviction behind 3, namely, the conviction that the truth conditions of an elementary proposition can be determined independently of any other proposition. Thus, where p is "This is red", q may be a proposition such as "This is not blue". With this Wittgenstein is headed unswervingly in the direction of holism. For once 3 is given up, we are free to insist that "This is red" depends on the truth of "This is not blue" because of the truth of another proposition, say, "Nothing can be both blue and red". So Quine was not making an idle point in recognizing[34] the Wittgenstein of the *Philosophical Investigations* as a fellow holist.[35]

34. In *Word and Object*, Cambridge, MA. (1960).

35. This is not to deny that *TLP* is holist with regard to the meaning of words. As Wedin (1985) argues, the meaning of a word is a function of its possible uses in sentences of the language. This brand of holism does not clash with *MI*. The post-*Tractarian* brand does. Pears, who also acknowledges the holistic character of *TLP*, rightly recognizes that relinquishing *MI* leads to a stronger brand of holism. But his diagnosis of *MI*'s failings is wrong: "We would not use colour-

And, as Quine in *Word and Object*, so Wittgenstein in *PI* has little use for the elementary proposition. For both, decision as to a proposition's basic or foundational status is always relative to a background theory or set of linguistic practices. Analysis no longer takes a single course nor results in a single select set of propositions (whether or not they are mutually independent).

This is hardly surprizing since, in giving up 3, Wittgenstein is committed to

5B. (p is true or false $\rightarrow$ q is true) $\rightarrow$ $\Diamond(\exists p')(p'$ is elementary & p' does not depict [a part of] the world).

Granted, 5B simply allows that some propositions do not depict the world. But once this step is taken for erstwhile elementary propositions such as "This is red", what good reason can there be for holding that any propositions depict the world? And, thus, what reason for holding onto substance? So Wittgenstein's adoption of 3C is only provisional and marks the beginning of a new philosophical style that arguably became the dominate force in mid-twentieth century Anglo-American philosophy. It was not an internal incohrence in *TLP* that fostered this but a complete rethinking of the relation between language and the world, a rethinking that gives the world itself as the unit of analysis. In this new world of linguistic practices there simply is no place, alien or otherwise, for old-style *Tractarian* objects.

words [in elementary propositions], because they generate logical incompatibilities between the propositions in which they occur. Nor is this a superficial difficulty, to be eliminated by further analysis of these propositions. For the analysis suggested by Wittgenstein in the *Tractatus*, into propositions assigning velocities to particles, would merely shift the problem to another level without solving it ..." ("Wittgenstein's Holism", *Dialectica* 44 (1990) 165-173). Here Pears suggests that 6.3751 tries out assignments of velocities to particles as candidates for elementary propositions. As we saw above, however, this is simply false. Moreover, the context of 6.3751 makes its focus not elementary propositions but propositions of science. Finally, further analysis can, therefore, resolve surface color incompatibilities in precisely the manner espoused by *NOPE* and our *Tractarian* solution to the problem of color incompatibility.

THE GENERAL FORM OF THE OPERATION IN WITTGENSTEIN'S *TRACTATUS*

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Propositions and operations both play a central role in the Philosophy of Logic as set out in Wittgensteins *Tractatus*.[1] The general propositional form is amply treated of both in the work itself and in the substantial secondary literature.[2] The general form of an operation, on the other hand, has, to the best of my knowledge, received no scholarly attention and it is dealt with only in thesis 6.01 and its preamble 6.002. Accordingly it is the purpose of the present paper to discuss the proper interprertation of this thesis which reads:

> Die allgemeine Form der Operation $\Omega'(\overline{\eta})$ ist also: $[\overline{\xi}, N(\overline{\xi})]'(\eta)$ $(= [\overline{\eta}, \overline{\xi}, N(\overline{\xi})])$.
> Das ist die allgemeinste Form des Überganges von einem Satz zum anderen.

In view of 6.002, the general propositional form will have to be explained, as well as the notion of an operation. Furthermore, certain

1. C.K. Ogden (trans.), Routledge and Kegan Paul, London, 1922. New translation by D. Pears and B. McGuinness, Routledge and Kegan Paul, London, 1961 (2nd ed.1971). The "*Kritische Edition*" by Schulte and McGuinness, Suhrkamp, Frankfurt a. M., 1989, which contains crossreferences to the *Notebooks* and the *Prototractatus* as well as the complete text of the *Prototractatus*, proved most useful during the preparation of the present paper.

2. 4.5, 4.53, 5, 5.47, 5.5 and 6. The commentaries G.E.M. Anscombe, *An Introduction to Wittgenstein's Tractatus*, Hutchinson, London, 1959; Max Black, *A Companion to Wittgenstein's Tractatus*, Cornell U.P. 1964; R.J. Fogelin, *Wittgenstein*, Routledge, London, 1976 and H.N. Mounce, *Wittgenstein's Tractatus. An Introduction*, Blackwell, Oxford, 1981 are all useful here. Particularly relevant are P.T. Geach, "Wittgenstein's operator N", *Analysis* 41(1983), pp.168-71, and S. Soames, "Generality, Truthfunctions and Expressive Capacity", *Phil. Review* XCII (1983), pp. 573-589.

specifically Tractarian notational devices demand clarification. Inspection of thesis 6.01 shows that we have to deal with at least the following:

- the joint negation operation N
- the elevated comma
- the equality sign
- round *Klammerausdrücke*
- square *Klammerausdrücke* with two, respectively, three arguments
- the bar notation.

Owing to the firm internal cohesion of the Tractatus, though, the required explanations will have to touch upon a considerably wider range of matters.

Our first task is to treat of the formal concept *operation.* It is introduced in the course of an alternative description of the *Formenreihen.*[3] Originally, in thesis 4.1252, a series of forms is explained as a series ordered by an *internal* relation. This explanation permits two readings: one Russellian and one Fregean. The former is, *prima facie*, the natural one: the internal relation itself is a strict ordering of the terms in the series, that is, a series also in the terminology of *Principia Mathematica.*[4] The Fregean option, on the other hand, renders 'is ordered by' as *gets its order from.* Thus the sequence of terms itself is a PM-series, but the internal relation is not an ordering relation for the series; it only generates such an ordering.

In view of the alternative characterization of the notion of a *Formenreihe* offered in thesis 4.1273 the Fregean reading deserves preference. There a series of forms is determined by laying down its first term and a general operation producing the next term from its predecessor. Thus the terms of the series S, with order generated from the internal relation Ω, can all be obtained through successive

3. The English translations offered in the editions mentioned in f.n. 1 are, repectively, *formal series* and *series of forms.*

4. A.N. Whitehead and Bertrand Russell, *Principia Mathematica* (P.M.), Vols. I-III, Cambridge U.P., 1910-1913, Vol.II, Part V, p. 513 ff.

applications of the operation O. The relation Ω, however, must be many-one in order that the two characterizations of *Formenreihen* match and that the operation O may be legitemately introduced:

(*) $OS_1 = S_2$ iff $S_1 \Omega S_2$.

Thus Ω itself cannot be a PM-series: a many-one relation cannot in general be transitive and transitivity is a mandatory requirement for any sort of ordering. This reading is leant further support in thesis 5.232:

> Die interne Relation, die eine Reihe ordnet, ist äquivalent mit der Operation, durch welche ein Glied aus einem anderen entsteht.

The ancestral Ω* of Ω is a PM-series with the series S as its field, however, and this can be taken as a precise expression of the sense in which the internal relation Ω orders the terms of S.

The grounds for an attribution to Frege, rather than to Russell,of the preferred, latter reading can be found in his tratment of the ancestral and like matters, which bears the apt title "*Einiges aus einer allgemeinen Reihenlehre*".[5] In the development of his theory Frege has occasion to consider a two-place propositional function f(Γ,Δ) for which he offers the following renderings:

> "Δ ist Ergebnis einer Anwendung des Verfahrens f auf Γ" oder durch ... "Δ steht in der f-Beziehung zu Γ"..., welche Ausdrücke als gleichbedeutend gelten sollen.[6]

When we read "operation" for "*Verfahren*" and "internal relation" for "*Beziehung*" the result is a neat reformulation of thesis 5.232 quoted above.

In the theses referred to and other similar passages, e.g. 5.23 and 5.251, *Operation* is used in the sense of a general method or recipe for action rather than for the operational deed itself. The latter, on the other hand, must be meant in those passages, among which 5.21 and 5.234, where there is talk of the result of an operation. A simple way to resolve this ambiguity is to reserve *Operation* for the method

5. *Begriffsschrift*, Jena 1879, part III.
6. *Op.cit*, f.n. 5, p. 57.

and use *Anwendung der Operation* for the operational deed.[7]

The Tractarian treatment of operations is largely contained in the theses 5.21 to 5.254, inclusive, which all serve to comment upon thesis 5.2:

Die Strukturen der Sätze stehen in internen Beziehungnen zueinander.

An operation gives expression to such an internal relation between *Sätzen* (5.21, 5.22) much in the same way that a material property, or relation, is expressed by a material function (4.1276). The (method of) operation which gives expression to an internal relation between *Sätzen* provides the type of action that has to be carried out on a *Satz* in order to produce the internally related *Satz*. Strictly speaking (3.11), a *Satz* is a *Satzzeichen* in use, in a projective relation to the world. The sense of 'is' involved here is that of representation; the *Satz* is a *Zeichen* in the same way that the King in Chess is a piece of wood. The *Satzzeichen* possesses structure that can be internally related to other structures and hence an operation would be carried out on the *Satzzeichen*.[8] Wittgenstein is quite explicit on this point: an operation acts on the signs.[9]

7. Several *ion*-words show similar ambiguities in the *Tractatus*. *Funktion* is ambiguous between, on the one hand, 'function of' and, on the other, the Fregean unsaturated notion. Similarly, *Konfiguration* is ambiguous between the pattern of configuration and the structure thus configurated. Karl-Heinz Hülser, *Wahrheitstheorie als Aussagetheorie*, Forum Academicum, Königstein/Ts., 1977, p. 34, f.n. 21 and pp. 112-3, is most illuminating here.

8. James Griffin, *Wittgenstein's Logical Atomism*, 2nd ed., O.U.P., 1965, Ch. X, gives a clear presentation of the interrelations between *Satz*, *sinnvoller Satz* and *Satzzeichen*. Hidé Ishiguro, "Representation: An Investigation Based on a Passage in the Tractatus", in: B. Freed et al. (eds.), *Forms of Representations*, North-Holland, Amsterdam, 1975, pp.189-202, is particularly helpful on the 'is' of representation.

9. Notebooks, 22. 11. 16.. Contemporary logical terminology differentiates between *functions* and *functors*. The former are entities, whereas the latter are pieces of notation which refer to functions. The application of a function to an argument is syntactically couched in terms of the juxtaposition of a singular term to a functor. Thus one might expect Wittgenstein to use *operator* in place of *operation*. This, however, would be doubly wrong. First, it would point in the direction of a violation of thesis 5.25, since functions and operations would be treated on par as the operators would express operations in the same way that functors ex-

The restriction of operations to a field of only *Sätze* may well serve to explain the emphasis Wittgenstein lays on the difference between functions and operations (5.25, 5.251). There are Tractarian functions whose range of values consists of *Sätze* (3.318, 4.24), but these *Sätze* cannot serve as arguments for the functions whose values they are. A *Satz* which results from an application of an operation, on the other hand, may equally well serve as a base for yet further applications of the same operation: the range of an operation may be included in its domain.

Russell used an elevated inverted comma notation

$$R\,`y = (\iota x)(xRy)\ \text{Df.}$$

for descriptive functions and clearly Wittgenstein's elevated comma is related to Russell's.[10] In (*) above the basic connection between operations and internal relations is brought out; using the elevated comma it may be reformulated :

$$(**)\quad \Omega`S_1 = S_2 \text{ iff } S_1\Omega S_2.$$

Thus the elevated comma provides a means with which to emphasize the relational origin of operations just in the same way that Russell's elevated inverted comma shows the relational origin of descriptive functions. Wittgenstein could not make use of the latter in view of the order of arguments: it is the opposite from what he needs and this might explain his inversion of Russell's sign. Yet a further reason for this notational change lies in the circumstance that the descriptive functions of Russell are all *material* functions and therefore unsuitable as expressions for Wittgenstein's operations that result from *internal* relations.

One must note here that not all Tractarian signs for operations carry an elevated comma, *cf.* for instance thesis 5.502 and many

press functions. Secondly, the *operation* already acts on the signs, whence it would entail a superfluous doubling of entitites acting on the syntactic level. The action of the operation N is as follows: juxtapose the letter "N" with a notation for a range of bases. The result is a sign which expresses a *Satz* that is true provided all the *Sätze* in the range of bases are false.

10. P.M., *op.cit.*, f.n. 4, Vol. I, * 30.01, p. 245.

other places where truth-operations are employed. The truth-operations in general, and in particular the operation N, are, however, *prima facie* not given in terms of internal relations, but through truth-value considerations and this difference in conceptual origin might serve to explain the notational differences: the elevated comma is reserved to those cases where the operation is straightforwardly obtained from an internal operation. The other way of introducing operations via truth-table considerations poses questions of legitimacy, though: is not the first method, ultimately couched in terms of internal relations between the structures of *Satzzeichen*, more general than the latter? First, note that the other direction poses no problem: given that the truth-table itself may be viewed as as a *Satzzeichen* (4.442) a truth-value explanation of an operation automatically provides an internal relation between the relevant *Satzzeichen*. For the other direction we have to consider an operation introduced by means of an internal relation and reformulate it in terms of truth-value considerations. In order to see that this is possible we need to refine a point made above concerning the respective roles of *Satz* and *Satzzeichen*: an operation acts on the sign serving as a symbol. This general point applied to *Sätze* yields that the operations on *Sätze* act on the *Satzzeichen* serving as *Sätze*. Thus not necessarily every structural feature of the *Satzzeichen*-facts will serve to yield an internal relation between *Sätze*: it is a possibility that two *Satzzeichen*-facts are internally related in a certain way without any matching internal relation between the *Sätze* expressed. A *Satz* is a *Satzzeichen* in a projective relation to the world, which restricts reality to yes or no (3.12, 4.023). Thus, only such structural features (of a *Satzzeichen* serving as *Satz*) that are relvant for the *Satz's* being able to limit reality to yes or no serve to determine internal relations between *Sätze* and the ensuing operations. In other words, only truth-conditionally relevant features may be used to determine internal relations between *Sätze*, rather than between facts which happen to serve as *Satzzeichen* and where any structural features will do to specify an internal relation. Thus the legitimacy of the truth-value method can be upheld: it allows for no more and no fewer operations than the method via internal relations.[11]

11. It is worth noting that the *Prototractatus* systematically uses *sign* where the

The operation defined at (**) applies to one base only, but this is not an essential feature of operations. The foremost example of an operation that we have to consider, namely the joint negation operation N is applicable to arbitrary many bases from none to an unlimited number (5.5, 5.502). The resulting sentential sign expresses a *Satz* which is true precisely when all the bases in question are false. These bases are given via *Klammerausdrücke*

$$(\bar{\xi})$$

where "ξ" is a variable ranging over the relevant *Sätze*. Wittgenstein is at pains to stress that it is immaterial how this range of *Sätze* is described (3.317, 5.501): the only important thing to ensure is that all values of the variable x are taken into account and the superscript bar is meant to emphasize this (5.501). Wittgenstein considers three illustrative ways of how to give the range of a *Klammerausdruck* variable, but, given his remarks on the freedom as to the presentation of bases, these cannot be considered exhaustive.

The first of these is very simple and, in fact, it only makes superficial use of a variable. This is the case where the range in question consists of a finite unordered list of *Sätze*; clearly such a list itself will serve as well as any variable to describe the relevant bases for the application of N. The second case is also fairly straightforward, but heated controversy has arisen in its wake. Here the variable in question occurs in a propositional Urbild:

$$\mathbf{f(x)}$$

which serves to delimit all the *Sätze* that are instances hereof. In thesis 5.52 this is used to provide a quantifier-notation, which unfortunately does not allow for necessary scope-distinctions, as has been stressed by Fogelin.[12]

Tractatus has *symbol.* Some relevant theses from the earlier manuscript are: 3.20121, 3.0122, 4.102263, 5.315, 5.3251, 5.405 and other places. Thus the insights concerning the proper nature of symbolism seem to be rather late.

12. "Wittgenstein's operator N", *Analysis* 42 (1982), pp. 124-127, with reply by Geach.

Geach and Soames have suggested simple, basically equivalent, remedies which certainly seem permissible, given the theses just cited to the effect that it is immaterial what notational devices are used to specify the variable-ranges in the *Klammerausdrücke*.[13] On the other hand, it is equally clear that Fogelin, who rejects the Geach-Soames emendation, is on strong ground when he emphasizes that the decidability of logical truth is a, if not *the*, central feature of the Tractarian philosophy of logic (6.113, 6.126, 6.1262): it must be possible to decide mechanically, by syntactic calculation *am Symbol allein*, whether a *Satz* is tautological or not. According to the Theorem of Church, the scope-discerning devices of Geach and Soames do not in general admit of such decidability. This, however, is not the last word on the matter, since, on behalf of Geach and Soames, we may remark that Wittgenstein clearly intends the expressive capacities of the Tractarian language to encompass also multiple generality of first and higher order (which serves to rule out decidability). This is conclusively brought out in thesis 6.1232 where the Axiom of Reducibility, which employs such quantification, is singled out as a *Satz*. Thus I would hold that both sides of the dispute are right and that the error lies in a fundamental inconsistency embedded in the *Tractatus* itself.

Wittgenstein's third example is perhaps the most interesting. Here one gives a "formal law", according to which the *Sätze* of the range in question are generated and in this case, Wittgenstein states, the members of the range constitute a series of forms. This would seem to indicate that by "formal law" is meant a specification of a first term and a means for obtaining latter terms from previous ones. Thus we are straightforwardly led into consideration of the threeplace *Klammerausdrücke* from thesis 5.2522. This is a diffenent type of bracket expression from the one we encountered in thesis 5.501 and which made use of round brackets, in conjucntion with Greek variables, in order to specify ranges of *Sätze* which are to serve as bases for applications of suitable operations. Here the bracket expression makes use of square brackets which essentially serve as a notation for an *iteration-functional* on expressions. Given a term a and an operation O for producing expressions from expressions, the *Klammerausdruck*

13. *Op.cit.*, f.n. 2.

$$[a, x, Ox]$$

indicates the general term in the series of forms which consists exclusively and entirely of the iterations of O with respect to a: a, Oa, OOa, OOOa, ..., and so on.

We may compare this with the use of an arithmetical iteration-functional **It**(m,g) of one number-argument m and one function argument g. Given a natural number k and a function with f(x) as value for number-argument x,

$$\mathbf{It}(k, \lambda x f(x))$$

is a function satifying the recursion equations

$$\mathbf{It}(k, \lambda x f(x))(O) = k$$
$$\mathbf{It}(k, \lambda x f(x))(n+1) = f(\mathbf{It}(k, \lambda x f(x))(n)).$$

Accordingly the value range of this function will be:

k, f(k), f(f(k)), f(f(f(k))), ..., and so on.

Pursuing this analogy with the arithmetical iteration-functional we see that the three arguments of the three-place square brackets properly speaking ought to be only two and that the task of the second argument, in relation to the third, really is that of serving as a mark of bondage. A more adequate square bracket notation is accordingly provided by

$$[a,O],$$

where a is a term and O the general operation in question, or, making the variable-binding explicit,

$$[a, \lambda x Ox].$$

In the case of arithmetic it is known that, modulo a suitable choice of initial functions, the scheme of iteration suffices to give all primitive recursive definitions.[14] No comparable reduction is known for the

14. Raphael M. Robinson, "Primitive Recursive Funtions", *Bulletin of the*

case of inductive generation of syntactic forms and the question immedeately arises whether the limitations on Wittgenstein's inductions proves too restrictive: does iteration of an operation suffice to generate all *Sätze*? Wittgenstein clearly intends the answer to be positive; indeed, thesis 6, which represents the culmination of the technical development of the positive side of the *Tractatus*, is intended as a demonstration of how the *Sätze* constitute a *Formenreihe* by being generated from elementary *Sätze* using the operation N:

> Die allgemeine Form der Wahrheitsfunktion ist: $[\bar{p}, \bar{\xi}, N(\bar{\xi})]$.
> Dies ist die allgemeine Form des Satzes.

In the explanation of the square brackets at 5.2522, Wittgenstein is at pains to emphasize the homogeneity of arguments, even to the extent of misrepresenting the variable-binding role of the middle argument. Here in thesis 6, on the other hand, homogeneity is violated in a most blatant way: the third argument-place is taken by a result of an application of the joint negation operation N to a certain range of *Sätze*, that is, by a *Satz*, whereas the other two places are taken by ranges of *Sätze*, whether elementary or not. It is incumbent on any *Tractatus* interpretation to try to make sense of this deviant use of the square brackets. In my opinion this is an insoluble task; their use in thesis 6 represents a tacit break with the conventions laid down in 5.2522. In particular, the inductions employed at 6 are considerably more complex than mere iterations.

The first difficulty one encounters when dealing with thesis 6 is how to interpret the superscript bar in connection with the letter 'p'. The latter has, after all, a fair number of uses in the *Tractatus*. It serves, for instance, to indicate arguments of truth-functions, or, perhaps more accurately phrased, the bases of truth-operations, (e.g. 5.02) as well as facts (e.g. 5.43). Furthermore, it most commonly indicates a fixed, but further unspecified *Satz* (4.061 and many other places), sometimes with the further demand that the *Satz* indicated has to be an *Elementarsatz* (e.g. 4.31). None but the last of these various types of uses offers a serious alternative for the interpetation of thesis 6, though; in the gloss offered in 6.001 we learn that thesis 6 claims nothing but that any *Satz* is the result of successive

applications of the operation N on *Elementarsätze*.

The present use of the bar is not covered by the explantion offered in 5.501, where its use is laid down only in connection with round brackets and Greek variables. It would be far too restrictive, though, to treat 'p' as standing for one fixed *Elementarsatz*; in that case one could not even obtain the *Satz* p&q, where q is another *Elementarsatz*. The Greek letter 'ξ' is characterized as a *Satzvariable* in 5.502 and it seems rasonable here to view also 'p' as a variable, namely as one ranging over *Elementarsätze*. The interpretational issue concerning the letter 'p' in conjunction with a superscript bar thus comes down to the problem of determining the permissible ranges of *Elementarsatzvariable*. The phrase '*auf die Elementarsätze*', from the gloss 6.001 mentioned above, could be taken to indicate that the only range allowed is that of all *Elementarsätze*. Again, such a reading would be far too restrictive. The result of an application of N to this single range yields a fixed *Satz* S as its reult and it is not to be seen how to obtain from this, e.g. the *Satz* p&q already used as an example above, by means of further operations on N. Thus we have to consider the option that the use of '$\bar{p}$' is analogous to that of '$(\bar{\xi})$', only now confined to *Elementarsätze*. It is a moot point, however, whether such a use of an *Elementarsatzvariable* is allowed. A formal concept is immediately given with an object falling under it (4.12721) and a variable is a sign of a formal concept (4.1271); thus an object falls under a certain formal concept precisely when it is a value of a corresponding variable which serves as a sign for the formal concept in question. But plainly an *Elementarsatz* is a *Satz* (4.21), so what concept would be signified by an *Elementarsatzvariable*? The formal concept *Satz* is given with any value of an *Elementarsatzvariable* and it is not at all clear whether a variable can serve as a sign for more than one formal concept. The difficulty is that the status of subconcepts is unclear for formal concepts. Those occurrences of the letter 'p' which are candidates for service as *Elementarsatzvariable* are too nondescript to settle the issue one way or the other; for example, does 'p' so serve in thesis 4.24? In spite of these difficulties, if we want to make sense of the occurrence of 'p' in thesis 6, the only viable alternative seems to be to take it as part of a variable-notation for classes of *Elementarsätze*.

The admissible means for presenting such classes then become quite relevant for the proper interpretation of thesis 6. That thesis is the culmination of a line of thought which is first adumbrated at 5.1, while 5.5, in particular, constitues a clear anticipation. In its supplementaries 5.51-5.54 it is spelled out how to cope with the problems posed by ordinary truth-functions, quantification, identity and propositional attitudes, and thesis 5.55, with its string of commentaries up to 5.56, provides information highly germane for the task of determining what notations are admissible for clases of *Elementarsätze*.

The first of Wittgensten's three illustrative ways from thesis 5.501 is clearly admissible also for *Elementarsätze*: if an *Elementarsatz* is recognizable as such *am Symbol allein*, then a finite list of *Elementarsätze* can also be recognized as such *am Symbol allein*. The second case is more problematic, though. An *Elementarsatz* is a concatenation of Names (4.22), but is every concatenation of Names an *Elementarsatz*? That is, can we have concatenations of Names which are either simply nonsense or nonelementary *Sätze*? This is a matter of some importance in connection with Wittgenstein's view of expressions containing variables (3.312, 3.317). Let us consider an Elementarsatz, that is a certain concatenation of Names, say,

a # b # c # d

of Names.[15] For certain Names, among which

c,

an *Elementarsatz* will result when the gap in

a # b # # d

is filled with the Name in question. Are there other Names, though, for which either a nonelementary *Satz* or outright nonsense results when the gap is filled?[16] The use of a variable

15. Here '#' is used as a concatenation symbol.

16. Nonsense might reult from attempting to concatenate unconcatenatable Names. The question is only if there are such Names?

ξ

yields a *Satzvariable*

a # b # ξ # d,

becuase by stipulation (3.316) only such substitutions are considered for which a *Satz* results. Legitimate postulation of *Elementarsatz-variable* presupposes that it is decidable *an dem Namen allein* whether it yields an *Elementarsatz* when used in gaps such as in the above concatenation of Names. I have not been able to settle this matter from the text of the *Tractatus* and would not be surprised if it is undetermined there.

As regards the third illustrative method from 5.501 we can be more conclusive: it is definitely to be ruled out as inadmissible for *Elementarsätze*. The use of a formal law to generate a *Formenreihe* of *Sätze* imposes a syntactic hierarchy (5.252, 5.2522) and there can be no hierarchies among the *Elementarsätze* (5.556, 5.561), owing to their extreme logical independence.

It seems clear after the above discussion that Wittgenstein intends his *Sätze* to be inductively generated and that the basic clause in this definition should deal with their dependency on the *Elementarsätze*. Thus the interpretational challenge put by thesis 6 is to describe the type of definition by induction used there. "Officially" iterations only are allowed, but will not suffice. The following makes the dependency on the *Elementarsätze* explicit and seems as good a candidate as any to capture Wittgenstein's intention in thesis 6:

Der Satz.

(0) An *Elementarsatz* is a *Satz*.

(i) The result of applying N to a (legitimately presented) class of *Sätze* is a *Satz*.

(ii) There are no other *Sätze* than those obtained through successive applications of (0) and (i).

Thus presented, the definition has all the features of a proper inductive definition: there are basic, inductive and extremal clauses.

The inductive clause (i) may be elaborated into something slightly more explicit:

(ia) The result of applying N to a finite list of *Sätze* is a *Satz*.
(ib) The result of applying N to the values of a *Satzvariable* **f(x)** is a *Satz*.
(ic) The result of applying N to the terms of a formal series of *Sätze* is a *Satz*.
(id) The result of applying N to any other legitimately presented class of *Sätze* is a *Satz*.[17]

We must, however, take notice of a residual vagueness in (this rendering of) Wittgenstein's thesis 6, when considered as an inductive definition of the formal concept Satz: the question remains whether *Elementarsätze* (and via clause (0) also *Sätze*) can be recognized as such *am Symbol allein*, since the former cannot be logically circumscribed in any further way. In particular, they cannot be inductively generated, owing to the strictures against hierarchies and concomitant internal relations among them. Furhtermore, the definition is impredicative to an extent which exceeds that common to ordinary inductive definitions: the definition itself, especially as given by Wittgenstein in thesis 6, is clearly an example of a "formal law" in the sense of the third illustrative method from thesis 5.501 and so the result of applying N to the class of all *Sätze* is itself a *Satz* occuring in the listing as given by the formal law. This circularity need not necessarily be a vicious one, though, since the *Satz* obtained through application of N to all *Sätze* is nothing but the contradiction *falsum*.[18]

Given Wittgenstein's harsh words against Frege and Russell concerning impredicativity (4.1273) some care on his part would not have been out of place here, if only to show that the author of the *Tractatus* was aware of the lurking impredicativity. The unre-

17. Soames, *op.cit.*, f.n. 2, p. 581, f.n. 21, credits John Etchemendy with the insight that thesis 6 can best be viewed as an inductive definition. His proposal is slightly less comprehensive than the version offered here in that it leaves out the possibility of giving the range of bases by means of a formal law.

18. It can also be obtained using method 2: $N(S) = \bigwedge \{S \text{ is a } Satz : \neg S\}$.

stricted use of 'formal law' constitutes another source of vagueness in the generattion of the *Sätze*. It would be possible to render this precise if one could give a 'formal law' which generates all formal laws. This has not been done and it is extremly hard to see how it could be done; in the analogous case for arithmetic it is known that the total recursive functions have no recursive universal function, owing, of course, to Cantorian diagonalization.

The idea exemplified by the third illustrative way in 5.501, namely that of applying an infinitary operator to a more or less constructively given class of bases has been used to great effect in the theory of the sub-languages of the infinitary language $L_{\omega_1\omega}$, that is, predicate logic with infinite conjunctions and finite quantifier-prefixes.[19]

Especially in comparison with the virtuosity of this latter technical development Wittgenstein's treatment of the inductive means for generating his *Sätze* appears primitive: in brief, he does not realise that a *Formenreihe*, which is either a cyclic series or a progression in PM sense,[20] is not the right general notion of order to associate with inductive definintions.[21] The particularly simple case of the inductive generation of the wff's of propositional logic makes this perfectly clear. The order of precedence is not a total and objects can have more than one immediate predecessor: the wff P & Q has the wff P, as well as the wff Q, as immediate predecssors, but does not in any way dominate the wff R. The ordering corresponding most naturally to an inductive definition is not a total wellordering (of which progressions form an example), but a wellfounded partial ordering.[22]

19. H.J. Keisler, *Model Theory for Infinitary Logic*, North Holland, Amsterdam, 1971 and J. Barwise, *Admissible Sets and Structures*, Springer, Berlin, 1975, are the standard references concerning languages of this type. What Dag Prawitz calls 'Propositions' in his article of the name, *Theoria* 34 (1968), pp. 134-46, or rather the set-theoretic model offered in section 4, pp. 143-44, can reasonably be taken as an infinitary construction of Tractarian *Sachverhalte* and complexes thereof.

20. See the picture on page 639 of PM, Vol. I, *op. cit.*, f.n. 2.

21. The inducitve definitions in the *Tractatus* are approached via the notion 'and so on'; the latter is to be captured via operations and thus the general operational form can be seen as a sort of normal form for inductive definitions.

22. P. Aczel, "An introduction to inductive definitions", Ch. C.8, in: J. Barwise, *Handbook of Mathematical Logic*, North Holland, Amsterdam, 1977, treats of these matters in a lucid and relaxed way.

Of the topics listed at the outset of my paper only two remain. The first of these, namely the proper interpretation of the Tractarian equality-sign, is easily dealt with: Wittgenstein (4.241-4.243) denies equality the status of a material propositional function and adopts Frege's *Begriffsschrift* theory of equality. Thus the sign

$$a = b$$

expresses that the signs 'a' and 'b' are intersubstitutable in *Sätze*, that is, that they have the same use and accordingly that both signs are the same symbol. It is also used to state nominal definitions in what is claimed to be the Russellian form

$$a = b \text{ Def.},$$

where a is the *definiens* and b the *definiendum*. Russell, however, used the opposite order between *definiens* and *definiendum* in his definitions.[23] The order employed in the *Tractatus* is the one preferred by Frege.[24] In the *Prototractatus*, on the other hand, the definitions are cast in the Russellian mould; neither the reason behind this change nor its purpose are clear to me.

The equation in 6.01 lacks a definitional mark and it is the right hand sign, if any, which is already understood: the three-place brackets have been explained, but not the two-place. In view of this circumstance one still might want to treat of the equation as a definitional elucidation. In this equation an operation is then defined by laying down what the result is given a certain base. This value is described in terms of the three-place square-brackets. The Greek variable

$$\eta$$

here determines a range of *Sätze* and the square bracket in the RHS of the equation in 6.01 then describes the formal concept of an η-*Satz*,

23. PM, Vol I, *op.cit.*, f.n. 4, p. 11.

24. *Begriffsschift, op. cit.*, f.n. 5, p. 56 and *Grundgesetze der Arithmetik*, Vol. I, Jena 1893, 27.

much in the same way that thesis 6 gave the formal concept *Satz*. The inductive definition of the η-*Sätze* is of the pattern exhibited above:

Der η-*Satz*.

(0) Every *Satz* in the range η is an η-*Satz*.

(i) The result of applying the operation N to a range of η-*Sätze* is an η-*Satz*.

(ii) There are no other η-*Sätze* than those obtained through successive applications of (0) and (i).

This, thus, is how, in general, the values of operations are specified. The role of the range η must be further elucidated, though, in view of the preamble 6.002:

> Ist die allgemeine Form gegeben, wie ein Satz gebaut ist, so ist damit auch schon die allgemeine Form davon gegeben, wie aus einem Satz durch eine Operation ein anderer erzeugt werden kann.

This formulation elaborates that of the rider of 6.01, where the *Übergang* from one *Satz* to another is considered. Both formulations have, I think to be taken *cum grano salis*; one would certainly expect Wittgenstein's foremost example of an operation, namely the joint negation operation N, to conform to the general operational form. This it will not do when the general form is confined to cases which allow only for bases which consist of one single *Satz*: the operation N is, as has been stressed already, a multigrade operation, taking any number of *Sätze* into a *Satz*.

An operation is given by an internal relation between (the structures of the facts which serve as *Satzzeichen* for the relevant) *Sätze* and as discussed above this relation may be truth-functionally formulated. Thus the relation R between the base B of *Sätze* and the *Satz* S is a truth-functional one. It must, of course, be many-one. The base B must be presented in an adequate way, perhaps using one of Wittgenstein's three illustrative techniques. In the base B the *Satz* P, say, occurs and hence a certain relation obtains also between P and S. This relation is in a sense derived from the relation R(B,S); when the latter is made fully explicit, for instance as

$$R(\{..., P, ...\}, S),$$

one sees that the other members of the base serve as parameters in the definition of the relation

$$Q(P, S) =df. R(\{..., P, ...\}, S).$$

My suggestion is now that Wittgenstein does not primarily deal with the passage from *Satz* to *Satz*, which corresponds to the relation Q, but with the form of the passage from a base B (in which the relevant *Satz* is included) to a certain *Satz*, in other words with the operation that corresponds to the relation R. Given that it is certainly legitimate to obtain a *Satz* from another *Satz* through application of a many-place operation to the given *Satz* plus other supplementary *Sätze*, whose function is merely parametric, Wittgenstein does have to include such cases in his general account of how a *Satz* can be obtained from another *Satz*, and this is the reason for the occurrence of a whole base-range of *Sätze* in the explication of the passage from *Satz* to *Satz*. He could, however, have been a bit more explicit about the role of the range which serves to give the bases for the application of N in the elucidation of the general operational form: the *Übergang* finds place between a certain, further unspecified, *Satz* in the range and the η-*Satz* given on the right in the equation in 6.01.

The two-place square brackets, to the left in this equation, on the other hand, can readily be interpreted as providing a variable-binding device of the same kind as that discussed above for the three-place square-brackets. Thus, in modern notation, using capital "X" as a class-variable ranging over classes of *Sätze*, an appropriate version would be:

$$[\lambda X N(X)](\eta).$$

Accordingly we can now describe the general form of transtion from a given *Satz* p to another *Satz* in the following way:

0. Choose a range ξ of *Sätze*.
1. Choose a certain ξ-*Satz*.
2. Define an operation on ranges of *Sätze* by putting its result equal to the ξ-Satz chosen at step 1.
3. Choose a range η of *Sätze* which contains the given *Satz* p.

4. Apply the operation defined in step 2 to the range η chosen at step 3.
5. The result is a *Satz* q obtained in the most general way from p.

With this our interpretative task has been resolved.

In view of the matters discussed in the present paper Gödel's stern words on standards of syntactic precision may be cited; he found that PM "presents in this respect a considerable step backwards from Frege" and, *mutatis mutandis*, this verdict seems applicable also to Russell's erstwhile pupil Wittgenstein.[25] Indeed, the Tractarian sign-language is hardly one "in which everything fits", so could we not turn his own tables on the author of the *Tractatus*? Does he, in view of thesis 4.1213, have a correct logical doctrine? One the other hand, we must not be too severe: Wittgenstein was writing as a pioneer. With the benefit of seventy years of technical hindsight at our disposal it is possible to detect a few places where the Tractarian treatment goes astray. When Wittgenstein wrote even Skolem's famous paper on recursive definitions was yet to appear.[26]

This brevity of explanation, and the earlier instances of ill-designed notations, such as when the placemarking and variable-binding roles of variables are confused, are symptomatic of Wittgenstein's treatment of formal matters: compared to his masterly command of the issues within the philosophy of logic, his grasp of how to design a complex formalism is clearly not as firm. The difficulty and the magnitude of the latter task is often overlooked. The list of logicians who have tried to construct substantial interpreted formal languages adequate for sizable parts of mathematics, but who failed in their early attempts, is impressive: it comprises, among others, Frege, Church, Curry, Quine and Martin-Löf. The combination of great

25. "Russell's Mathematical Logic", in: P.A. Schilpp (ed.), *The Philsophy of Bertrand Russell*, Library of living philsophers, vol. 5, Northwestern University Press, Evanston, 1944, p. 126.

26. "Begründung der elementaren Arithemetik durch die rekurrierende Denkweise ohne Anwendung scheinbarer Veränderlicher mit unendlichen Ausdehnungsbereich", *Videnskapsselskapets Skrifter*, I. Matematisknaturvidenskabelig Klasse, 1923, no. 6 (Kristiania,1923). English trans. in: J. van Heijenoort, *From Frege to Gödel*, Harvard U.P., 1967, pp. 303-333.

logico-philosophical insight and skill at the design of formalisms is a very rare one: Frege provides the only example among the great formal logicians in the first half of our century. Peano was a great designer of logical notation, but did not have the corresponding philosophical power. The author of the *Tractatus*, on the other hand, constitutes the finest example of a philosopher whose technical formal capacities do not reach the outstanding level of his logico-philosophical thinking.

WITTGENSTEIN IN BETWEEN – A FRAGMENT

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During the first decades of this century we frequently see new movements in the sciences, in the arts as well as in philosophy, which enter the scene under a new name, a pamphlet declaring all norms and methods of the classics in a special field as outdated and even wrong in principle and propounding new theories or methods or arts which should replace the rotten ones. Thus the normal course of the origin and development of scientific theories, artistic creation and philosophical ideas was seen as something in need of a sudden change which could be brought about only by the decision to start anew. These new beginnings should free from the fetters of the past and open up a completely new way of action and reflection, or – more rarely – re-open an almost forgotten one which seems full of promise.

In philosophy the strongest exemplification of this attitude during the period in question were the logical empiricists who shared the conviction that a completely new way of doing philosophy has been opened. Contrary to the eternal anarchy of philosophical systems and opinions their new philosophical methods should make all conflicts unneccessary in principle. Thus these philosophers agreed with what Schlick said in his paper on "The Turning Point in Philosophy", namely "that an end has come to the fruitless conflict of systems" and that there are "no questions which are in principle unanswerable, no problems which are in principle insoluble".[1]

A dozen years earlier than the pamphlet "Wissenschaftliche Weltauffassung – Der Wiener Kreis" Wittgenstein had finished the first version of the "Logisch-philosophische Abhandlung" which

1. M. Schlick, "The Turning Point in Philosophy" ("Die Wende der Philosophie", in: *Erkenntnis* 1(1930/31)), transl. by D. Rynin, in: (ed.) A. J. Ayer, *Logical Positivism*, 1959, p. 54 ff.

later was published in its revised form and is now known under the title *Tractatus logico-philosophicus*. There we find the original wording of Schlicks preposterous sounding opinion that there are no unanswerable questions and no insoluble problems. However, not only the wording but also the very reason for this optimistic outlook stems from the *Tractatus*. There we read that

6.5 If a question can be put at all, then it *can* also be answered.
6.51 Scepticism is *not* irrefutable, but obviously nonsensical, when it tries to raise doubts where no questions can be asked.
For doubt can exist only where a question exists, a question only where an answer exists, and an answer only where something *can be said.*

Thus, in Wittgenstein's early view everything depends on the difference between saying and showing, where the latter is included in what cannot be said. If, however, something can be said at all, which means, that it also be can be thought at all, then it can also be thought clearly and can be said clearly. To transform unclear ideas into clear ones, to elucidate the propositions propounded in arguments is the task of philosophy. That was what was meant, when Wittgenstein declared that philosophy is not a doctrine but an activity aiming "at the logical clarification of thoughts". – "Philosophy should make clear and delimit sharply the thoughts which otherwise are, as it were, cloudy and indistinct." (*TLP* 4.112)

The idea that philosophy should be mainly and foremost "*critique of language*" became the leading criterion for judging also the past of philosophy. And the verdict was demoralizing telling to the philosophical community that

> Most propositions and questions that have been written about philosophical matters, are not false, but nonsensical. (*TLP* 4.003)

Wittgenstein did not think that *all* former philosophy was of this kind, that *all* of past philosophy was nonsensical. But what he certainly maintained was that all *metaphysical* talk is of this kind.

In one of the chapters of the "Big Typescript" of 1933 Wittgenstein is concerned to make clear what he thinks is the difference

between his understanding of philosophy and what philosophers of the past claimed to do. The first idea is that philosophy – as he does understand its task – is an undertaking which aims to destroy false gods or idols, but does not create new ones: What should be done is to remove the chaotic state of conceptual confusions. As examples he mentions the "flux of time", the "extension of space" or the Heraclitean saying that "one cannot step twice into the same river". And his answer to the old philosophers is: "We do bring words back from their metaphysical to their right use" ("Big Typescript", Ts 213, p. 412). In the *Philosophical Investigations* this formulation was corrected, turning the expression "right use" into "everyday use" (*PI*, § 116). Clearly, if the metaphysical use of words is wrong then only the right one can give us an undistorted picture. And as the right use we have to think of the everyday or ordinary use of words in our public language. No further investigation is needed. Therefore: Don't think, look.

No doubt, almost all characterizations of the task and the work of philosophy Wittgenstein offers say nearly the same thing: philosophy is: to reject wrong arguments, to clear up confusions, to trace the physiognomy of every mistake, to bring about perspicuous representations. The aim – clarity for its own sake – remained always the same; only the way to get to it was seen in a new light. Here someone may object that we should not overlook the big changes in Wittgenstein's later philosophy, his strong criticism of his earlier work and the radical new style of the *Philosophical Remarks* of the early thirties as well as of his main work, the *Philosophical Investigations*. Even if it were true what von Wright maintained that "the later Wittgenstein ... has no ancestors in the history of thought", that "his work signals a radical departure from previous existing paths of philosophy",[2] this would not alter the truth of the statement, that Wittgenstein never gave up the idea that the task of philosophy is to bring about clarity as an end in itself. This is how he thinks he differs essentially from the spirit of modern science and civilization. Their aim is to construct "ever more complicated structure(s)". Thus, if *they* seek clarity, it will always

2. G. H. von Wright, "Ludwig Wittgenstein. A Biographical Sketch", in: G. H. von Wright, *Wittgenstein*, Oxford 1982, p. 27.

be clarity *as a means* for further construction. Here we may find one of the vital differences between the program Carnap was developing at this period and the Wittgensteinian one. Carnap's aim was in continuing the idea and work of reconstruction to *improve* the method by distinguishing two levels: the objects described by an object-theory and the objects of the object-theory described by the meta-theory. Thus, for Carnap construction of the language to cover the two levels was the very point – and logical syntax should fulfil this task.

But for Wittgenstein the task is a different one. What he remarked about his work in general seems to be true also in this case, namely, that where others go on ahead, he stays in one place. (CV, 66) He can say what he actually said:

> For me clarity, perspicuity are ends in themselves.
> I am not interested in constructing a building, so much as in having a perspicious view of the foundations of possible buildings.[3]

How this description of the purpose of philosophy differs from what we know of past philosophers? In some sense the great philosophers always tried to give a picture of the design of the world, of its constituents and the principles of our understanding. Thus, ontology and epistemology were the most important disciplines to answer the questions: "What is there?" "What is existent or real and what not?" "Which are the ways we judge or say something and what makes our propositions true?" "When do we know something and what can we know?" – These are only some of the questions which we find asked since the time of the Presocratics, questions which are typically philosophical ones. No doubt, some of them we know even from our reading of the *Tractatus* which for a short period was the crucial text for logical empiricists and their allies.

However, even if it is true that the *Tractatus* deals with some of the main questions of traditional ontology, epistemology and – *pace* Wittgenstein – metaphysics, it does not fit their way of an-

3. Vorwort-Entwurf (early draft of the printed foreword) to *Philosophical Remarks* 1930 in: *Culture and Value*, ed. P. Winch, p. 6 f.

swering those questions. How else could it be that a philosopher declares that those who will understand him will recognize his elucidations in the end as nonsensical? So it is not surprising that Wittgenstein does distinguish his own way of practizing philosophy from that of the tradition. One main reason is that Wittgenstein from the very beginning of his philosophical work was deeply convinced that practizing philosophy is something other than doing science, "Philosophical investigations" – he writes in 1947 – "are conceptual investigations". The essential features of metaphysics is: that the difference between factual and conceptual investigations is not clear to it. A metaphysical question always looks like a factual one although the problem is a conceptual one. ["Die metaphysische Frage ist immer dem Anscheine nach eine sachliche, obschon das Problem ein begriffliches ist."] (BPP I, 949)

Thus even at the end of his life he did not change his view about metaphysics. Should we assume, perhaps, that he then changed his understanding of the task of philosphy and no longer insisted on its purely descriptive character? I don't think this assumption would be justified. Concerning the negative part of an interpretation we have to acknowledge that Wittgenstein's non-naturalistic attitude emphasizes firstly, that "There is no common sense answer to a philosphical problem"[4], and secondly, that it is wrong to copy the ways and methods of science. In fact, Wittgenstein thinks that philosophers "are irresistibly tempted to ask and answer questions in the way science does. This tendency" – he says – "is the real source of metaphysics, and leads the philosopher into complete darkness."[5]

What therefore – according to Wittgenstein – should be *avoided* is to aim to explain conceptual questions and propositions in the way we explain events namely by trying to deduce them from laws. The remedy against this "craving for generality" is the esteem for the particular case, namely, exactly those cases which Socrates and Plato refused to accept as definienda.

There is a longish chapter in the "Big Typescript" on the importance of generality which, to some extent, is clearer than some passages in other works by Wittgenstein. The first problem dealt

4. L. Wittgenstein, *Blue-Book*, p. 58.
5. L. Wittgenstein, *Blue-Book*, p. 18.

with belongs to logic and the philosophy of logic. It concerns the question how to understand the all-operator and transcribe it from normal discourse into logic. Here Wittgenstein criticizes first the Russell-Frege-conception or interpretation of the existential quantifier: There is an x such that x has the property f for some special cases, like: "There is a black circle in this rectangle" which according to Wittgenstein is to be transcribed in the Russellian notation as: "There is an object, which is a red circle in this rectangle." This transcription is dismissed as wrong since already "There is" ["Es gibt"] is misleading because "There is" ["Es gibt"] means actually "there is one circle under the other which ... " (cf. TS 213, p. 324 f.).

Another point of the critique concerns the *transition* from: "There is a spot in the square" to "*all* spots are in the rectangle". And Wittgenstein asks: Which 'all'? And behind the question we find still the other one – namely what kind of object it is, of which it is said, that it does (or does not) have the property to be a spot in a rectangle? In parentheses to these considerations Wittgenstein remarks that the most difficult standpoint in logic is the one of common sense. Because it asks for total truths for its justification – without any concession or construction. Already in the notes in his diary during the first world war one finds the confession of his uncertainty about the right interpretation of the concept of "all". How is it that "all" is a logical concept, how is it, that it is a formal concept? And further questions lead him to the search for "Das erlösende Wort – ?!"[6] Apparantly he had similar doubts and questions eighteen years later.

Having criticized Russell Wittgenstein turns to a self-criticism of his own earlier view. This was the Tractarian doctrine that the existential quantifier is a logical sum and that for all x fx is a logical product. Of this doctrine he says that naturally it can not be held further. The wrong idea was that the logical product will be found sometime. Well, this will really happen and it would work when we have a number of limited cases, like "all notes of the c-major scale" or the "primary colours in this picture" – but it could *not* work in other cases.

Wittgenstein concludes this chapter by warning against using "all" in logical analysis for the purpose of clarification if one is not clear about its meaning. There are as many different generalities as

6. L. Wittgenstein, 20. 1. 1915.

there are different kinds of numbers [Zahlarten].

Having cleared up these points Wittgenstein turns to the very heart of the matter: The explanation [Erklärung] of generality *via* examples. We know a lot about this from the *Philosophical Investigations* – and from Plato. But the upshot of the remarks is – that it is the rules which are normative for the *example*, the rules determine that the case is an example. And the rule is just the rule for *acting*. Thus: it is not the concept, explained by a definition, it is not the expression (the word or sign) which turns a case of use into an example. It is the *rule* of acting accordingly. And this rule may be grasped even from *one example* alone.

One aim of investigating the different uses of an expressions was therefore to relate them to a rule or to turn them into an example of a rule or of different rules. But craving for generality is *not* the aim. On the contrary, looking at particular cases, even primitive forms of language, activities and reactions is what Wittgenstein recommends as part of the new methods in philosophy. "Craving for generality", however, is one of the main obstacles for the appreciation of the particular. And as the above mentioned quotation from the "Blue Book" underlines, the philosopher's preoccupation with scientific methods and his research in the most general discipline of all, namely metaphysics, are in the same boat: the new way of philosophizing should avoid these temptations; it leads between science and metaphysics.

I do not say that Wittgenstein himself did always stick to this program. For instance, in the forties he too tries to achieve classifications of psychological concepts and compares the realist and the idealist on a very general level. Psychological categories are one of the late topics he wanted to write about. But when it comes to arguments, he does not (easily) use general premisses, except when he refers to rules.

Perhaps the main reason why Wittgenstein thinks that there is a gulf between his idea of the methods of philosophy and the traditional conception of these was that he really had a different view of the philosophical business. Firstly, he thinks, it is "Arbeit an einem selbst" that makes it possible to stop when you want or when you do not need it. Secondly, it is not an experimental undertaking, it cannot look for new results. This is also a new idea and one which

from the very date of its first publication was felt as a blow, hitting the true model or picture of philosophy.

However, even many followers of Wittgenstein shared the opinion expressed by Dummett that Wittgenstein's elucidation of the essence of philosophy is the weakest part of his work. Also Oswald Wiener, an Austrian writer and author of the important novel "Die Verbesserung von Mitteleuropa", criticizes Wittgenstein in his latest book, published under a pseudonym. His main charge against Wittgenstein is that he only puts questions to his reader and never provides *results*.

In a certain sense this is true for Wittgenstein's philosophical remarks and investigations: they are crowded with question-marks. But they should be taken as an invitation to 'look' at what is plainly there. What he later has said about the ideal which is sitting fast in our thought like eyeglasses on our nose points to a key for interpretation: questions – like propositions – have to be scrutinized such that "our real need" ("unser eigentliches Bedürfnis") serves as a pivot for rotating our way of looking. That which disturbs or hinders an unbiased look at things has to be cleared away. Clarity as an end in itself leaves everything as it is, except of the ways of the philosopher's looking at the world.

But are not our ways of looking at the world determined by the ways men have looked at the world? Are not history and tradition and the language we use the rails we follow? That is just the case and when people find that philosophy does not make progress then they do not understand why it is this way: "The reason is that our language has remained the same and always introduces us to the same questions." (TS 213, p. 424) But how should we look at the world in order not to fall again and again into the old traps?

The philosophical medicine he recommends is not new: Just *be unbiased*.

> To be unprejudiced means: Not to put down the weight anywhere, but to keep it in balance. ["Vorurteilsfrei zu sein heißt aber: sein Gewicht nicht irgendwo abstellen, sondern in Schwebe halten."] (21.12.1947, Ungedruckte Bemerkungen zur Philosophie der Psychologie.)

This old sceptical advice is, I think, a key to the understanding of Wittgenstein's later attitude towards philosophical problems: "Paint really only that which you see." – "Don't think, look" are signposts which point in the same direction.

Therefore it is not adequate to attribute to Wittgenstein the idea that philosophy has come to an end. That we can stop when we want has the reason that we need not continue when order has been achieved. When an illness has been cured there is no need to continue "its" treatment, because there is nothing left to be cured.

Now, after having looked into Wittgenstein's lasting conception of the task of philosophy, we may turn to some of the more specific questions. In the systematic treatise of the philosophical remarks in the Big Typescript, Wittgenstein starts with questions concerning understanding, meaning and sentences which leads him to state that a sentence is a sign within a system of signs. Herewith the main step towards a holistic conception of the working of language was made. Meaning should be interpreted only within the context of its use in a language. True, already in the Tractarian period he accepted the Frege rule, that in asking for the meaning of a word the whole sentence has to be considered, since alone with propositions "we make ourselves understood" (4.026), "only in the nexus (Zusammenhang) of a proposition does a name have meaning" (3.3).

Again, that the sentence is a connection of signs is not something given but something *done*. And since it could have been done otherwise it is up to the user to choose or to decide the place in the system. Now the choice to build up a sentence is not only directed by the intention to picture some fact or state of affairs, but to select a certain connection of signs out of other possibilities. This procedure can be compared with what we might do when we put the hands of a watch to the time of another sign within the system: there we have a system of numbers correlated according to the rule for counting the hours of the day, and we put the hands just to the point according to which the use of the sign directs it. Hence the system of signs is to be distinguished from the dictionary of the signs in the language and the use which – if correct – is within the system, otherwise not.

To know this, presupposes having learned the language, that is, one has to know how to apply the sign, here the word, within the

system. If we take – as Wittgenstein does – the whole of language as the system, our effort to express something, to say something, presupposes the understanding of the language at least in the following sense: to know how to use words within the system *and* in what situations the words are applicable. Even in his "Last Writings on the Philosophy of Psychology" he has no better answer: "What am I after? The fact that the description of the use of a word is the description of a system, or of systems. – But I don't have a definition for what a system is." (I, 294)

In the *Tractatus* the words, that is the names in a proposition, were thought as standing for things (objects) and if they were linked to sentences they were themselves parts of facts representing states of affairs.

Later on the idea of a connection between meaning, understanding and verification occupied the discussion. And I should like to turn at this discussion shortly because one of the questions certainly was: What is it the simple names stand for? In short: What are the objects we arrive when we come to the constituents of our propositions? I shall not deal with this question at length, but only point to one of three interpretations which are available, and to which McGuinness has also contributed one of his important essays quite early.

The first interpretation which comes to mind is the one alluded to in the *Tractatus* itself, when Wittgenstein at 2.01 gives the hint that the term 'object' may be read as "thing" and we take 'thing' in its ordinary sense. The second interpretation takes them as exemplifications of properties, thus following the line of a bundle-theory of things and avoiding the metaphysical bias. The third line of interpretation links it to experience in its narrow sense and this interpretation has been used to explain also the counterpart of the experiences – the world – as constituted by the experiences. Thus, the world ceases when experience ends.

In the Typescript 211 which is one of the two typescripts making up the material for 213 – the big one – we find a transition from the basic idea in the *Tractatus* – that a proposition is a combination of names – to the idea that a propositon is part of a system.

To understand this transition seems important to me. And at least a step in order to understand its importance will be to remember

that the idea of *verification* as the central idea for exploring the sense of a propositon turns up already in the discussions with Schlick and Waismann in 1929 or even earlier. We know the entry:

Jeder Satz ist eine Anweisung auf eine Verifikation. (PB 174)

Thus the way to grasp the sense of a proposition leads to an *attempt* to verify it. However, the search is not unrestricted, because to search for the meaning of a proposition is equally bound to a system: the system of language. [Just to walk through an unending space to look for something, e.g. gold, is not to search for gold].

In a certain sense one can understand the verificationism of those days as a continuation of a problem, raised already in the *Tractatus* – namely, the problem of the possibility of meaningful questions. There, Wittgenstein's solution was: questions can meaningfully be asked only when it is *possible* to answer them. Asking what is meant by this leads either to a kind of realism, as it was presented in the *Tractatus* or to a kind of anti-realism which seems to be linked with the verificationist program of the early thirties.

If the meaning of a proposition is to be detected via its verification the question: "What do you expect will be the outcome of your search?" is a natural one. Wittgenstein realizes that we are tempted to ask: How do we *think* the sentence p? How do we expect that this or that will take place? However, he underlines that this is a *wrong question*. Therefore the right question is to be looked for. And the answer to the right question is again linked with the verificationist program, namely, that in order to understand a proposition we need a determination of what makes the sentence in question true. Wittgenstein's answer to this question points again to the idea that the description of the verification contributes to the grammar of the language, that is the system of language to which the proposition belongs.

There is an interesting passage in the typescript 211 (p. 333 ff.) where Wittgenstein says that only facets of a hypothesis will be verified, denying that there would be primary propositions as a basis for others, which definitely have been verified. – This is excluded by an analogy of the surface, since there is no sense in asking if there are surfaces which are not surfaces of bodies.

Then Wittgenstein turns to a topic which is interesting in itself and interesting for the theory of verification (p. 336).

How about sentences we find in poetry? "Here we cannot talk of verification and nevertheless these sentences have sense." No doubt, an important point. Not in *all* cases could verification be a guide to the meaning of a sentence. Thus, there was a counterexample posing a problem. Wittgenstein's answer to it shows, what Findlay always has claimed, that Wittgenstein clearly knew Meinong and not only Russell (and Frege).

The first answer is again given by an analogy, saying that their relation to the propositions which *are* verifiable is similar to the relation of a genre-picture to a *portrait*. Strangely enough *Wittgenstein* declares that this simile clears up the problem *completely*.

He puts into question whether these propositions are what Frege and Meinong have called *assumptions*. And clearly the answer must be: Yes. In an assumption we do not state that something is the case, since we do not believe in the truth of the proposition. The attitude we view the content of an assumption is thus a different one to the attitude we are in when only facts are in question.

In discovering this Wittgenstein was led to the idea that to ask for a verification is to ask for the *intentional* object, which may be reproduced in different ways and which he always likened to pictures.

I think I was right in stressing the thought expressed by Wittgenstein himself that he and his method have more in common with *a painter* and painting than one would think. Much later Wittgenstein returned to these early ideas.

But before that, he had to go through the conception of a calculus, derived from the idea to explain a proposition by its belonging to a system. He tried to go into the comparison of systems with a calculus, hoping that the deductive consequences will fill up the expectation to come to an end. But again, quite soon he discovers that this approach also is not satisfactory. When he gave up the hope that the model of a calculus could do the work to picture *our* language and that to picture our language we do not have the possibility to step *outside* language, he still thought that verification is the method to extract the meaning of sentences. This can also easily be seen in the "Leitsätze zum Proseminar" delivered by

Waismann 1931, where Waismann explores Wittgenstein's idea that the anger of another person will be recognized in a *different way* to one's own anger. The anger of a person is not a private event. If there is no sign of anger, no "verification", then we are not in the position to attribute 'anger' to a person. However, we ourselves do not need signs when we are angry; we just feel our own anger when we are in that state. Propositions about the anger therefore make apparent that the *word* "anger" in sentences about myself and sentences about other persons must have a different meaning. Waismann, like Wittgenstein in 1929, defends the view that a statement which cannot be verified definitely is not verifiable in principle.

To deal with this question would lead to another aspect in the story of Wittgenstein, to the question how far he himself has been influenced by the Viennese philosophers *in between* his begin to work in philosophy anew and his first attempt of systematizing the results in the so-called Big Typescript (to pay attention to such an aspect I have learned from Gilbert Ryle in an exiting seminar on early Aristotle and late Plato in the late fifties; if I remember rightly, also Brian McGuinness took part).

WITTGENSTEIN'S CONCEPT OF SHOWING

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The doctrine of showing presented in the *Tractatus* shelters a variety of would-be statements, many of them philosophical, but some, like the propositions of ethics, a part of our lives. It seems surprisingly easy for any thought that was threatened by Wittgenstein's austere theory of sense to take sanctuary among the things that can be shown but not said.[1] Surely their credentials needed to be checked more carefully before they were admitted to this privileged class within which lack of sense was no bar to communication and what was communicated was often something more important than the plain messages of sentences endowed with sense.[2]

Several commentators have begun the task of sifting this class of sentences. Brian McGuinness has examined its more 'mystical' members[3], and Peter Geach, working from the other end of the broad spectrum, has analyzed sentences which seem to be indispensable to the theory of logic and language, but which cannot be given sense within it.[4] Both articles relate the doctrine of showing to the work of Wittgenstein's contemporaries, Geach tracing connections with Frege's philosophy and McGuinness with Russell's. My point of departure and orientation will be different. I shall start from Wittgenstein's reasons for placing all true-seeming sentences about the relation between language and the world in the class of utterances

1. TLP 4.1212.

2. See Wittgenstein's letter to L. Ficker about the *Tractatus* in: P. Engelmann: *Letters from Ludwig Wittgenstein with a Memoir*, ed. B. McGuinness, tr. L. Furtmüller, Blackwell, 1967, pp. 143-4.

3. B. McGuinness: "The Mysticism of the Tractatus", *Philosophical Review*, Vol. LXXV, No. 3.

4. P. Geach: "Saying and Showing in Frege and Wittgenstein", in: *Essays on Wittgenstein in Honour of G. H. von Wright, Acta Philosophica Fennica*, Vol. 28, Nos. 1-3, Amsterdam: North Holland Publishing Co, 1976.

that lack a truth-value and can only communicate in the privileged way, and I shall investigate the fate of this part of the doctrine of showing in his later writings.

It may seem that there is nothing of the kind to be investigated, because the doctrine simply disappeared with the theory that sentences are pictures. So I will start by quoting two passages from the later works which will correct this impression.

> I might also put it like this: the 'law of induction' can no more be *grounded* than certain particular propositions concerning the material of experience.
>
> But it would also strike me as nonsense to say "I know that the law of induction is true".
>
> Imagine such a statement made in a court of law! It would be more correct to say "I believe in the law of ..." where 'believe' has nothing to do with *surmising*.
>
> 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 and then you will see it.[5]

This text, cited by Anthony Kenny in his book, *Wittgenstein*,[6] is a clear indication of the survival of the doctrine of showing: the practice of arguing inductively is not based on any highly general factual statement, but, rather, belief *in* what such a statement wrongly tries to say can be seen in the practice.

The other text is in *Zettel*:

> I want to say that there is a geometrical gap, not a physical one, between green and red.
>
> But doesn't anything physical correspond to it? I do not deny that. (And suppose it were merely habituation to *these* concepts, to these language-games. But I am not saying that it is so.) If we teach a human being such-and-such a technique by means of examples – that he then proceeds like *this* and not like *that* in a particular new case, or that in this case he gets stuck, and thus that this and not that is the 'natural' continuation for him: this of itself is an extremely important fact of nature.

5. L. Wittgenstein: *On Certainty*, ed. G. E. M. Anscombe and G. H. von Wright, tr. D. Paul and G. E. M. Anscombe, Blackwell, 1969.

6. A. Kenny: *Wittgenstein*, Allen Lane, The Penguin Press, 1973, p. 218.

> "But if by 'bluish yellow' I mean green, I am taking this expression in a different way from the original one. The original conception signifies a different road, a *no thoroughfare*."
>
> But what is the right simile here? That of a road that is physically impassable, or of the non-existence of a road? I.e. is it one of physical or of mathematical impossibility?
>
> We have a colour system as we have a number system.
>
> Do the systems reside in *our* nature or in the nature of things? How are we to put it? *Not* in the nature of numbers or colours.
>
> Then is there something arbitrary about this system? Yes and no. It is akin both to what is arbitrary and to what is non-arbitrary.
>
> ...
>
> ... but has nature nothing to say here? Indeed she has – but she makes herself audible in a different way.
>
> "You'll surely run up against existence and non-existence somewhere!" But that means against *facts*, not concepts.[7]

Here the question is about the status of the sentence, "It is not possible that there should be such a colour as reddish-green." The answer suggested is that it is neither a factual sentence nor the result of a freely adopted convention, because at this point "nature makes herself audible in a different way": we see that the impossibility is implicit in our practice.

Two ideas are brought together in these late texts. One is the idea that conceptual necessities are created by what we ourselves do, and though what we do is influenced by the facts which form the background to our performance, those facts cannot provide any independent justification for the rules governing our performance. The second idea is that, when we fail to find facts which will justify the rules, we invent them by projecting onto the world the necessity (given the rules) of our practices. These two ideas are best known from the use that Wittgenstein makes of them in his account of rule-following in *Philosophical Investigations* and *Remarks on the Foundations of Mathematics*. What is not so well known is that they

7. L. Wittgenstein: *Zettel*, ed. G. E. M. Anscombe and G. H. von Wright, tr. G. E. M. Anscombe, Blackwell, 1967, 354-358 and 359.

are developments of the early doctrine of showing, so that the echoes of that doctrine in the two quoted texts are not a coincidence.

The cardinal point made in the long discussion of rule-following in *Philosophical Investigations* is that, when someone uses a paraphrase to explain the meaning of a sentence, he must be relying on the actual practice of applying the words occurring in the paraphrase to things.[8] In the *Tractatus* the concept of showing is used to make the same point:

> Every sign that has a definition signifies via the signs that serve to define it; and the definitions point the way.
>
> ...
>
> What signs fail to express, their application shows. What signs slur over, their application says clearly.
>
> The meanings of primitive signs can be explained by elucidations. Elucidations are propositions that contain the primitive signs. So they can only be understood if the meanings of those signs are already known.[9]

The identification of the point made here with the point made in *Philosophical Investigations* I, § 201 does not imply that there was no change or development in the interim. Wittgenstein's abandonment of logical atomism in 1929 made two big differences. First, the appeal to the actual practice of applying a word to things was no longer associated with 'primitive signs' and he only insisted that it must be made somewhere. The second and more important development was the emergence of the problem of identity. This problem had been kept in the wings by the logical atomism of the *Tractatus*. For if simple objects did recur and did have to be re-identified, there would be no criterion available for their re-identification, because the material needed for constructing such a criterion was lacking. So the abandonment of logical atomism soon led to another much more important development, the formulation of the central question in this area: "What counts as applying a word in the same way again?"

8. L. Wittgenstein: *Philosophical Investigations*, tr. G. E. M. Anscombe, 3rd ed, Blackwell, 1958, I, § 201.

9. TLP 3.261-3.263.

If there were any doubt about the identification of the point made in *Philosophical Investigations* I, § 201 with the point made in *Tractatus* 3.261-3, perusal of some of the intervening texts would soon remove it. In *Cambridge Lectures 1930-1932*, he compares a sentence with a plan and observes that "we cannot get the interpretation into the plan; the rules for interpreting a plan are not part of the plan."[10] Similarly, "our symbols can never contain their own rule of projection or interpretation".[11] So "in all language there is a bridge between a sign and its application. No one can make this for us; we have to bridge the gap ourselves. No explanation ever saves the jump, because any further explanation will itself need a jump."[12]

There is a more explicit development of the point in *Philosophical Remarks*:

> But can't you give someone an instruction by showing him how to do something? Certainly, and then you have to tell him 'Now copy that'. Perhaps you have already had examples of this before but now you have to say to him that what happened then should happen now. That still means: sooner or later there is a leap from the sign to what is signified.[13]

In the *Blue Book* he diagnoses a cause of the common illusion that there must be some way of avoiding the need for this leap:

> Another source of the idea of a shadow being the object of our thought is this: We imagine the shadow to be a picture the intention of which *cannot be questioned*, that is, a picture which we don't interpret in order to understand it, but which we understand without interpreting it.[14]

In the *Brown Book* the illusion is presented in a different form, but the motivation is the same – the desire for the automatization of the contribution made to the meaning of a word by what we

10. *Wittgenstein's Lectures, Cambridge, 1930-1932*, ed. D. Lee, Blackwell, 1980, p. 24.

11. Ibid., p. 30.

12. Ibid., p. 67.

13. L. Wittgenstein: *Philosophical Remarks*, ed. R. Rhees, tr. R. Hargreaves and R. White, Blackwell, 1975, p. 66.

14. L. Wittgenstein, *The Blue Book*, in: *The Blue and Brown Books*, Blackwell, 1958, p. 36.

ourselves do with it:

> We meet again and again with this curious superstition, as one might be inclined to call it, that the mental act is capable of crossing a bridge before we've got to it ... .
>
> It is no act of insight, intuition, which makes us use the rule as we do at the particular point of the series... . And the mistake which we here and in a thousand similar cases are inclined to make is labeled by the word "to make" as we have used it in the sentence "It is no act of insight which makes us use the rule as we do", because there is an idea that 'something must make us do what we do'. And this again joins on to the confusion between cause and reason. *We need have no reason to follow the rule as we do*. The chain of reasons has an end.[15]

The final step in this development is taken in *Philosophical Investigations*, where the thesis, that no contribution to the meaning of a word is made by our practice, is reduced to absurdity. The argument is that, if that thesis were true, then, given the possibility of continuing any series of rule-governed applications of a word in an indefinite number of different ways, there would be no distinction between obeying and disobeying the rule.[16]

If the doctrine of showing survived into the second period of Wittgenstein's philosophy – modified of course, but still recognizably a development of the same ideas – we might expect to find it put to uses which resemble the use that he made of it in the *Tractatus*. The two texts quoted near the beginning of this paper, from *On Certainty* and *Zettel*, have already provided examples. The first one is very perspicuous: the law of induction is treated not as a general factual statement with a truth-value, but as an attitude which can be seen in the practice of drawing inductive conclusions.

The second one is more involved. Certain features of our colour-vocabulary are presented neither as facts about the relations between colours nor as the results of freely chosen conventions, but as intimations of nature "making herself audible in a different way". What makes this suggestion especially interesting is its use of Wittgenstein's new idea about rule-following to account for a sentence which has been classified by some philosophers as synthetic

15. Ibid., p. 143.
16. PI, I, § 201.

a priori: "It is not possible that there should be such a colour as reddish-green." The new idea about rule-following is that it is human nature, exploited in the teaching of language and reinforced by its subsequent use in communication, which determines what counts as applying a word in the same way again. If we add that human nature must be responding to its natural environment, the impossibility of reddish-green is explained in a way that is evidently derived from the early doctrine of showing: we can see in our applications of the two words, "red" and "green", no natural development leading to the use of the term "reddish-green".[17]

These elaborations of the doctrine of showing need to be substantiated in more detail. The strategy adopted by Wittgenstein in the second text would be easier to appreciate against the background of his treatment of ontological questions in the *Tractatus* and in the work that he did at the beginning of the second period of his philosophy. There is also more to be said about the first text. It may be correct, but it is hardly self-explanatory to say that "an attitude can be seen in a practice". We need to get into a position to understand Wittgenstein's conviction that a philosophical investigation of language must adopt the users' point of view rather than searching their environment for scientific explanations of the various features of the language that they use.

First, then, we must look at the ontology of the *Tractatus* and the reason why it can only be shown. That will put us in a position to assess how much the changes which began in 1929 affected the doctrine of showing, and how representative of his later ideas the text quoted from *Zettel* really is.

The atomistic ontology of the *Tractatus* is deduced from the fact (guaranteed by the pragmatic paradox of denying it), that we speak a language, together with the theory that all language is pictorial. A particular elementary sentence, "Fa", shows that the object a occurs in its sense, and, like anything else that is shown, this cannot be said, because a sentence used to say it would not be a (contingent) factual sentence. The general thesis, that there are simple objects, is also something that is shown, in a more roundabout way, by the

17. This example throws some light on Wittgenstein's treatment of proof in mathematics.

existence of language, given the validity of the picture theory of sentences.

Now there are two distinct claims that might have been made for this ontology: one, that it is *required* by the language, and the other, that it *justifies* the language. We need to know which of these two claims he was making for the ontology of the *Tractatus*; and later, after his abandonment of logical atomism, which claim he made for the ontology of our everyday language. These are important questions, because the first claim is a weak one – "There are, at least, things of this kind, and so the language which is based on them is a possible one" – while the second claim is much stronger "All things are of this kind, and so the grammar of any possible language must be based on them".

There can be no doubt that he made the stronger claim for the ontology of the *Tractatus*:

> It now seems possible to give the most general propositional form: that is, to give a description of the propositions of *any* sign-language *whatsoever* in such a way that every possible sense can be expressed by a symbol satisfying the description, and every symbol satisfying the description can express a sense, provided that the meanings of the names are suitably chosen.
>
> ...
>
> Suppose that I am given all elementary propositions: then I can simply ask what propositions I can construct out of them. And there I have all propositions, and that fixes their limits.[18]

However, it is not so easy to see what happened after his abandonment of logical atomism. Naturally, the strong claim was withdrawn – evidence for that will be given below – but how weak did he take the weak claim to be? What ontological conclusions, if any, could be drawn from our everyday language? And were they conclusions that could only be shown in anything like the old sense of that term?

There is no doubt about the fate of the strong claim. It was withdrawn soon after Wittgenstein abandoned logical atomism:

> No description of the world can justify the rules of grammar.[19]

18. TLP 4.5-4.51.
19. *Wittgenstein's Lectures, Cambridge, 1930-1932*, p. 44.

This is repeated many times in the next five years and the weak claim is left alone in the field.[20]

The phrase "justify the rules of grammar" is ambiguous in a way not yet mentioned. The justification might proceed via the argument, that certain features of our environment explain our adoption of certain grammatical rules. Or the argument might be that the facts made the adoption of those rules as necessary as what we must say under the constraint of the rules. When Wittgenstein says that "no description of the world can justify the rules of grammar", it is the second of these two kinds of justification that he has in mind. The first one is dismissed by him in several texts, not on the ground that it is impossible, but on the quite different ground that it is irrelevant to philosophy:

> If the formation of concepts can be explained by facts of nature, should we not be interested, not in grammar, but rather in that in nature in which is the basis of grammar? – Our interest certainly includes the correspondence between concepts and very general facts of nature. (Such facts as mostly do not strike us because of their generality.) But our interest does not fall back on these possible causes of the formation of concepts; we are not doing natural science; nor yet natural history – since we can also invent fictitious natural history for our purposes.[21]

This dismissal of scientific explanations of the adoption of conceptual systems is questionable, but it will not be discussed in this paper.

Here we are concerned only with the second kind of justification, which tries to ground rules in reality as securely as linguistic practice is grounded in rules. Attempts at this kind of justification are familiar in the history of philosophy: a feature of language (or thought) which seems to stand in need of justification is allowed to cast its shadow in the Platonic realm, and then the shadow is hailed as the explanation of its substantial cause. Wittgenstein's attitude to

20. Ibid., pp. 94-5; *Philosophical Remarks*, p. 53; *Philosophical Grammar*, pp. 186-7, 313, etc.

21. PI II, xii. This is repeated with additional details in *Remarks on the Philosophy of Psychology*, II, §§ 422-436. The example discussed is the sentence "There is no such colour as reddish-green", and the two texts, PI II, xii and *Zettel*, §§ 354-364, are brought together in a way that throws light on the development of the concept of showing. See below.

these ventures in projective metaphysics and, in particular, to the ontology of the *Tractatus* will be discussed later.

Meanwhile, the question about the development of the concept of showing needs an answer. How is Wittgenstein's rejection of the second kind of justification of grammar related to the early doctrine of showing? The answer to this question will lead back to an examination of his attitude to the weak ontological claim and to his idea that human nature (in its natural environment) contributes to what counts as applying a word in the same way again.

His objection to the second kind of justification of grammar is stated concisely in 1930:

> What is essential to the world cannot be said about the world; for then it could be otherwise, since any proposition can be negated.[22]

So if the essence of the world (i.e. what is logically possible) is communicable, the communication must be effected in some other way. His view is that it is effected by grammar:

> Grammar is not the expression of what is the case, but of what is possible.[23]

This mode of expression is evidently the same as the showing of the *Tractatus*. The reason for keeping it distinct and separate from factual discourse is given at greater length later in the lecture:

> You cannot justify grammar. For such a justification would have to be in the form of a description of the world, and such a description might be otherwise, and the propositions expressing this different description would have to be false. But grammar requires them to be senseless.[24]

But perhaps the most explicit version of this argument is given in *Philosophical Remarks*:

22. *Wittgenstein's Lectures, Cambridge, 1930-1932*, p. 34.

23. Ibid., p. 10. This is a re-affirmation of part of the thesis of TLP 6.124: "Logic is not a field in which *we* express what we wish with the help of signs, but one in which the nature of the absolutely necessary signs speaks for itself." What is re-affirmed is that possibilities are shown; but the strong claim, that there is a single mandatory set of possibilities which has to be shown by the grammar of any language, has been withdrawn.

24. Ibid., p. 49.

> If I could describe the point of grammatical conventions by saying they are made necessary by certain properties of the colours (say), then that would make the conventions superfluous, since in that case I would be able to say precisely that which the conventions exclude my saying. Conversely, if the conventions were necessary, i.e. if certain combinations of words had to be excluded as nonsensical, then for that very reason I cannot cite a property of colours that makes the conventions necessary, since it would then be conceivable that the colours should not have this property, and I could only express that by violating the conventions.[25]

It is at this point that the illusion of projective metaphysics is likely to be generated. We only have to retort "All right, then, it is *inconceivable* that the colours should have this property", and we will be well on the way to using the shadow of the convention to justify the convention itself. In *Remarks on the Philosophy of Psychology* Wittgenstein examines the consequences of making this move. He imagines us making it as a reaction to "people who were acquainted with 'reddish-green' (e.g. who called olive-green by that name)". We would probably react by saying:

> "Then they have a different concept of colour altogether." As if we wanted to say: "Well then, it wouldn't be this but a different concept of colour" – all the while pointing to our own. As if there were an object to which the concept belonged unequivocally.[26]

There is a neat dismissal of projective metaphysics which first appears in 1931:

> To a necessity in the world there corresponds an arbitrary rule in language.[27]

This is repeated, slightly altered and within quotation marks, in Philosophical Grammar:

> "The only correlate in language to an intrinsic necessity is an arbitrary rule. It is the only thing that one can draw out of the necessity into a proposition."[28]

25. *Philosophical Remarks*, p. 53.
26. *Remarks on the Philosophy of Psychology*, II, § 428.
27. *Wittgenstein's Lectures, Cambridge, 1930-1932*, p. 57.
28. *Philosophical Grammar*, p. 184.

In *Philosophical Investigations* Wittgenstein distances himself from the epigram even further by quoting it and asking us to consider it.[29] Presumably, he had become dissatisfied with the word "arbitrary". Even in 1930 he had qualified it:

> ... it may be ... objected, "Are you then talking of 'mere convention', of mere convention in the sense that the rules of chess or any other game are 'mere convention'?" Grammar is certainly not merely the convention of a game in this sense. What distinguishes language from a game in this sense is its application to reality.[30]

Later in the lectures he asks:

> Is grammar arbitrary? Yes, in the sense just mentioned, that it cannot be justified. But it is not arbitrary in so far as it is not arbitrary what rules of grammar I can make use of. Grammar described by itself is arbitrary; what makes it not arbitrary is its use.[31]

This reason for denying the arbitrariness of grammar remained a constant feature of his philosophy. Here is a later appeal to it, made in *Philosophical Investigations*:

> "... So does it depend wholly on our grammar what will be called (logically) possible and what not, – i.e. what that grammar permits?" – But surely that is arbitrary! – Is it arbitrary? – It is not every sentence-like formation that we know how to do something with, not every technique has an application in our life; and when we are tempted in philosophy to count some quite useless things as a proposition, that is often because we have not considered its application sufficiently.[32]

If this is how grammar avoids arbitrariness, it is easy to see why people often fail to appreciate it and look to projective metaphysics to provide an alternative support for their language. The support described by Wittgenstein is diffuse and inconspicuous, and it is more congenial to believe that things are not really like that and that there is really another system of support, concentrated and clear, like the support that things get within language (and the world). That is why they are always looking for some way of breaking out

29. PI I, § 372.
30. *Wittgenstein's Lectures, Cambridge, 1930-1932*, p. 12.
31. Ibid., p. 49.
32. PI I, § 520.

of the ring of language and finding some link between grammar and reality which could be described in appropriate factual sentences instead of being shown by pervasive features of language. But there is no such link, and the very most that they can achieve is a change of grammar:

> "What would happen if we didn't follow grammar, or if our grammar was not what it is?" The whole point is that, if we did not have our grammar, we should have to pass to another grammar.[33]

The reason why they cannot achieve anything more is explained very clearly in a passage in *Philosophical Grammar*:

> The thing that's so difficult to understand can be expressed like this. As long as we remain in the province of the true-false games, a change in the grammar can only lead us from one such game to another, and never from something true to something false. On the other hand, if we go outside the province of these games, we don't any longer call it 'language' and 'grammar', and once again we don't come into contradiction with reality.[34]

The structure of the predicament of the projective metaphysician, which prevents him from saying what he wants to say, is so clear that Wittgenstein's diagnosis may appear contemptuous. But that is not the case. In particular examples the structure is not easy to discern, especially when the motivation of the projection is strong. So when he treats a particular case of this type of metaphysics, like the Platonic account of following a linguistic rule[35], he proceeds with great care and sympathy, unravelling complicated confusions and always trying to discover exactly how the impossible escape from grammar came to seem possible.

Finally, more needs to be said about the positive content of Wittgenstein's later doctrine of showing. For the sketchiness and elusiveness of his own view of what makes grammar non-arbitrary has certainly caused misgivings about his rejection of the alternative view. There is a bold statement of his view in *Philosophical Remarks*:

33. *Wittgenstein's Lectures, Cambridge, 1930-1932*, p. 87.

34. *Philosophical Grammar*, p. 111.

35. See PI I, §§ 191-202 and Wittgenstein: *Lectures on the Foundations of Mathematics*, ed. C. Diamond, Harvester Press, 1976, pp. 194-199.

> ... for what belongs to the essence of the world simply *cannot* be said. And philosophy, if it were to say anything, would have to describe the essence of the world.
>
> But this 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 rules for this language which exclude nonsensical combinations of signs.[36]

The point has already been made that after the abandonment of logical atomism the 'essence of the world' is no longer being taken as a single uniform essence. So it looks as if the only ontological claim that he would now be prepared to make was the weak one: "There are things of the various words on which our different language-games are based." However, the passing of logical atomism produced another important effort at this point: there was no longer any reason to put such existential statements among the things that could only be shown.[37] Consequently, his interest in ontology did not follow the path taken by Russell and, later, by Quine. His concern shifted from the existential statements themselves to the structures of the classes which were said to exist. What determines the structure of the class of things to which a descriptive word applies, or the logical relation between two such classes? It is here, if anywhere, that there remain things which can only be shown.

The structure of any descriptively specified class is a convincing candidate for inclusion in this category. For, as we have seen, Wittgenstein's new idea about rule-following was that precept and example can never completely determine the next application of a descriptive word, and something is always left to human nature, reinforced by training and by the subsequent constraints of communication, but always reaching beyond any past experience. What a speaker needs is a grasp of the structure of the class which goes further than anything that can be put into words. This structure, therefore, may be plausibly said to be shown.[38]

36. *Philosophical Remarks*, p. 85.

37. See PI I, §§ 39-60.

38. It is interesting to observe that right at the beginning of the second period of Wittgenstein's philosophy, this point is associated with his discussion of the unjustifiability of grammar. See *Wittgenstein's Lectures, Cambridge, 1930-1932*, passim.

There is also something else in this area which is both a priori and picked up without explicit instruction, and so which can plausibly be said to be shown. After learning to apply the words "red" and "green", we may immediately accept the statement that it is not possible that there should be such a colour as reddish-green. Wittgenstein makes this point in two texts already quoted.[39] The example is banal, but the principle that it illustrates is important: human nature can not only construct a road but also posit a *no thoroughfare* without the corroboration of proof.

The next step in defence of the thesis, that much of the early doctrine of showing survives in Wittgenstein's later philosophy, is beyond the scope of this paper. It would be a move into his phenomenology of meaning and his treatment of semantic aspects and 'meaning blindness', and it would inevitably raise the question, whether he was right in thinking that philosophy must follow this path and ignore the pressure of external constraints, identified scientifically rather than metaphysically, on our language and thought.

39. *Zettel*, §§ 354-365 and *Remarks on the Philosophy of Psychology*, II, §§ 422-434. See above.

SOME REMARKS ON 'LANGUAGE' AND 'GRAMMAR'*

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My original intention was to present a systematic, if schematic, account of Wittgenstein's employment of the words 'Sprache' and 'Grammatik'. The ultimate aim was to effect a kind of genre-identification, to make some tentative steps towards clarifying his conception of language and grammar in order to locate his work on the map of modern philosophy. By making use of unsuitable landmarks, there is an acute risk of misconceiving the whole spirit of his philosophical investigations and consequently of misunderstanding many individual remarks.[1]

To what extent is it illuminating to label him an 'analytic philosopher' or a 'philosopher of language'? What are the resemblances and differences between his 'descriptions of the grammar of our language' and Ryle's mapping of the 'logical geography of ordinary language'? How do his investigations compare with Austin's fine-grained examination of English idiom or with Strawson's account of the most general features of our conceptual scheme? How does his conception of meaning as use relate to truth-conditional semantics à la Carnap or Davidson, to Dummett's 'anti-realism', to Chomsky's transformational generative grammar, to theories of speech acts and illocutionary force, etc.? Or we might raise the yet more radical question whether it even makes sense to locate Witt-

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1. In respect of his philosophy of mathematics, I have tried to demonstrate that the widespread practice of labelling his thinking 'conventionalism' does not square with his overall intentions and distorts understanding of many of his best-known remarks (e.g. 'Arithmetical equations are rules of grammar' and 'The sense of a mathematical proposition is given by its proof'). Cf. Part II of my book *Wittgenstein, Frege and the Vienna Circle* (Blackwell, Oxford and New York, 1988).

genstein's thinking within the logical space generated by these fixed points within analytic philosophy.

Any detailed treatment of these questions was clearly beyond the scope of a single paper of manageable proportions, but I found the same to be true even of the more modest synopsis that I had first envisaged. The data are extraordinarily complicated and wide-spread, while unpacking the subtleties of individual remarks often requires extensive argument and textual comparisons. The attempt to produce an übersichtliche Darstellung of this material risks degenerating into a series of controversial but unsupported dogmas, and that eliminates the possibility of achieving anything very important in this way.

The heir of the original paper is an unsystematic description of a few aspects of Wittgenstein's use of the terms 'Sprache' and 'Grammatik', particularly in the phrases 'die Sprache', 'unsere Sprache', 'die Grammatik', and 'unsere Grammatik'. Since my aim is principally to raise questions rather than to answer them, I shall make no pretence at giving a complete or exhaustive treatment of these expressions in his writings. Moreover, I shall restrict attention to his speech-patterns (his idiom, his jargon, etc.), leaving out of account such vexed question as whether he himself did not misuse or stretch the term 'Grammatik' (e.g. in his characterizing the arithmetical equation '2 + 3 = 5' and an ostensive definition of 'red' as 'substitution-rules for symbols' or 'rules of grammar'). My modest hope is that some careful scrutiny of some of his own carefully formulated remarks may encourage others to further investigations which might throw some light on a wide range of issues which seem to be imperfectly understood and inappropriately debated.

I. *'Die Sprache': the craving for generality*

There is a tendency among translators to treat 'die Sprache' and 'die Grammatik' as abstract mass-nouns, parallel to 'der Gedanke', 'das Denken', or 'die Wirklichkeit'; and there is a corresponding tendency among commentators to take remarks incorporating these phrases as generalizations (e.g. about natural languages or about

any conceivable sign-system, whether actual or invented). In many cases this pattern of interpretation clearly distorts what Wittgenstein intended us to understand by particular remarks.

One instance is the remark: 'Es ist das Natürlichste ... wenn wir die Muster zu den Werkzeugen der Sprache rechnen.' (PI § 16). This is regularly paraphrased as a generalization about the samples used in ostensive definitions of words in any language whatever; moreover, it is often cited to support ascribing to Wittgenstein the (dogmatic) thesis that such samples *are* part of language (often reinforced by the citation of PI § 50). In fact, this remark has as its subject-matter the colour samples shown by A to B in the language-game of PI § 8, and it suggests that they *can be regarded as* instruments of this language.[2] The fact that these samples are imagined to have an institutionalized use may be important or even essential to making sense of this way of seeing them, and hence absence of any such role for many of the samples used for explaining colour-words in natural languages would block any generalization of this remark even over all colour-samples[3], let alone over all samples whatever.

Another clear instance is the remark: 'Wenn wir sagen: "jedes Wort der Sprache bezeichnet etwas" so ist damit vorerst *gar* nichts gesagt' (PI § 13). In the authorized version this is translated: 'When we say: "Every word in language signifies something" we have so far said *nothing whatever*'. This suggests, and is usually taken to be, a general thesis about the vacuity of the principal component of Augustine's picture of the essence of human language, viz. 'Die

2. Compare this remark: 'It is *natural for us to call* gestures, as those employed in 4), or pictures as in 7), elements or instruments of language.' (*The Brown Book*, p. 84: italics added). Ironically, the neglect of such qualifications, and even of modal auxiliaries such as 'need not', 'may', etc., is a conspicuous aspect of many expositions and analyses of Wittgenstein's ideas, as if these niceties were not worthy of attention among philosophers.

3. If Wittgenstein meant to employ the samples used in language-game (8) merely as objects of comparison (rather than as prototypes intended to support some generalization), then the project of classifying samples into species, in particular of distinguishing 'optional samples' from 'canonical samples', might be held to be irrelevant to clarifying PI §§ 16 and 51. (Cf. G.P. Baker and P.M.S. Hacker, *Wittgenstein: Understanding and Meaning* (Blackwell, Oxford, 1980), pp. 196-201.)

Wörter der Sprache benennen Gegenstände' (PI § 1). But the subsequent parenthesis (in PI § 13) makes it clear that the remark is intended to be one about 'die Sprache (§ 8)', i.e. the language-game of 2 extended by adding numerals, colour samples, and demonstratives used in connection with a gesture of pointing. This remark is no more a generalization about all sign-systems than the question raised in PI § 10 ('Was *bezeichnen* nun die Wörter dieser Sprache?') is a general question about languages. The quoted sentence from § 13 should be translated "Every word in *the* language signifies something", where the definite article has the role of a quasi-demonstrative as in 'There is some wine in the cellar'; indeed, to avoid misunderstanding, it might even be translated as "Every word in *this* language signifies something".

The tendency to exaggerate the scope of strictly limited generalizations and the inclination to mistake remarks about particular sign-systems for generalizations about all possible languages arise in part from a feature of German grammar, namely the demand for the definite article with abstract nouns. This frequently introduces the possibility of an ambiguity for which there is often no exact counterpart in English. When Wittgenstein made use of the phrase 'die Sprache', we must *always* ask ourselves whether or not it makes sense to ask '*Welche* Sprache?' ('*Which* language?'). In some cases this question seems absurd (e.g. in Augustine's delineating 'ein bestimmtes Bild von dem Wesen der menschlichen Sprache' (PI § 1) or in our investigating 'die Erscheinungen der Sprache' in primitive forms of communication (PI § 5)). In others we might well doubt whether this question is appropriate or not (e.g. in the remark that Augustine's picture of language surrounds 'das Funktionieren der Sprache' with a fog (PI § 5) or in the question how one can even want 'mit der Sprache noch zwischen die Schmerzäusserung und den Schmerz treten' (PI § 245)). But in some cases the question 'Which language?' seems to be appropriate and to demand an answer (e.g. in the remark that we might say that "a", "b", etc. in the language-game (8) signify numbers to remove the mistaken idea that these signs play the part actually played 'in der Sprache', i.e. in this particular language, by the signs "block", "slab", etc. (PI § 10)).

Much hangs on how to sort out the cases which fall between the two clear extremes. For example, is the often-quoted remark 'Was

es, scheinbar, geben *muß*, gehört zur Sprache. Es ist in unserem Spiel ein Paradigma ...' (PI § 50) a generalization which is meant to encompass the 'simples' ('objects') of the *Tractatus*, or is it comment specifically about the elements (the coloured squares) in the language-game of PI § 48? (We might well say that our noting that this remark contains an ambiguity is an important observation about our method of representation of Wittgenstein's philosophy!) Persistent neglect of this particular ambiguity in the phrase 'die Sprache' has arguably distorted much discussion of Wittgenstein's ideas[4], and it has generated some clearly mistaken (and many disputable) translations into English. There is a constant danger of endowing quite specific comments with a spurious appearance of generality. Perhaps we could learn to take at its face-value his claim to have said *nothing* about the essence of language throughout his critical discussion of Augustine's picture of language (PI § 65).

II. *'Die Grammatik'*

There are many close parallels in the patterns of use of the expressions 'language' and 'grammar' ('die Sprache' and 'die Grammatik'). Though they are far from interchangeable, either in

4. This point is as true of the *Tractatus* as of the *Investigations*. In the former, logical syntax is misrepresented as a kind of abstraction from the syntactic categories of natural languages, whereas it is meant to lay down *a priori* the essential structure of any possible language; the thesis that every proposition must be complex is treated as a potentially falsifiable generalization about English, German, Latin, etc., whereas it is meant to indicate part of the essence of a propositional-sign; etc. In the latter, remarks (53ff.) about the particular language-game (48) are generally treated as generalizations about samples, names, rules of language-games, etc. and taken to be explicit criticisms of the doctrine of unanalyzable names and simple objects in the *Tractatus*; the suggestion of a possiblity for connecting the word 'pain' with primitive expressions of pain (§ 244) is taken to state how sensation-words in English are in fact connected with sensations or even to formulate how any sensation-word in any possible language must be taught and learned; etc. Commentators on Wittgenstein seem to be pulled by powerful gravitational forces towards assimilating all of his remarks to factual observations about the logical geography of natural languages.

Wittgenstein's writings or in general, they occur in phrases with the same structures, and they display parallel ambiguities. In particular both can be used either as abstract mass-nouns or as count-nouns. As abstract nouns, both require the use of the definite article in German. And both can be used with the applicative 'unsere' ('our').

In translating and interpreting Wittgenstein's work, philosophers show a penchant for taking 'grammar' as a mass-noun, and correspondingly they treat 'our grammar' ('unsere Grammatik') as equivalent to 'the grammar of our language'. The question '*Which* grammar?' seems to be rejected without serious consideration as being logically inappropriate, at least in any context in which we cannot raise the question 'Which language?'. We seem prepared to distinguish 'the grammar of English' from 'the grammar of German', or 'the grammar of sensation-words' from 'the grammar of number-words', but it seldom occurs to anybody to canvas the possibility that there might be radically different grammars of our language (e.g. of English or of sensation-words) or that 'pictures absorbed into the forms of our language' might sometimes refer to different ways of describing the use of our words. Wittgenstein's enterprise is usually taken to be presenting *the* grammar of our language, as if any deviation from his descriptions of how we speak would amount to a *mis*description of our language (except in so far as it were either more or less detailed than his own).

This understanding of the term 'grammar' seems conspicuous in glossing Wittgenstein's remarks on the importance of surveyability (Übersichtlichkeit). He diagnosed one main source of our failing to understand the use of our words as our inability to command a clear view of [übersehen] the use of our words; 'Our grammar is lacking in this kind of perspicuity' ['Unserer Grammatik fehlt es an Übersichtlichkeit']. He sought perspicuous representations [übersichtliche Darstellungen] in order to remedy this defect and to produce a kind of understanding which consists in 'seeing connections' (PI § 122). Our understanding of his programme is no more secure than our understanding of the problem which he addressed.[5] This in turn

5. For a detailed interpretation of this passage, see my paper '*Philosophical Investigations* section 122: Neglected Aspects' in Arrington and Glock (edd.), *Wittgenstein's Philosophical Investigations: Text and Context* (Routledge, London, 1991), pp. 35-68.

depends on grasping exactly what he meant here in speaking of 'our grammar'.[6]

One possibility (the only one usually considered) is that 'our grammar' here refers to what he had just called 'the use of our words'. To say that our grammar lacks perspicuity is simply to *repeat* that we do not command a clear view of the use of our words. The criterion for this failure is presumably that we do not know our way about in our own language[7] (PI § 123), that we get entangled in our own rules (PI § 125) and sustain intellectual bruises from running up against the limits of language (PI § 119)[8], and that we fall into antinomies, saying 'This isn't how it is, yet this is how it has to be!' (PI § 112). Lack of this special kind of understanding is manifested in certain very specific inabilities.

It might seem paradoxical, however, to summarize what seems a contingent and variable feature of certain persons' degree of understanding of the use of their own words in the comment that our *grammar* (the use of our words) is lacking in the property of perspicuity (as it were globally and absolutely). Does it make sense to find fault with a natural language (English, German, etc.) on the grounds that we sometimes fall into conceptual confusions by blindly following the lead of 'surface grammar'? Would this not be comparable to claiming that gravity is blameworthy on the grounds that some people sometimes fall and injure themselves? Equally, it might seem odd for Wittgenstein, who professed to leave everything as it is (PI § 124), to avow the intention to bestow on our grammar a property which it now lacks by constructing perspicuous representations which will henceforth make the use of our words perspicuous. In discussing proofs in mathematics, did he not make the antithetical point that symbolic abbreviations do not leave everything as it is precisely because they may make a complex array of symbols surveyable for the first time and hence transform something that was not previously a proof into something that is one? Indeed,

6. There is a related problem of whether the first-person plural is to be interpreted uniformly throughout this remark.

7. Namely English, German, French, etc.

8. Presumably a matter of making nonsensical assertions and framing unintelligible questions, e.g. because we commit 'category-mistakes'.

did he not constantly oppose the common dismissive strategy of labelling certain transformations as '*mere* changes of notations'[9] or '*mere* alterations in our form of representation'?[10]

Of course, neither of these objections to the prevailing interpretation is insurmountable. Both can be removed by treating perspicuity as a property of the use of our words (our grammar) which admits of degrees and is relative to a point of view. Our grammar might be declared to lack surveyability because there is a high probability that we will get lost in trying to give descriptions of the use of our words. Moreover, this tendency to error seems to depend on our point of view: though we may not command a clear view of something complicated, merely altering the angle or distance from which we view it (as in looking down on a maze from on high) may make everything easy to grasp without altering anything in what we are looking at. This interpretation not only exploits the metaphor of a bird's-eye view (one sense of 'Übersicht'), but also has the merit of showing that it *must* be possible to achieve Wittgenstein's avowed goal since speaking a language is a normative practice of which any speaker must in principle be able to attain mastery (cf. PI § 199: 'To

9. Contrast the standard conception of formal definitions among logicians: 'a definition is, strictly speaking, no part of the subject in which it occurs. ... Theoretically, it is unnecessary ever to give a definition: we might always use the *definiens* instead, and thus wholly dispense with the *definiendum*. ... theoretically, all definitions are superfluous.' (B. Russell and A.N. Whitehead, *Principia Mathematica*, Vol. I, p. 10)

10. Wittgenstein had a very rich conception of what he called 'a form of representation'. Under this heading, he included not only the propositions of arithmetic and geometry, but also such metaphysical propositions as 'Every event must have a cause', 'Every mental state must correspond to a state of the brain', or 'Every disposition must be realized in a structure'. Following up this line of thought, he considered the claim that the difference in the development of a poppy and a rose *must* originate from a difference in the microscopic structures of their seeds; he suggested that this amounts to adopting a form of representation. But he emphatically denied that this way of seeing the claim makes it trivial: on the contrary, to abandon this dogma would be 'a tremendous thing to do – as great as recognizing indeterminacy' (UW 434). We risk misunderstanding the dimension of depth in our conventions if we describe this as a *mere* change in our form of representation. (The deep aspect of *this* matter easily eludes us!)

understand a language means to be master of a technique.').[11] Though we may well not succeed at the first attempt, we *must* in principle be able to construct a description of the use of our words which embodies our own practical ability to speak a language, just as it must be possible to produce a map which would encapsulate our ability to find our way about in the streets of a city; success may be difficult to achieve, but it demands no more than the right choice of landmarks and the selection of a suitable scale (or degree of detail).[12]

This first (and now standard) interpretation fails even to consider the possibility of an ambiguity in the phrase 'our grammar'. Rather than the use of our words, could Wittgenstein not have meant by it our *descriptions* of word-use, perhaps (more narrowly[13]) our sched-

11. Compare: 'It is not a *contingent* feature of language that its grammar is surveyable.' (Baker and Hacker, *op.cit.*, p. 544).

12. This interpretation has an affinity with Dummett's idea that a philosophical theory of meaning for a natural language is 'the theoretical representation of a practical ability'. He too thinks that it must be possible in principle to construct a 'systematic theory of meaning'. Though he thinks that he detects in Wittgenstein's work an antipathy to this claim, he argues that this cannot have any cogent support. Not only would it be an unwarrantedly 'defeatist' doctrine, but also it would run counter to the obvious fact that anybody who has a mastery of a language has a capacity to understand an infinity of sentences on the basis of 'an implicit grasp of a number of general principles governing the use in sentences of the words of the language'. (M. Dummett, *Truth and other Enigmas* (Duckworth, London, 1978), p. 451.) In addition, Wittgenstein did himself give 'a complete systematic account of the functioning of a miniature language' in describing each of his illustrative language-games, and this makes it difficult to see any conclusive reason for denying the possibility of giving similar accounts of an entire natural language. Indeed, it seems that we could 'command a clear view of the working of our language' only by attaining to 'a systematic description' of the use of our words. (M. Dummett, *The Logical Basis of Metaphysics* (Duckworth, London, 1991), pp. 13 and 163).

13. He sometimes used 'descriptions' and 'rules' as alternatives when combined with the adjective 'grammatical' or the phrase 'of grammar'. On the other hand, many of his remarks about the use of our words, though presumably part of his project of describing grammar, are not even plausible candidates for ordinary explanations of word-meaning (or rules for the use of words whose grammar is described).

ule of *rules* for the use of words whose meaning we are attempting to clarify? On this view, the statement 'Our grammar is lacking in perspicuity' is not simply a reformulation of the preceding statement 'A main source of our failure to understand is that we do not *command a clear view of* the use of our words'. Instead it traces back our failure to command a clear view of our own word-use to a general defect in our descriptions of what we say or in our compendia of rules by which we attempt to delineate the use of certain ones of our words. For example, when we try to describe what we say, we might make use of forms of description which are inappropriate for our purposes or liable to produce or exacerbate misunderstandings in a particular context; e.g. instead of describing various uses of the word 'time' (or of 'language'), we may try to frame a definitive once-for-all answer to the question 'What is time?' (or 'What is language?'), or instead of describing how to use the connective 'if', we may try to fill out the schema '"if" signifies ...' (cf. BB 26-7; PI §§ 16, 89, 92, 293). Because we are prone to over-hasty generalization (BB 7) and also inclined to be dissatisfied with careful enumeration of cases or detailed attention to the vagaries of word-usage (BB 20), when we describe the use of our words, we may lay out rules in which we then become entangled (PI § 125). We find ourselves making assertions which would ordinarily strike us as absurd, e.g. that we cannot measure time (BB 26), that 'this' and 'that' are the only genuine proper names (PI § 38), that I can never know whether another person is in pain (PI § 245), or that 'I am annoyed by your repeated thoughtlessness' is a description of the speaker's behaviour, actual or potential (cf. PI § 244). In all these cases the fault lies in the very forms of statement which we employ in attempting to describe what we say (how we use our words).

If Wittgenstein meant to give the second diagnosis of the origins of (some) philosophical problems, then the remedy which he envisaged must obviously be our modifying our previous descriptions of the use of our words in particular circumstances and for particular purposes, i.e. our producing a different grammar or even new forms of grammatical descriptions. This seems to be exactly what he did have in mind when he first introduced the notion of a perspicuous representation (PR 52). The colour-octahedron is described as a

perspicuous representation *of the grammatical rules*, viz. the rules which describe the possibilities for significant combinations of colour-words (cf. PR 273-80). This diagram is evidently used to remedy in the particular case of colour-words what is the chief trouble with our grammar, i.e. with *our* (current) presentation of the rules for the use of our words; though each rule is clear enough on its own (e.g. that we can speak of 'yellowish red', but not of 'greenish red'), the totality of the rules seems disorderly, a motley or hotch-potch which displays no overall pattern. Wittgenstein's earliest search for a perspicuous representation was addressed to this problem: he sought to display an order within a particular set of grammatical rules (our own particular descriptions or register of rules setting out how we speak about colours). Might the later version of the same remark ('Our grammar is lacking in perspicuity' (PI § 122)) not express the very same complaint?

In so far as the *Philosophical Investigations* is a search for perspicuous representations, the question to be answered is *what* it is that any of Wittgenstein's perspicuous representations represents. Or perhaps the question should be whether this question even makes sense. Is the answer not *tautologically* 'our grammar'? Our way of regarding the question would be transformed, however, if we acknowledged that the phrase 'our grammar' is itself ambiguous and hence that the question had at least two different answers. 'Our grammar' here might mean either 'the use of our words' (what we describe in various ways) or 'our descriptions of word-use' (especially, but not exclusively, our compilations of what we call 'explanations of what our words mean'). If the answer construed 'our grammar' in the first sense, then what is represented in a perspicuous representation would be something relatively fixed and stable, something which could (save for alterations in how we speak) be described once for all independent of all future experience (cf. PI § 92). On the other hand, if the answer construed 'our grammar' in the second sense, then these implications would not hold; indeed, there might be good reasons to replace one form of description of the use of our words with another (e.g. to drop the uniform application of the schema '... signifies ...') even though what is described has undergone no change at all. We might come to see that this form of description of how we use our words is what surrounds the workings

of our language with a fog (PI § 5). Correlatively, we might have to reexamine the question whether the demand for Übersichtlichkeit is unequivocally well-founded or healthy, whether the possibility of mastering the practice of speaking a language guarantees that it can be met, and whether the possibility of meeting the demand in some cases might not call for creativity in the form of novel 'descriptions of the use of our words' or even new forms of 'grammatical descriptions' (e.g. the truth-table notation of the *Tractatus*). We might consider recasting some of Wittgenstein's best known dicta in the role of presenting different ways of seeing the use of our words, i.e. different forms of representation of the *grammar* of our language. This would require a different attitude towards assessing the merits and demerits of his calling arithmetical equations 'rules of grammar (or syntax)' (PR 130, 143; PG 347), of his viewing ostensive definition as substitution-rules for symbols which remain within language rather than connecting words with the world (cf. BB 109), of his criticizing the application of the model of 'object and designation' to describing the use of 'pain' (PI § 293), etc. Perhaps his principal goal was not to establish any facts of grammar, but rather to reveal or bring to the attention of *willing* readers neglected aspects or unnoticed patterns in what we say.

III. *What we say: language and speech*

Contemporary philosophers are concerned to make various distinctions. They commonly differentiate between type-sentences and token-sentences, between the sentence uttered by a speaker and the statement which is made by the speaker's utterance, between a form of words and the uses to which it can be put in different circumstances, or between what a sentence means and what a speaker means by uttering it. These distinctions are often thought to be subtle and easily overlooked, but also to be of fundamental importance (e.g. in developing a sound philosophy of logic). All of these distinctions can be presented as ambiguities in the phrases 'what is said' or 'to say the same thing', and many of them can be marshalled under the two general headings of 'language' and 'speech' (or among linguists under the headings 'langue' and 'parole' or 'semantics' and 'pragmatics').

Anybody properly trained in these matters will wish to apply these established distinctions to Wittgenstein's thinking about symbols, calculi, language-games, etc. In translating or expounding his ideas we will be faced by the question what concept or set of concepts he expressed by each of his various uses of the phrases 'die Sprache' (and 'unsere Sprache'). Sometimes he seems clearly to have meant 'language', while at others it seems to be 'speech' (or even 'speaking' or 'speaking a language'). Of course, this problem would not be so very urgent were philosophers not inclined to attach such great importance to subtle differences between the various senses of 'what is said'. But in view of the entrenched propensity to think that all these differences are BIG differences and to try to institutionalize them in semi-technical usage of 'language', 'speech', 'sentence', 'statement', 'proposition', 'Gedanke', etc., the exact understanding of each occurrence of 'die Sprache' comes to have a decisive importance for the overall interpretation of Wittgenstein's philosophical investigations. I will examine two celebrated remarks whose content might be transformed were we to associate the phrase 'die Sprache' with what philosophers now call 'speech' rather than what they call 'language'. (The authorized translations invite English-speaking philosophers to neglect alternative interpretations of these remarks. The more neutral, though less literal, translation of 'die Sprache' as 'what is said' or 'what we say' might have the merit of encouraging further thought about what Wittgenstein may have meant.)

1) In various contexts he tackled the 'prejudice' of limiting 'die Sprache' to the words and sentences which speakers utter. For example, it is this preconception which fosters the idea that there are many things which are 'indescribable' and which we 'cannot put into words' (e.g. the aroma of coffee or the sound of a clarinet (PI §§ 610, 78)). He suggested trying to look at things differently: we can consider gestures (e.g. pointing at something), miming an action (e.g. wiping sweat from one's brow), drawings (e.g. geometrical diagrams accompanying a Euclidean proof), or samples (e.g. the colour-samples in language-game (8)) as instruments or parts of 'die Sprache' (PI §§ 16, 50), or as something belonging to the means of representation rather than what is represented (PI § 50)).

What should we make of this proposal? One response might be

that Wittgenstein has here misused or abused the term 'language'. Dictionaries, phrase books, and grammars exhaust the description of what is called 'the English language' (and the description of an imaginary language, e.g. the language-game of § 8 or § 48, would differ solely in being less complicated). These descriptions of a language do not include gestures, actions, drawings, samples, etc. Indeed, it seems odd to reckon most of these concrete symbols among the elements of English: some of them have no institutionalized status among English-speakers (e.g. the particular red wooden brick which I employed yesterday as a sample in teaching one of my children the word 'red'), and others are not language-specific since they have a use among speakers of many different languages (e.g. the gesture of pointing or a geometrical diagram). In addition it seems inconceivable that we *could* incorporate gestures, actions, samples, etc. in what we call 'a dictionary', i.e. within the covers of a book. A critic might well turn Wittgenstein's own strategy against him, urging that the expressions 'language', 'parts of language', 'instruments of the language', etc., should be brought back to their everyday uses! Even if he did not fall into literal nonsense by affirming that colour-samples *are* parts of language, how can it be any more useful to regard samples *as if* they were parts of language than it would be to look at numbers as if they were perceptible objects? Did he not simply abuse the term 'language' without producing any good reasons for extending the boundaries of what we commonly conceive of as language?

These obvious objections could be short-circuited if we replaced the term 'language' with the phrase 'what we say'. There seems no doubt that what someone says may be altered by his pointing to one object rather than another, by his producing one geometrical diagram rather than another, or by his indicating one sample rather than another. If we were to reckon among the 'parts of what we say' on a particular occasion anything which makes a difference to what is said (especially to a report of what is said in indirect speech), then we should in many cases include such items in this class. A witness in a trial would, e.g., have misrepresented what I said if he reported my utterance 'You are lying' as a statement about somebody who was not present when I spoke or if he reported it as a statement about X when I pointed to Y when I said 'you'. It seems that Frege

followed this line of reasoning in allocating to the *sense* of a token-reflexive utterance all indications of time, place, speaker, audience, etc.[14]; such things must generally be known in these cases in order to understand what has been said or to decide whether a report in indirect speech of what has been said is correct.

From this relatively uncontentious starting-point, we might make some cautious steps towards treating 'parts of what we say' as 'parts of our language' in a limited range of cases. First, if we were to compare the effect of substituting one gesture for another, one sample for another, etc., with the effect of replacing one word by another, then we might also view gestures, diagrams, etc. as symbols. On the same grounds, we might also consider the mouth that says 'I have toothache' as part of the *symbol* (cf. Vol. XVI, 230), the mechanical model of the ether which accompanies an exposition of the theory of electricity as part of the *symbolism* of the theory (BB 6) or the time and place of the utterance as parts of the *expression* of the thought.[15]

Of course, we might baulk at some or all of these suggestions, perhaps on the ground that symbols must be things the production of which is wholly within our control, whereas samples give hostages to fortune, and I cannot choose the mouth with which I say 'I have toothache' (BB 68; NPE 311). On the other hand, we might take a further step in the same direction: if certain gestures, actions, samples, etc. had sufficiently established, regular and institutionalized roles among English-speakers, we might see merit in comparing them with the words of the language. For a limited class of gestures, stylized actions, canonical samples, etc., we might even appropriate the label 'instruments of the language', or we might regard them as the elements of a symbol-system (perhaps a 'gesture-language') into which we can translate some elements of our word-language. With some caution and at a respectful distance we might follow Wittgenstein in allocating some samples, diagrams, gestures, etc. to language at least for some purposes of clarifying what we say. (This piecemeal approach might highlight some of the many unnoticed

14. G. Frege. 'Thoughts' in *Collected Papers on Mathematics, Logic and Philosophy*, p. 358.

15. *Ibid.*, p. 358.

subtleties of his remarks.)[16]

2) He framed various remarks of the form exemplified in the dictum 'It is in language that an expectation and its fulfilment make contact' (PI § 445; cf.PR 65-9). Variants are the remarks 'If you see the expression of the expectation, you see what is expected' (PG 132), 'Expecting that p will be the case must be the same as expecting that this expectation will be fulfilled' (PR 65), 'The answer to the question "What is the carrying out of the command p?" is a *grammatical transformation* of the command p and nothing more' (PLP 119; cf. PR 65-6; PI § 458) and 'The proposition "p" determines that p must be the case in order to make it true; and that means: (the proposition p) = (the proposition that the fact that p makes true)' (PG 161). Wittgenstein's position might be encapsulated in the slogan: 'Like everything metaphysical the harmony between thought and reality is to be found in the grammar of the language' (PG 162).

These remarks are sometimes regarded as holding the key to the dissolution of the 'problem of the intentionality of mental states or acts': the possibility of having the thought that Paris lies to the south of London presupposes command of some means of giving expression to this thought, and hence the thought can be seen to make reference to a spatial relation between two cities in virtue of the power of words (e.g. 'Paris' and 'London') to refer to things in the world. On this view, Wittgenstein turned on its head the familiar idea that it is the mind (especially mental acts of meaning and understanding) which gives life (i.e. sense or significance) to sounds and ink-marks (cf. BB 4). His claim seems to be that the concepts of thinking, meaning something by a word, understanding, etc. all presuppose independent concepts of signs, symbols, language, etc.: the mind is, as it were, a second-order capacity to acquire mastery

16. For example, important differences in the role of particular samples in particular language-games (e.g. the coloured bricks shown to a child and a paint manufacturer's colour-chart, or an ordinary metre-stick and the standard metre in Sèvres used to define the unit of metric linear measurement) might be brought out by contrasting samples which belong to grammar with those which are merely instruments of the language and with those which are merely parts of what we say.

of a system of symbols[17] whose meanings are to be explained in terms of their use (cf. PI § 43; BB 4-6).

Whether this pattern of reasoning has any claim to being called Wittgenstein's solution to the 'problem of the intentionality of the mental' depends in large measure on how exactly the phrase 'in der Sprache' is to be understood. What could he have meant by remarking that an expectation and its fulfilment make contact 'in der Sprache'? The most immediate suggestion might be that the *expression* of an expectation and the *description* of the event which counts as its fulfilment must be identical or at least substantially the same. This would indeed be a form of 'contact in *language*', a case of forms of expression running together for a distance on parallel tracks (cf. PI p. 192). This idea, however, encounters a host of problems. What is to be counted as 'the expression of an expectation'? There seem to be at least three different kinds of expressions whose relations to the description of the fulfilment need to be clarified; viz. 'The gun will go off', 'I expect the gun to go off' or 'I expect that the gun will go off', and 'He expected that the gun would go off'. Which of these expressions was the focus of Wittgenstein's attention? Does the distinction between expression (Äußerung) and description (Beschreibung) matter here? Or the distinction between describing my present mental state (PR 68) and predicting something? With respect to matching the description of the event which fulfils the expectation, each form of the expression of an expectation raises its own peculiar problems, e.g. about variation in the moods and tenses of verbs, systematic differences in pronouns and indexicals, and modifications of word-order; moreover, any claim that any of these expressions *must* exhibit parallel structures has the disquietingly dogmatic ring of an *a priori* limitation on the possible varieties of linguistic expression.[18] The requirements for 'contact' might be loosened by allowing for standard forms of grammatical

17. This phrase is taken from Anthony Kenny, *The Metaphysics of Mind* (Oxford University Press, Oxford, 1989), p. 20. The idea is developed by him as the central element of Wittgenstein's philosophy of mind.

18. This worry should perhaps be set aside. Compare: 'Could we imagine any language at all in which expecting p was described without using "p"? Isn't that *just as* impossible as a language in which ~p would be expressed without using "p"?' (PR 69).

transformations, e.g. producing sentence-questions out of declarative statements, paraphrasing statements in indirect speech, or transforming first-person statements into third-person ones. But even this form of 'contact' between expressions does not cater for many variations in mood or tense, etc., or for logical relations (e.g. the temporal generality of a rule and the temporal specificity of an act of compliance with it). Building all of the required complexity into a description of what counts as 'contact in language' might make Wittgenstein's remark lose much of its illuminating power.[19] It might even reduce its content to the claim that anybody who can be said to understand any one of the expressions of an expectation must be able to explain what would count as its fulfilment. This would be a grammatical remark about the phrase 'to understand an expression of an expectation', but precisely because it involves the (mental) concepts of understanding and knowing how to explain words, it would not seem to provide any proper basis for solving the 'mystery' of the 'intentionality of the mental'.

Many of these doubts and difficulties would be circumvented if we interpreted 'in der Sprache' in a less restrictive way. Perhaps Wittgenstein could be best understood as remarking that an expectation and its fulfilment make contact 'in what we say', perhaps with the intention of undermining our desire to persist in posing the question 'How does an event fulfil an expectation?'. The schema of 'making contact in what we say' is flexible enough to be filled out in many different ways in different cases. The case of expectation and its fulfilment may exemplify a particular pattern of identity in what is said, a pattern which is common to many other speech-acts and descriptions of mental states. E.g. if I predict at midnight that the clock will stop at noon, and if the clock does subsequently stop at noon, then what I predicted at midnight (viz. that the clock would stop at noon) is what I later do (or would) say actually happened at

19. It might be thought to trivialize the claim that the internal relations between the uses of sentences are to be explained by saying that 'assertion, question, supposition, command, etc. *make contact in language*' (Baker and Hacker, *op.cit.*, p. 131). It would certainly not meet the wide-spread desideratum of exhibiting some element (a 'neustic', 'proposition-radical', or 'descriptive content') which is common to sentences which differ in 'mood' or 'force'.

noon (viz. that the clock did stop at noon); recognizing the identity of what is said despite variations in the construction of the two indirect statements is part of the grammar of one use of the phrase 'what is said'.[20] Different forms of identity of what is said might be taken to inform the relation of wishing for something to happen and the occurrence which is its fulfilment and the (different) relation of wondering whether something is the case and finding out that it is the case.

In yet a different way, a standing order and particular acts of compliance with it might be said to make contact in 'what is said', and this might dissolve another perennial form of philosophical puzzlement.[21] We often say that part of what is said in issuing the general directive 'Wind the clock every Sunday morning' is that the child whose chore this is should wind the clock this morning if today is indeed Sunday; hence the general directive and the child's act of winding the clock today are connected by our saying that part of what the child has been told to do is to wind the clock this morning. (This account calls for no special explanation of the phrase 'part of what is said'; in particular, it does not make any demand that the general directive be regarded as a conjunction of orders specifying that the clock be wound on particular Sundays.) All of these suggestions about the variety of ways for things 'to make contact in what we say' are contributions to the grammar of *oratio obliqua* (indirect statements, indirect commands, etc.). We might also speak of these forms of 'making contact in what we say' as 'making contact in our language', provided that we saw that what is primarily at issue is the *forms* we actually use for describing what we *say* about things (cf. BB 23).

20. In some cases – but not in all – there is an even simpler grammatical relation, i.e. an exact identity of two indirect statements. E.g., we might say that it is part of the grammar of 'belief' that the belief *that the clock has stopped* is the belief which is made true by its being the case *that the clock has stopped.*

21. The 'problem of imperatival inference': viz. how is it possible for one *order* to follow from another *order* (given that logical consequence depends on the relation between the truth-conditions of the premises of an argument to the truth-conditions of the conclusion)? Cf. R.M. Hare, *The Language of Morals* (Clarendon Press, Oxford, 1952), cc. 2-3; A.J.P. Kenny, *Will, Freedom and Power* (Blackwell, Oxford, 1975), ch. V.

The most important point about interpreting the phrase 'in der Sprache' is to capture the spirit of Wittgenstein's remarks about expectation, thought, desire, intention, etc. He did not offer a novel set of solutions to 'the problem of intentionality'. In particular, he did not subscribe to the thesis that the concepts of words, signs, symbols, language, etc. are independent of and logically anterior to concepts of 'the mental' (expectation, thinking, etc.). On the contrary, he emphasized that the concept of a language is interwoven with the concepts of meaning and understanding, of communicating thoughts, of expressing emotions or sensations, etc. He also did not subscribe to the thesis that something must be added to ink-marks and sounds in order to make them into linguistic expressions capable of expressing ideas or of referring to things. On the contrary, characterizing something as a sign or symbol presupposes that it has a distinctive kind of use within a normative practice. In conformity with his usual procedure, he sought to *dissolve* the puzzles which make up 'the problem of intentionality'. The idea that it is mental acts (of meaning and understanding) which connect language and the world is not the wrong answer to an important philosophical question[22], but rather an answer to the wrong question (one which he thought that we can be brought to acknowledge is nonsensical). The antithetical idea that it is linguistic expressions which forge links between thought and reality (or which explain how mental states or acts can refer to things in the world) can equally be made to appear to be an answer to a nonsensical question. In this respect, 'It is in language that an expectation and its fulfilment make contact' is precisely comparable to the remark 'The equation "2 + 3 = 5" is a rule of grammar'. Both may give the appearance of being explanations of necessary truths in terms of linguistic conventions, but in reality both were intended to demolish the very framework in which the metaphysical harmonies between thought, language, and the world appear to be problematic. The two cases we have just examined of

22. In particular, it is not Wittgenstein's intention to answer the question 'What must be *added* to *mere* signs to give them life?' by citing 'use' or 'the practice or technique of speaking a language'. A sign is no more separable from its use than a lever is from its employment. (We might say that there is no such thing as a name which does not belong to a particular language-game (cf. PI § 49).)

Wittgenstein's use of the phrase 'die Sprache' exhibit very clearly the fact that the exact interpretation to be put on this phrase in any particular context may be of decisive importance for the interpretation of remarks which are pivotal for understanding his philosophical investigations. Like a railway wagon which must be placed exactly on the rails in order to move along a track, our expositions of many of his ideas will run on the rails of his thinking only if we arrive at an understanding of *precisely* what he meant by each employment of the phrase 'die Sprache'. This is an extremely subtle and delicate task of interpretation which needs to be carried out case by case, not something capable of being settled once-for-all in advance of considering the intricate details of his thinking.

IV. *Starting again from scratch*

What I have attempted here is to demonstrate by examples a method of reading Wittgenstein's texts and expounding his ideas. This demonstration can be broken off at any point, once its nature has been made clear. Piling up more examples would achieve little, since the method must be justified by its *works*, i.e. by its clarifying Wittgenstein's remarks from case to case. But a useful coda to this investigation might be an indication of some of the distinctive general features of this method (a parallel to his *description* of the methods of his own philosophical investigations in §§ 89-133).

First, I would advocate a strong principle of charity: we should proceed on the basis that the texts which Wittgenstein constructed himself consist of carefully thought out arrangements of remarks whose precise wording was of paramount importance. (Alas, this principle does not apply either to the texts compiled by editors in various more or less systematic ways from his manuscripts or to texts compiled from lecture notes taken down by others.) In these authoritative texts we have no right to assume that a remark which is repeated more or less *verbatim* has the same significance in its various occurrences, still less to presume that an earlier occurrence can be used to establish how it is to be understood in a later text; such evidence should be treated as presumptive and defeasible. Correspondingly we have no business arguing that a word or phrase

which recurs in various remarks *must* have the same significance in them all. This is certainly not true of many expressions which are crucial to the interpretation of Wittgenstein's thinking. It is demonstrable that such terms as 'Satz', 'Sprache', 'Objekt', 'Tätigkeit', 'Vorgang', and 'Grammatik' have different meanings in some different contexts, and that the most accurate translations into English must vary from one context to another or be taken to show corresponding ambiguities. This is not a defect in Wittgenstein's writing, something which we should assume that he would have eliminated had it been pointed out to him. Nor does it justify either despair about understanding his ideas or our pinning interpretations randomly onto ambiguous expressions in his writings. We should aim at giving sensitive readings of his remarks which might in many cases fully justify giving various different interpretations of certain words or phrases. Indeed, we might well expect that careful probing of the reasons supporting our *variable* interpretations of these expressions might be a powerful source of illumination of his ideas.

Secondly, I would urge a kind of minimalism: given our strong cravings for generality and the inclination to extract generalizations from his investigations of specific concepts or language-games, we should try to relate every remark to the specific arguments which support it and to the particular purpose which informs the surrounding remarks, and we should attach to each expression the interpretation which gives it the minimum generality compatible with the context.[23] Wittgenstein clearly abstained from drawing many of the general conclusions which are taken to be the leading ideas of his philosophy, especially from employing generalizations as premises for making inferences to other conclusions about the grammar of our language, and we might consider respecting his reticence as an essential aspect of his thinking (an integral part of his avoiding dogmatism) rather than dismissing it as a stylistic quirk. Just as he

23. This strategy, if applied to some of his 'methodological remarks', might transform our understanding of his philosophical activity. Consider: 'What *we* do is to bring words back from their metaphysical to their everyday use' (PI § 116) or 'The concept of a perspicuous representation [Übersichtliche Darstellung] is of fundamental importance for *us*' (PI § 122: italics added). Are these remarks to be classified as part of his description of the *nature* (essence) of philosophy?

advocated treating a mathematical theorem as a cross-section of the body of the proof which supports it, so we might try taking each of his philosophical epigrams as a cross-section of the body of comment (reasoning, dialogue, analogies, language-games, etc.) which informs it. Each remark would then be absolutely context-relative and purpose-specific. Perhaps it was this aspect of his work which Wittgenstein sought to highlight in the remark: 'The solution of philosophical problems can be compared with a gift in a fairy tale: in the magic castle it appears enchanted and if you look at it outside in daylight it is nothing but an ordinary bit or iron (or something of the sort).'(CV 11) Our very attempt to appropriate and carry off his nuggets of gold for our own purposes may guarantee that we will find nothing but scraps of rusty iron in our hands when we have arrived home with our booty.

Thirdly, I suggest scrupulous attention to Wittgenstein's overall therapeutic conception of his philosophical investigations: far from advocating any general positive position (whether anti-realism, conventionalism, anthropological idealism, or whatever) and far from undertaking to give any general outline of the logical geography of our language (or even of the narrower domain of 'mentalistic' or 'psychological' concepts), he always sought to address specific philosophical problems of definite individuals and to bring to light conceptual confusions which these individuals would acknowledge as a form of entanglement in their own rules. He did not make direct assaults on various standard 'isms' (whether Cartesian dualism in philosophy of mind or Intuitionism in philosophy of mathematics); nor did he pretend to overwhelm these positions by an accumulated series of indirect attacks. Rather he confronted specific remarks of specific writers (sometimes Augustine, Plato, James, or Köhler, often Frege, Russell, and the author of the *Tractatus*). He did not see himself in the role of a public health official whose brief was to eradicate smallpox from the face of the earth (e.g. to eliminate Cartesian dualism once for all by means of the Private Language Argument). Rather he operated as a general practitioner who treated the bumps that various individual patients had got by running their heads up against the limits of language (cf. § 119). Or, more accurately, he compared his procedure with psychoanalysis: his aim was to bring each patient to acknowledge the origins of her particular

conceptual disorders (especially in the workings of analogies or pictures of which she was not conscious), and the patient's own acknowledgement of the rules in which she is entangled is a pre-condition of the correctness of the diagnosis (BT 410) as well as of the effectiveness of the cure (BT 410). Wittgenstein's practice in philosophizing is not less, but rather *more*, consistently therapeutic than we commonly recognize. His interest is not to remedy ignorance about segments of a complex practice of which we have individually only partial mastery, nor is it to establish objective facts about shared institutions of which we may have temporarily lost sight and need to be reminded. He was far more concerned with making propaganda for different points of view, with exploring neglected possibilities, with trying to effect changes in our ways of seeing things, indeed with bringing about changes of mind or modifying the *will* (how we *want* to see things). For achieving these purposes the construction or assessment of abstract proofs and refutations would be manifestly peripheral or even irrelvant. Wittgenstein's enterprise is essentially person-relative, and it centres on the dynamics of somebody's thinking, not on the geometry of thoughts.

Finally, it is vital to recognize the variety of remarks which Wittgenstein offered as descriptions of 'the grammar of our language' and the variety of roles which they play in his investigations. We are strongly inclined to regard all of them as extracts from the schedule of rules which govern the normative practice of speaking a natural language and hence to treat them each as part of what competent speakers would acknowledge to be correct explanations of the meanings of certain words. This idea manifestly jars with Wittgenstein's own procedure. Many remarks have very different roles. Some are enumerations of rules for using symbols in simple or even wholly imaginary language-games (§§ 2, 4, 8, etc.); they may throw light on our practices, in respect of both similarities and differences, and to this extent they may be called 'grammatical remarks', but it would not be natural to describe them as *parts* of the grammar of *our* language. Other remarks draw comparisons or offer analogies. For example, to note that a colour-sample in language-game (8) can be *regarded as* an instrument of the language is certainly not to formulate part of an explicit explanation of any

colour-word within language-game (8), nor is it even to give part of any standard explanation of how we are to use the word 'sample' in our language. Similarly, to call the equation '2 + 3 = 5' a rule of grammar is no part of an explanation of how correctly to use the phrase 'a rule of grammar', but rather an analogy drawn for the specific purpose of calling attention to an important aspect of the role of equations in our language (or form of life). Yet other remarks concern what we say about what we say. For example, we are invited to attend to how we use the expression 'a name of a sensation' (LPE 290-1; cf. PI § 261), and the clarification of the concepts of thinking, expectation, hoping, intending, etc. turns in part on describing the grammar of reports in indirect speech (various forms of 'making contact in our language'). The presumption that all the things which Wittgenstein would presumably have called 'descriptions of grammar' are homogeneous in function is a major obstacle to understanding many of his conceptual investigations. Still more damaging is the subsidiary idea that these descriptions are additive. A comparison which is illuminating for one purpose may be unhelpful or even obfuscating in another context, and a pair of seemingly inconsistent analogies may facilitate grasping different aspects of a single thing. What Wittgenstein called a perspicuous representation of our grammar would perhaps *never* result from mere accumulation of what are given and accepted in everyday practice as correct explanations of the meanings of words. In any case, what brings about somebody's 'knowing her way about' in the language is often the judicious choice of a new object of comparison, a creative analogy, or the revelation of a new aspect of the use of our words. In respect of Wittgenstein's own 'descriptions of the grammar of our language', there is some merit in our appropriating the motto: 'I'll teach you differences'.

WITTGENSTEIN, ANTI-REALISM AND MATHEMATICAL PROPOSITIONS

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It has, since Dummett's works, become usual to consider that Wittgenstein abandoned, at the beginning of the 1930s, a realist conception of the meaning of a proposition, founded on the idea of truth conditions which are or are not realized in a way which could in certain cases transcend definitively any possibility of verification or refutation, for an anti-realist conception in which the notion of truth conditions so understood, is replaced by that of conditions of correct assertability. Dummett maintained that the only reasonable way in which to defend an intuitionistic interpretation of mathematical propositions was to abandon the ground of ontology for that of the theory of meaning and to interpret the rejection of mathematical platonism by the intuitionists as a way of challenging, on a privileged example, that of mathematical propositions, a platonistic theory of meaning which violates the Wittgensteinian principle (or supposedly so) according to which meaning cannot transcend use. The only interesting, and perhaps the only decisive argument that one can use against platonism is that: "the platonistic theory of meaning cannot be a theory in which meaning is fully determined by use".[1]

One of the reasons for which intuitionism, unlike logicism and formalism, remains today a particularly live current of thought is, from Dummett's point of view, that the questions it asks concerning the form that a theory of meaning for a determinate category of propositions (mathematical propositions) should take are still current and go far beyond the restricted domain of the philosophy of mathematics: "... It seems highly likely that the contentions both of

1. M. Dummett, "The Philosophical Basis of Intuitionistic Logic", in *Truth and Other Enigmas*, Duckworth, London, 1978, p. 225.

the intuitionists and of their various opponents can be generalized so as to bear on the form that a theory of meaning should take for any part of language".[2]

Serious doubts have, for some time now, been voiced as to the possibility of directly involving Wittgenstein himself in the controversy between realism and anti-realism, as it is understood by Dummett. McGuinness has, for example, contested that the *Tractatus* could be considered as realist in Dummett's sense of the term.[3] As other authors have remarked, it is not at all certain either that Wittgenstein sought in his later period to defend a theory or at least a conception of meaning that could legitimately be qualified as anti-realist.

I have no intention of discussing directly, here, this difficult question. What is of interest to me above all is whether, from a Wittgensteinian point of view, it is possible to use the example of a mathematical proposition as a starting point for a confrontation between a realist conception and an anti-realist conception of meaning amenable to being extended to other categories of propositions. And the answer to this question seems to me to be quite clear. If the Wittgensteinian conception of the nature of a mathematical proposition has any plausibility at all, then it is extremely doubtful, not to say impossible, that a generalization of the sort that Dummett has in mind could be hoped for.

The reason for this state of affairs is that mathematical propositions, as Wittgenstein sees them, have a meaning and a role which differ to a much greater degree from those of ordinary propositions than either platonistic realism or intuitionistic anti-realism suppose them to. If the characteristic of a mathematical proposition is, as Wittgenstein maintains, to effect a determination of meaning as opposed to a use of meaning, and if the recognition of a mathematical proposition as true consists, in reality, in deciding to introduce a new rule for the use of the concepts which are involved, the question as to whether the meaning that we have conferred on our

2. M. Dummett, *Elements of Intuitionism*, Clarendon Press, Oxford, 1977, p. ix.

3. Cf. B.F. McGuinness, "Language and Reality in the TRACTATUS", *Theoria*, V (1985).

mathematical propositions has to be analysed in terms of platonistic truth conditions or in those of intuitionistic verifiability conditions is quite simply founded on a category mistake.

Were we to discover a proof of the fact that there are three consecutive 7s in the decimal expansion of π or a proof of the fact that it would be contradictory that the decimal expansion of π should contain a sequence of three consecutive 7s, we should, according to Wittgenstein, say that we have, at the same time, given a meaning and an answer to the corresponding question: "The question, Wittgenstein says, seems both to have been answered and to make sense. This account of the possible answer is contrary to what we ordinarily call a proposition. For we say a proposition must make sense before we know whether it is true, or false."[4]

Here lies the essential difference between a mathematical proposition and an ordinary descriptive proposition. Now, when the meaning of a proposition indisputably preceeds the recognition of its truth or falsity we may ask ourselves whether this meaning is or is not such that the proposition already possesses, independently of the possibility or chances that we have of recognizing what it is, a determinate truth-value. But what could this question signify exactly in the case of a proposition for which it is impossible to distinguish in this way the meaning of the question that it poses and the nature of the answer, the determination of meaning and that of truth?

The anti-realism of which one can, if one so wishes, continue to speak in the case of a mathematical proposition, is not therefore the opposite of what one could call, in the case of an ordinary proposition, realism. It is rather and quite simply the expression of the fact that mathematical propositions relate to the determination of the grammar, and not to the description of some reality or another, and that, by definition, the grammar cannot contain determinations that admit of going beyond that which we are able to determine ourselves. Discussing the case of geometrical propositions, Wittgenstein says that they do not speak of any reality, but tell us whether something does or does not make sense: "The charm of saying that

4. *Wittgenstein's Lectures, Cambridge, 1932-1935*, From the Notes of Alice Ambrose and Margaret Macdonald, edited by Alice Ambrose, B. Blackwell, Oxford, 1979, p. 195.

geometrical lines connect the points is that we seem to say that a correlation exists. But the statement about geometrical lines does not say anything about reality. It does not mean that there is a correlation, but rather that it *makes sense* to say a correlation exists" (*ibid.*, p. 161). But that something does or does not make sense is not the kind of thing which could have been decided without our knowledge and independently of us. Anti-realism is here essentially the expression of what one could call the transparency of the grammar, as opposed to the opacity of reality. It does not mean that in speaking of a mathematical proposition which may perhaps be a rule but of which we might never know if it is indeed really one or is not, we say something that could be contested, but that this idea is without any meaning. Nothing in Wittgenstein's texts allows us to affirm with certainty that he intended to reject all idea of verification transcendent truth. But what certainly was incomprehensible to his mind is the idea that a rule could transcend definitively any possibility of recognition; what one could call "an adoption transcendent notion of rule".

The reason why mathematics can seem to give the impression of lending itself remarkably well to a confrontation between realism and anti-realism, and even constitute the ideal ground for a debate of this kind is not at all difficult to guess. Mathematical propositions have both a more precise meaning than the majority of the propositions of ordinary language (so that the indetermination which could affect their truth value has a lesser risk of resulting from a vagueness which could subsist in their meaning) and truth conditions, which in certain cases, give the impression of going far beyond that which we can be certain of being, one day, able to verify or to refute. We believe that we have a sufficiently determinate idea of that which would render a mathematical proposition concerning an infinite collection true, although the proof constitutes the only means we have of recognizing that it is true, if indeed it is; and this even though we are not at all assured of ever having a proof. Wittgenstein, precisely, does not accept the idea that the proof only constitutes the means that beings limited such as we are find themselves forced to use in order to recognize that truth conditions which can be understood independently from it are realized when they are. The proponents of mathematical realism sometimes tend

to consider proof as an instrument which compensates, as far as is possible, a capacity of observation which reveals itself as insufficient for attaining infinity and unravelling its mysteries. Wittgenstein fought relentlessly against the idea that the difference between the finite and the infinite in mathematics is only a difference of a quantitative type and against the illusion which regularly follows from it: that the difficulty in deciding certain questions concerning the infinite has something to do with 'human weakness'. For him, a proof concerning the infinite does not concern an infinite extension and is not a means for the discovery or the recognition of something concerning it; it always relates to a form or to a law by which the extension is engendered. As he says in a picturesque way : "I can prove something only about the form, the model by which I lead the stream of numbers."[5] We cannot say that we understand the universally quantified proposition (x) P(x) concerning an infinite set of natural integers because we have an idea of what would render the infinite logical product P_1 & P_2 & P_3 etc. true; for the proposition is not an infinite logical product and the 'etc.' is not a sign of incompleteness.

> Here there is confusion between physical impossibility and what is called 'logical impossibility'. For we think we have given a sense to the expression 'checking of the infinite product' because we take the expression 'infinitely many' for the designation of an enormously large number. And when we hear of the 'impossibility of checking the infinite number of propositions' there comes before our mind the impossibility of checking a very large number of propositions, say when we don't have sufficient time. (*ibid.*, p. 452)

What one must remember here is that in the sense in which it is impossible to test an infinite number of propositions it is equally impossible to try to do it.

Wittgenstein lays stress on the fact that "human weakness does not exist there where the apparent description of the action 'which we cannot perform' is without meaning" (*ibid.*, p. 461). For him, the philosophical problem of mathematical infinity has absolutely nothing to do with the question as to whether the finite can or cannot

5. *Philosophische Grammatik*, edited by Rush Rhees, B. Blackwell, Oxford, 1969, p. 434.

legitimately claim to understand the infinite, as it is generally understood, whether intuition can or cannot give us evident truths relating to infinite collections (Poincaré, for example, maintains that it cannot) etc., nor, since a calculus does not need to be justified and cannot be justified by the existence of something which can be established in reality, with the question as to whether infinity is or is not exemplified, in any form, in natural reality. In other words, Wittgenstein does not, at any time, contest that Cantor had succeeded in inventing a new calculus and, as in all like cases, he refuses categorically to adopt the reductionist attitude which theoreticians as opposed as Poincaré and Hilbert have in common, and which consists in requiring that what is said of the infinite could be reduced, in one way or another, to considerations which bear only upon the finite. The Cantorian calculus is, precisely, a new calculus, which it would be absurd to try and justify by reducing it to something more elementary or more reliable.

Of course, the separation that the realist accepts to establish between the truth and the falsity of a proposition objectively determined and the possibility of recognizing them is not total. In the example under consideration he will say that the meaning and the understanding of the proposition are guaranteed by the existence of a method of verification, which it just so happens that beings as limited as we are cannot apply. His opponent objects that the only method of verification that can give a meaning to a proposition is that which we can effectively use and which, for us, leads to a decision: the proof. But, from Wittgenstein's point of view, the anti-realist does not, at the same time, go far enough in his idea, for he considers, most likely because he reasons on this point in the same way as his opponent, that we have succeeded in giving a determinate meaning to the proposition, but a meaning which, given that we are not certain of being able one day to reach a decision concerning it, does not allow us to affirm that it is true or false. In other words, rather than facing openly the difficulty which results from his position: that certain questions must apparently await their answer in order to be questions, he prefers to stop at the idea that certain propositions are not subject to the jurisdiction of the Principle of Bivalence.

Realism and anti-realism constitute two different ways of accounting for the fact that we are not omniscient and neither are we

assured of ever being so. The former adopts what Prawitz calls a "platonistic principle of truth", which the latter proposes to replace by a "non-realistic principle of truth" which postulates that the fundamental characteristics of the notion of truth be drawn from its relationship to conditions of justified assertability and that it has therefore to be explained in terms of conditions of this sort. The situation can be described as follows: "The difference between the two principles boils down to this: on the platonistic principle, a truth condition for a sentence obtains or does not obtain independently of our means of recognizing that it obtains or fails to obtain, and we are then forced to admit that there may be truths that are in principle impossible to recognize (if we are not to assert unwarrantably that all problems are in principle solvable); on the non-realistic principle above, a truth is in principle always possible to recognize, but we must then refrain from asserting that a truth condition either obtains or does not obtain (again in order not to assert that everything is solvable). Both principles respect the fact that we are not omniscient, but the platonistic principle does this by introducing ideas the need of which is not easily seen."[6]

When the problem is posed in the manner of Wittgenstein, the question of omniscience takes on a meaning quite different and has no longer anything to do with that which it has in the case of a natural science. What is decisive is not what we can or cannot hope to know, but what the calculus itself, if one can so say, knows or does not know; and to ask ourselves whether we shall, one day, be able to decide a question which for the moment is undecidable is tantamount to asking whether the calculus which decides it will or will not one day be invented. Now, it is difficult to see what, where there is no place for discovery, in a proper sense, but only for invention and decision, a superior mind could have and use in the matter of omniscience: "There is nothing there for a superior intelligence to know – except what future generations will do. We know as much as God does in mathematics."[7] Were the task of the mathematician to consist es-

6. D. Prawitz, "Intuitionistic Logic: A Philosophical Challenge", in *Logic and Philosophy*, edited by G.H. von Wright, Martinus Nijhoff, The Hague-Boston-London, 1980, p. 9.

7. *Wittgenstein's Lectures on the Foundations of Mathematics, Cambridge,*

sentially in inventing indirect methods for exploring infinite totalities, the advantage of God, who is supposed to be able to do it directly, would be obvious. But Wittgenstein considers that to hold that the methods that we use in mathematics have anything indirect in that sense is quite mistaken. What constitutes the specificity of a mathematical proposition as opposed to an ordinary proposition is the fact that, in all really significant cases, we have to invent a decision method which not only supplies an answer but also gives a meaning to the question asked. And the reference to the supposed omniscience of a mathematical subject such as God has essentially for effect to create or to reinforce the illusion that the method of verification already exists for all cases, but is not applicable by us.

In spite of the difficulties, for reasons which have been given by McGuinness, in determining the exact position of the *Tractatus* in the controversy between realism and anti-realism, it is indisputable that Wittgenstein's attitude had, on this point, evolved in an extremely significant way and that it is not by chance that the arguments which are today involved in support of the anti-realist conception are drawn essentially from the texts of his later period. The anti-realism which is implicit in his later philosophy is clearly recognizable in declarations such as the following: "What is conceived as justification of an assertion, that constitutes the meaning of the assertion". "The causes of our belief in a proposition are indeed irrelevant to the question of what we believe. Not so the grounds, which are grammatically related to the proposition, and tell us what proposition it is" (*Philosophische Grammatik*, p. 81; cf. *Zettel*, 437).

The characteristic of realism is to consider that the relation between what makes a proposition true (its truth conditions) and that which leads us to recognize it as true can be an external relation which is more or less accidental. If however, and to the contrary, one takes the reasons which can lead us to recognize a proposition as true as being an integral part of its meaning and chooses to treat them as constitutive of the identity of the proposition itself, one has already, it seems, passed the stage which leads to anti-realism.

1939, from the Notes of R. G. Bosanquet, Norman Malcolm, Rush Rhees, Yorick Smythies, edited by Cora Diamond, The Harvester Press, Hassocks, Sussex, 1976, p. 104.

Wittgenstein's conversion to an anti-realist conception of propositions apparently introduces an important modification in the relations which are supposed to exist between the question of the limits of meaning and that of the limits of knowledge. In the *Tractatus*, the central question was evidently that of the limits of meaning; and the theory of knowledge, epistemology, identified as "philosophy of psychology" (4. 1121) was relegated entirely to the background. But afterwards, the question "What can we mean?" seems, on the contrary, to have become directly dependent on the question "What can we know?". What we can mean is limited by what we are able to know and by the manner in which we know it. Hacker, in the first edition of *Insight and Illusion*, describes as follows the change which had been operated:

> In his later philosophy, Wittgenstein is still concerned to establish the bounds of sense, to teach philosophy and metaphysics not to overreach themselves in their inordinate ambition. But now the establishing of the limits of knowledge is no longer an incidental by-product of the investigation. On the contrary, according to the criterial semantics, the limits of possible knowledge determine the bounds of sense. For the sense of an expression is determined by the conditions which justify asserting it and which legitimate a cognitive claim. A criterion, which determines meaning, gives one kind of answer to the question 'How do you know?'. Thus epistemology is brought back into the heart of philosophical logic, without however making any concessions to psychological logicians.[8]

The question, of course, is not that of the possibility of knowledge, as one usually understands it, that is to say that of the limitations imposed *a priori* on our faculties of knowledge, but that of the criteria which determine the way or the different ways in which one can know something and which allow one to say that one knows. It would therefore, in reality, be quite misleading to speak of something like the theory of knowledge being re-introduced into the heart of the theory of meaning, for the questions which will be posed are exclusively grammatical ones and remain so. Hacker explains that "if 'q' is a criterion for 'p', then it is part of the sense of 'p' that 'q'

8. P.M.S. Hacker, *Insight and Illusion*, Wittgenstein on Philosophy and the Metaphysics of Experience, Clarendon Press, Oxford, 1972, p. 303.

is *a priori*, non inductive, conventionally fixed evidence for the truth of 'p'" (*ibid.*, p. 291). For instance, "The grammar of propositions which we call propositions about physical objects admits of a variety of evidences for every such proposition. It characterizes the grammar of the proposition 'My finger moves, etc.' that I regard the propositions 'I see it move', 'I feel it move', 'He sees it move', 'He tells me that it moves', etc. as evidences for it."[9]

Here, we are dealing with a series of propositions which are considered as authorizing the assertion of a proposition concerning a physical object (my finger). And it is important to specify that even though it is true that the meaning of this proposition is partly determined by the fact that the truth of the first (and others of the same kind) constitutes a non inductive justification for its assertion, to say that 'p' is a criterion for 'q' does not signify that 'p' has the same meaning as 'q' no more than that 'p' logically implies 'q'. Wittgenstein, quite obviously, is not tempted by the type of reductionist verificationism which would consist in trying to reduce the meaning of the proposition relating to a physical object to that of more "elementary" propositions which we can use to justify its assertion.

Immediately after having remarked that "when I am asked for a reason for the belief, what is expected, as part of the answer is *what* I believe" (*Wittgenstein's Lectures, Cambridge, 1932-1935*, p. 28), Wittgenstein takes care to specify that the different ways of verifying a proposition contribute to determining the meaning of the proposition, but that the meaning is not constituted by them: "The different ways of verifying 'It rained yesterday' help to determine the meaning. Now a distinction should be made between 'being the meaning of' and 'determining the meaning of'. That I remember its raining yesterday helps determine the meaning of 'It rained yesterday', but it is not true that 'It rained yesterday' *means* 'I remember that ...'." "If we ruled out any one of the means of verifying the statement, we would alter its meaning. (...) And if we did away with all means of verifying it we would destroy the meaning." (*ibid.*, p. 29)

Even though the question of knowing what gives a proposition its meaning is thereby evidently not yet resolved, it becomes necessary to make a difference between what really can do the job and

9. *The Blue and Brown Books*, B. Blackwell, Oxford, 1958, p. 51.

that which, like the verification method, can only determine the meaning in question: "Two questions have been raised, which need to be answered now. (1) How could the meaning of a sentence about the past be given by a sentence about the present? (2) The verification of a proposition about the past is a set of propositions involving present and future tenses. If the verification gives the meaning, is part of the meaning left out? My reply is to deny that the verification *gives* the meaning. It merely *determines* the meaning, i.e. determines its use or grammar." (*ibid.*, p. 28-29)

It is true that Wittgenstein may seem to be drawing considerably closer towards a declared anti-realism when he suggests that the answer to the question "What does the verification of a proposition consist in?" can be understood as an answer to the question "What, for a proposition, does the fact of being true consist in?": "The question, 'What is its verification?', is a good translation of 'How can one know it?'. Some people say that the question, 'How can one know such a thing?', is irrelevant to the question, 'What is the meaning?' But an answer gives [sic] the meaning by showing the relation of the proposition to other propositions. That is, it shows what it follows from and what follows from it. It gives the grammar of the proposition, which is what the question, 'What would it be like for it to be true?', asks for." (*ibid.*, p. 19-20). But if, as indeed it seems to be the case, what Wittgenstein meant is simply that the criteria which justify the assertion of a proposition do not, as one could be tempted to believe, constitute an external element with regard to its meaning, but, on the contrary, are a partial specification of this meaning itself, or that the question of verification, that is to say the manner of answering the question "How do we know?", is not an external "epistemological" question, but a contribution to the grammar of the proposition (cf. *Philosophical Investigations*, § 353), that certainly does not suffice for allowing one to ascribe to him an explicitly anti-realist conception of the meaning of a proposition.

What is characteristic of a conception of this sort is, in effect, the fact of identifying, purely and simply, the meaning of the proposition with its assertability conditions and of holding that it cannot contain any element capable of exceeding once and for all what is understood in the conditions in question. And it is for the least

doubtful that Wittgenstein was prepared to defend a position of this kind. There is, in any case, a whole category of propositions the meaning of which cannot, according to him, be identified with their condition of correct assertion, quite simply because they do not have conditions of this kind and can be used in a perfectly correct manner without having to be justified in this way.

However that may be, it is not difficult to appreciate that the case of mathematical propositions is (even though one can also speak of the proof as being a criterion which justifies the assertion of a mathematical proposition) quite different from that which is evoked in the *Blue Book*. A proof does not, in effect, constitute a criterion which could justify an assertion concerning mathematical objects. It does not really legitimate a claim to knowledge, but introduces a determination of meaning. It is not a means of verifying a proposition which could have a meaning independently of it and conserve it whatever the result of the verification, since what the mathematical proposition says reveals itself to be exactly what the proof which gives it its mathematical meaning says. The shift in direction described by Hacker cannot therefore, for intrinsic reasons, be directly applied to mathematical propositions themselves.

In the example examined by Wittgenstein, the different criteria correspond to different ways of convincing oneself of the reality of one and the same fact concerning a physical object (my finger). And it is a situation which has no equivalent in the case of a mathematical proposition, for "what is the case", when it is true, is represented solely by the proof itself, to the exclusion of any contribution due to the intervention of an external reality in which things are or are not such according to whether the proposition is true or false. Two different proofs of the same proposition cannot be considered as being two different ways of recognizing the same mathematical fact, independent of both. And, since the proposition to be proved has no truth conditions that one could distinguish from the conditions of correct assertion which will be given by its proof and could be understood independently from them, the question of the identity of the unproved proposition and the proved proposition cannot be resolved in a positive nor in a negative manner: for it is quite simply meaningless if the identity of the proposition is exactly what the proof will permit to determine.

As Shanker says, "the sense of the *Beweissystemlos* verbal expression does not *change* after a proof has been constructed: rather it *emerges*."[10] What gives an appearance of mathematical meaning to a verbal expression of the proposition without its proof is, in fact, only the existence of a certain image, for example, that given by an unlimited expansion in its totality and in which something (the possibility of finding an answer) gives the impression of disappearing in infinity and of compelling us to take a short cut which we have not yet found. But, in reality, this image loses all interest and importance once the proof shows us what the mathematical proposition *really* says. The image, before the proof, is of no use whatsoever, because it gives us no idea of what to look for nor of the manner in which we must look. And it can be forgotten completely once the proof has shown us what we were really looking for.

If one admits that we can give a meaning to propositions which we are not certain of being able to verify or to refute, because we can imagine an appropriate extension of our faculties of knowledge that would enable us to recognize them as true or false, this sort of consideration cannot, from Wittgenstein's point of view, be applied to mathematics without precaution, for that which prevents us, for example, momentaneously from recognizing as true or as false a mathematical proposition concerning the infinite is not that the faculties of knowledge with which we are equipped are too limited for that. In other words, if the controversy between realism and anti-realism is understood as being about whether we must or must not accept the idealization constituted by the representation of an omniscient mathematical subject which allows to give a meaning to the idea of truth conditions that transcend definitively the limitations imposed on our human possibilities of verification, the inevitable conclusion is that, for Wittgenstein, this debate is without purpose, for it is based wholly on a presupposition which he contests and on a confusion which he denounces. An idealization of our mathematical faculties is, in order to be meaningful, obliged to use essentially those cases for which the method of verification seems to be there already, but could only be used by a mind much more

10. S. G. Shanker, *Wittgenstein and the Turning-Point in the Philosophy of Mathematics*, Croom Helm, London and Sydney, 1987, p. 106.

powerful or quicker than the one we are endowed with. The case of mathematical propositions is thus more or less reduced to the trivial case of the ordinary proposition already equipped with its method of verification, which it only remains to apply, if one can; and that which is radically specific to mathematical decision or undecidability proper is completely lost from sight.

One of the principal arguments drawn from Wittgenstein's texts in order to justify the adoption of anti-realist semantics is that contained in the principle according to which "meaning cannot transcend use". Dummett maintains that if the principle according to which meaning is use imposes any constraints on a theory of meaning, it can only be in the following way: "If meaning is use, that is, if the knowledge in which a speaker's understanding of a sentence consists must be capable of being fully manifested by his linguistic practice, it appears that a model of meaning in terms of truth-conditions is possible only if we construe truth in such a way that the principle of bivalence fails; and this means, in effect, some notion of truth under which the truth of a sentence implies the possibility, in principle, of *our* recognizing its truth. It is hard to swallow such a conclusion, because it has profound metaphysical repercussions: it means that we cannot operate, in general, with a picture of our language as bearing a sense that enables us to talk about a determinate, objective reality which renders what we say determinately true or false independently of whether we have the means to recognize its truth or falsity."[11]

It is clear that the requisite of complete manifestability of meaning in use applies not only to declarative propositions, but also to propositions of any form, including those, of course, which constitute the expression of rules. As Wittgenstein, in connection with mathematical propositions, emphasizes:

> What a geometrical proposition means, what kind of generality it has, is something that must show itself when we see how it is applied. For even if someone succeeded in meaning something intangible by it it wouldn't help him, because he can only apply it in a way which is

11. M. Dummett, "What does the Appeal to Use Do for the Theory of Meaning?", in *Meaning and Use*, edited by Avishai Margalit, D. Reidel Publishing Company, Dordrecht, 1979, p. 135.

quite open and intelligible to every one." (*Philosophische Grammatik*, p. 469)

What the requirement of manifestability signifies, in the case of rules, is that understanding the rule cannot comprise a hidden element which would not be capable of revealing itself publicly in the application that one makes of it (and of which one would not understand either, for this very reason, how it could have been acquired by someone who has learnt to use the rule). But, whereas understanding a proposition of a declarative form means, from an anti-realist point of view, knowing what would justify an assertion of the proposition, understanding a rule can certainly not be identified with a knowledge of what would justify its adoption. It is therefore of consequence to distinguish as clearly as possible two quite different problems: 1) What are the reasons which can be advanced in favour of the recognition of such and such a rule? 2) In what manner and to what extent can an observable application (or a number of such applications) justify the conviction that the meaning of the rule has been correctly and fully understood?

Wittgenstein's position is, on the first point, clearly anti-justificationist and most certainly manifests no tendency to dispute the use of rules which have the inconvenience of being justifiable only by appeal to a notion of truth which could transcend any possibility of verification. Dummett considers that we must be able to explain in what the fact of having a notion of truth which lies beyond our possibilities of verification consists, independently of our acceptance of the rules of inference used in classical bivalent logic: "Classical two-valued logic depends, for its justification, upon our having notions of truth and falsity which license the assumption that each statement has, determinately, just one of those truth-values; it cannot, of itself, generate those notions."[12]

A possible response would consist in saying that what one means by the fact of having a notion of truth of the sort in question is quite precisely nothing more than what is manifested in the acceptance and the use of the rules of classical bivalent logic for the propositions

12. M. Dummett, "What Is a Theory of Meaning?" (II), in *Truth and Meaning*, edited by G. Evans and J. McDowell, Clarendon Press, Oxford, 1976, p. 102-103.

concerned. A notion of this sort can, perhaps, no more be used to justify the rules in question than it can be justified by them; it is rather that it is essentially constituted by them. Such an answer would certainly not satisfy Dummett, who requires that the possession of a notion of this sort for a certain category of propositions be warranted independently of our decision to apply to them forms of inference the legitimacy of which can be questioned. But it is an answer which, in any case, is likely to correspond more closely to Wittgenstein's real attitude than to that which anti-realist writings of the justificationist and revisionist type inspired by him suggest. It may, in a more general way, be true that no semantics formulated in terms of assertability conditions permits of justifying in a satisfactory manner certain principles of classical logic. But that is only preoccupying when one is of the opinion that classical logic is in need of a justification which is to be taken from an appropriate theory of meaning.

The second problem is that which gives rise to the "sceptical" considerations that Crispin Wright, Kripke and many others have developed in connection with the question of what it is to follow a rule. Wright has introduced the notion of "investigation-independence" in order to characterize a conception which Wittgenstein gives the impression of challenging seriously, that is: "the idea that meaning can be so conferred upon at least some of the statements of our language that whether they are correct is something settled in advance and independently of any investigation we might make – more generally still, that what judgements are correct in particular circumstances is something determined quite independently of human reaction to those circumstances."[13] If one accepts to commit oneself to this line of thought, then it is difficult to see how the answer that Wittgenstein tried to bring to the second problem could not contain revisionist implications far more radical than those which follow from the position adopted by the intuitionists. For, before asking ourselves what it is that permits us to consider that a universal quantification: (x) P(x) (with P decidable), concerning an infinite totality, already has a determinate truth-value, one should

13. C. Wright, *Realism, Meaning and Truth*, B. Blackwell, Oxford, 1987, p. 148-149.

first envisage the possibility that the truth-value of a singular case P(a) which has not yet been considered, might not be determined independently of the manner in which we will act or react when the question is effectively posed.

I shall not venture here to formulate an opinion as to whether it is or is not possible to ascribe to Wittgenstein a position which one could qualify as "sceptical", in any sense of the term. My immediate problem is: Is it possible to carry over into the domain of mathematics the controversy between realism and anti-realism, without committing what Wittgenstein considers as being the mistake *par excellence* and the source of all confusion in the philosophy of mathematics – that is to say: the abusive assimilation of mathematical propositions to those of the ordinary kind? In the case of an ordinary proposition, the result of the verification leaves the meaning, which is independent of it, intact. But this is not so in the case of a mathematical proposition, for the answer that one obtains determines at the same time the meaning of the question asked. Conversely, one cannot pretend to have fully determined the meaning of a mathematical proposition without having, at the same time, verified it. Before the proof, the mathematical proposition has only what Wittgenstein calls in the *Philosophische Grammatik* "eine beiläufige Vorlage in der Wortsprache" (p. 374).

Wittgenstein emphasizes that in distinction to what happens in the experimental sciences, a sufficiently precise description of a method of verification is, in mathematics, *already* a verification. "We say, for example, 'this man died two hours ago' and if someone asks us 'how can you tell that?' we can give a series of indications (symptoms). But we also leave open the possibility that medecine may discover hitherto unknown methods of ascertaining the time of death. That means that we can already describe such possible methods; it isn't their description that is discovered. What is ascertained experimentally is whether the description corresponds to the facts. For example, I may say: one method consists in discovering the quantity of haemoglobin in the blood, because this diminishes according to such and such a law in proportion to the time of death. Of course that isn't correct, but if it were correct, nothing in my imaginary description would change. If you call the medical discovery 'the discovery of a proof that the man died two hours ago' you

must go on to say that this discovery does not change anything in the grammar of the proposition 'the man died two hours ago'. The discovery is the discovery that a particular hypothesis is true (or: agrees with the facts). We are so accustomed to these ways of thinking, that we take the discovery of a proof in mathematics, sight unseen, as being the same or similar. We are wrong to do so because, to put it concisely, the mathematical proof couldn't be described before it is discovered." (*Philosophische Grammatik*, p. 370-371)

The understanding that a mathematician has of a mathematical proposition that he is trying to prove is, therefore, quite different from that which one can have of an empirical proposition before having established its truth or falsity. The 'proof' of a fact such as that just examined needs reasons which are external, whereas "a mathematical proof is the analysis of the mathematical proposition."[14] The nature of the solution can, of course, be determined by extra-mathematical considerations. For example, if the problem is that of the construction of a regular pentagon with a ruler and compass, the construction is characterized, from a physical point of view, by the fact that it must effectively yield a regular pentagon defined in terms of effectuated measures. But "we obtain the concept of the *constructive quintisection* (or of the *constructive pentagon*) only by the construction itself" (*Philosophische Grammatik*, p. 362). We already have, naturally, a certain concept of what a regular pentagon is, but not the one which the construction of it yields. We regularly give the name of mathematical hypotheses or conjectures to propositions which can, effectively, have been suggested by induction of the ordinary kind. But, as Wittgenstein stresses, "in mathematics, there are no symptoms, for the mathematician there can be none save in a psychological sense" (*ibid.*, p. 384). A conceptual connection is or is not established; but it cannot really be foreseen or predicted. When a mathematician says, as Hadamard does, that "the only object of rigour is to support and legitimize intuition's conquests"[15], he means that the strict methods that the mathematician considers himself as bound to use have as their aim only that of allowing him

14. *Philosophische Bemerkungen*, B. Blackwell, Oxford, 1964, p. 179.

15. J. Hadamard, "Lettre à Emile Borel", in E. Borel, *Leçons sur la théorie des fonctions*, 3ème édition, Gauthier-Villars, Paris, 1928, p. 175.

to control and to confirm things which deep down he already knew in a different way. From Wittgenstein's point of view, it is a significant and interesting fact of the psychology of the mathematician that he should generally be so inclined to see and to say things in this way. Nevertheless when, for example, we try to prove a mathematical conjecture, we are not trying to confirm symptoms of a diverse nature but to discover a new criterion which we could not have imagined before effectively having discovered it. To look for a law of the distribution of the prime numbers, is to try and replace a negative criterion for prime number by a positive criterion or, as Wittgenstein prefers to say, "the indeterminate criterion by a determinate one" (*Philosophische Bemerkungen*, p. 248); and the criterion is not of the nature of a fact the existence of which we could have possibly predicted or foreseen.

I suggested, right at the beginning, that Wittgenstein would most likely have reproached the controversy between the realist and the anti-realist conception of the meaning of mathematical propositions as resting on the tendency, just as natural as it is regrettable, to assimilate the case of mathematical propositions to that of ordinary propositions, and mathematics itself to that of a natural science. We are, here, once more concerned with what he considers as the confusion *par excellence*, that from which issue, directly or indirectly, all the pseudo-questions and pseudo-solutions that arise in the philosophy of mathematics. Conversely, all the particularities and the difficulties, real or apparent, of his own conception are, finally, to be explained by his refusal to exploit an analogy which he considers to be superficial and misleading and by his determination to preserve an essential distinction which is constantly menaced without shrinking from any of the implications, at first sight, quite paradoxical, which it can, in certain cases, entail. Considered from this point of view, his philosophy of mathematics becomes, if not immediately acceptable, at least much more coherent and systematic than it could seem to be at first sight.

A mathematical proposition distinguishes itself from a proper proposition in that it is not possible to attribute a meaning to it which would, as in the normal case, be unaffected by truth and falsity and stable with regard to them. Wittgenstein points out that: "A mathematical proposition that has been proved has a bias towards truth in

its grammar. In order to understand the sense of $25 \times 25 = 625$ I may ask: how is this proposition proved? But I can't ask how its contradictory is or would be proved, because it makes no sense to speak of a proof of the contradictory of $25 \times 25 = 625$." (*Philosophische Grammatik*, p. 366). It is none the less true that, in a quite general way: ". . . It is part of the nature of *what we call propositions* that they must be capable of being negated. And the negation of what is proved also must be connected with the proof; we must, that is, be able to show in what different contrasting conditions it would have been a result." (*ibid.*, p. 376). Even to understand what the contrary of the proposition means – or could mean – one must look at the proof itself: "What is the contradictory of what is proved? – For that you must look at the proof. We can say that the contradictory of a proved proposition is what would have been proved instead of it if a particular miscalculation had been made in the proof." (*ibid.*, p.372)

However, there is indeed a type of question which corresponds, in the case of mathematical propositions, to a question that one may, and that one does in fact ask for ordinary propositions, concerning the meaning itself, without having to judge beforehand or to decide *ipso facto* on its truth. This question bears on what Wittgenstein calls "controlling the truth" of a proposition, which refers to the existence of a decision method which applies to all the propositions of a given form: ". . . If I want to raise a question which won't depend on the truth of the proposition, I have to speak of *checking* its truth, not of proving or disproving it. The method of checking corresponds to what one may call the sense of the mathematical proposition. The description of this method is a general one and brings in a system of propositions of the form $a \times b = c$." (*Philosophische Grammatik*, p. 366). The analogy between mathematical propositions and what we habitually call propositions is based entirely on the existence of a method for controlling the truth. If there can be no question of a control of this kind, the analogy becomes inoperative (cf. *ibid.*). Only the method of control can, in effect, give us an idea (a general idea) of what it is for the proposition in question to be true and of what it is for it to be false. The proof (or the refutation) has for effect to deprive one of these two possibilities of its meaning.

There are, then, mathematical propositions which are comparable to ordinary propositions in that one can, in virtue of their belonging

to a system of propositions for which there is a general decision method, assign to them, before they have been verified or refuted, a determinate meaning. And Wittgenstein considers that they should be distinguished, in a more rigorous way than is generally the case, from the mathematical propositions which, to the contrary, are isolated and the meaning of which depends directly on a proof yet to come, and which cannot either, for the moment, be tied to a system of proofs: "For example, the proposition $26 \times 13 = 419$ is essentially one of a system of propositions (the system given in the formula $a \times b = c$), and the corresponding question one of a system of questions. The question whether 26×13 equals 419 is bound up with one particular *general method* by means of which it is answered. Let us compare the proposition which is its answer with one that is totally different, the fundamental law of algebra, viz., that every equation has a solution. This has the form of a proposition and is written as an ordinary English sentence. But it is in a totally different position from the multiplication proposition. It seems to be an isolated proposition, unlike the latter. Also, it seems to get its sense from the proof, while the propositions stating what the product in a multiplication is do not. Whatever the answer to the question, 'Has every equation a solution?', nothing more would be said by it than what the proof gives." (*Wittgenstein's Lectures, Cambridge, 1932-1935*, p. 197). The inconvenience of the verbal expression in prose of a mathematical result is precisely that it obliterates, in a good number of cases, this essential distinction: "The main danger is surely that the prose expression of the result of a mathematical operation may give the illusion of a calculus that doesn't exist, by bearing the outward appearance of belonging to a system that isn't there at all." (*Philosophische Bemerkungen*, p. 375). It is largely the fact of being formulated in verbal language that creates for isolated propositions the illusion of a mathematical environment which, in reality, does not yet exist and which alone could give them a mathematical meaning.

Wittgenstein rejects completely the extensional conception that the platonist mathematician has of a question such as that of whether a determinate sequence of figures appears or does not appear in the decimal expansion of π. And he is naturally conscious of the fact that Brouwer wanted precisely to replace the extensional understanding of the question by an intensional interpretation: "The

intensional view (. . .) is that either one has a proof that there exist three 7s in π or one has a proof that there cannot be three 7s in π. There seems to be still a third alternative, that one has no proof one way or the other. When Brouwer says that the law of the excluded middle does not always hold he is taking the intensional point of view" (*Wittgenstein's Lectures, Cambridge, 1932-1935*, p. 196).

But the intensional conception, if one pursues it to its conclusion, entails a consequence which is paradoxical and which is that "it seems that there seem to be propositions which have no sense until we know whether they are true or false" (*ibid.*, p. 197). And a proposition which acquires meaning only by becoming true or false cannot, quite obviously, constitute an exception to the law of the excluded middle. What Wittgenstein means is that, if, for the moment, we are reduced to calculating step-by-step the sequence of the decimals of π, in such a manner that no characteristic property permits us to formulate some generality concerning the expansion and to make some prediction concerning the kind of thing that one would obtain (or more exactly, that one should obtain) in continuing indefinitely, then the question as to whether such or such a configuration appears or does not appear at a given moment in the expansion is not really a mathematical question at all, and is therefore not an example of a mathematical question which could be irresoluble.

Although Wittgenstein is quite conscious of the considerable difficulties entailed by it, he seems prepared to accept the paradoxical situation which results from adopting the intensional conception and even considers it as constituting precisely the distinctive characteristic of mathematical propositions as opposed to ordinary ones: "The cases in which a mathematical question is similar to an ordinary one are those in which we have a general method for answering it" (*ibid.*, p. 199) with, however, the difference that we cannot imagine what things would be like, if the right answer was in fact wrong, and the wrong one right. A mathematical question resembles an ordinary question when we possess a method of verification which has only to be applied to a particular case, for example, when we have an algorithm which yields the answer to all the problems of a given category. But, on the other hand, it is completely different when we are looking for a decision method

which once found will not only determine the desired answer, but also the real meaning of the question itself. This leads Wittgenstein to venture the following suggestion: "One might say that the verbal expressions in mathematics which we use to describe the results of proofs are used highly metaphorically." (*ibid.*, p. 198) It is the proof and it alone that gives the proposition its strict and literal meaning.

Such a way of seeing things obviously has a direct consequential effect on the question as to whether there could or could not be a mathematical problem which we would, perhaps, never succeed in solving. The problem of the *ignorabimus* has, in the case of natural science, a meaning because it is logically possible to describe, in advance, what one is looking for, and to affirm (rightly or wrongly) that it will not be found. "That which is hidden", remarks Wittgenstein, "must, before it is found, be able to be described as if it were already found" (*Philosophische Grammatik*, p. 363). It is precisely this which is not possible in mathematical research; and it is the reason for which mathematics cannot contain nor entail anything such that one would say of it that it is so hidden that we can have no hope of ever finding it. If I am looking for an ordinary object I can, before having found it (or having found that it was not there), give an irreproachable logical description of it. "But [Wittgenstein remarks] when I am 'looking for' something in mathematics, unless I am doing so *within* a system, what I am looking for cannot be described, or can only apparently be described; for if I could describe it in every particular detail, I would already actually *have* it; and before it is *completely* described I can't be sure whether *what* I am looking for is logically acceptable, and therefore describable at all. That is to say, the incomplete description leaves out just what is necessary for something to be capable of being looked for at all. So it is only an apparent description of what is being 'looked for'." (*ibid.*, p. 363-364)

Of course, it often happens that I look for an ordinary object in accordance with an incomplete description which could give the impression that the expectation and the searching do not concern the object itself, which I shall only know when I have found it. But, as Wittgenstein remarks, what I shall know directly (in Russell's sense of "knowledge by acquaintance") – in so much as it is a confirmation of my expectation – could logically have been de-

scribed and completely so. The description that a mathematical question gives of that which one must look for is not an incomplete description in the sense in which the description of a house that I am looking for could be. For, as Wittgenstein notes, it is not really a description of that which one is looking for.

From a Wittgensteinian point of view, there can be no question of taking sides regarding the problem of the final resolvability of all mathematical problems, which rests precisely on the idea that the mathematically undecided, of which we wonder whether it could not be undecidable, gives us at least an incomplete and indirect description of what it is we are looking for and on the illusion that the discovery will procure a more complete and direct knowledge of something the internal nature of which is really unaffected by this change, whereas for Wittgenstein, it was, to the contrary, the unknown and the problematical. Mathematical construction alone can show us that there was something to be found and the proof of impossibility that it could not. One cannot in mathematics meaningfully say that something will or will not be found. The impression that one has of being able to do so results essentially from a confusion that Wittgenstein expresses as follows: "Could one say that arithmetical or geometrical problems can always look, or can falsely be conceived, as if they referred to objects in space whereas they refer to space itself?" (*Philosophische Grammatik*, p. 365). What renders quite problematical the comparison, at first sight meaningful and useful, between a geographical expedition and a mathematical one is that the space, of which Wittgenstein says that it is "that of which one can be sure in searching" (*ibid.*), is precisely in the second case that which cannot be presupposed and which, to the contrary, remains to be determined, so that one cannot be certain that there is, at the beginning, a goal and a path which leads to it.

There is then, properly, nothing in mathematics of which we could say that we do not know it and that we strive to know it, for there is nothing there awaiting to be discovered. Before the discovery of the North Pole, there was the earth with the North Pole that we were endeavouring to discover. But things are not at all the same in the case of a grammatical discovery (which in fact is not a discovery at all). Before discovering a law of distribution for prime numbers there are not these same prime numbers distributed in a

way which we yet ignore: "After the discovery of the North Pole we don't have two earths, one with and one without the North Pole. But after the discovery of the law of the distribution of the primes, we do have two kinds of primes." (*ibid.*, p. 375). When Sheffer discovered the possibility of expressing all the propositional connectives with only one of them (incompatibility) he did not discover something that we did not know before: "What is it that we did not know before discovering it? (It was nothing that we did not know [*was wir nicht wußten*], but something that we were not acquainted with [*was wir nicht kannten*])" (*ibid.*, p. 361). What Wittgenstein means is that, if we were ignorant of something, then it was only in the sense in which one can be ignorant of a rule, a calculus, a technique, a game, etc., that one has not learnt or with which one is not sufficiently familiar. It is not a question of propositional ignorance (that one could describe in terms of "not knowing that something"), but of that which someone may lack when he does not know a language or does not master a particular symbolism. And it is not possible, in the usual sense of the term, to look for that which one does not yet possess in such cases, that is:

> Does it count as looking for something, if I am unaware of Sheffer's system and I say I would like to construct a system with only *one* logical constant? No!
> Systems are certainly not all in *one* space, so that I could say: there are systems with 3 and with 2 logical constants and now I am trying to reduce the number of constants *in the same way*. There is no '*same way*' here." (*ibid.*).

There is no reality which serves as a support to a possibility which we do not yet know and in which one could propose to look for it. The image of mathematics as it emerges from Wittgenstein's considerations is that of a creation which is pursued indefinitely, without the extensions effectuated being able to be considered as having been conquered in an unknown territory which pre-existed and could already be described in some way. In other words, mathematics (and in general, *grammar*) has no exteriority to which one could refer in order to speak of that which "*has not yet*" been determined or described. Since mathematics operates at the level of meaning and on itself, one cannot construct a theory, relating to the meaning

of mathematical propositions, nor, of course, to that of which mathematics speaks, for it speaks of nothing. One cannot describe mathematics by describing that of which it treats; and it is the reason why there is no metamathematics: "Since mathematics is a calculus and consequently, by essence, treats of nothing, there is no metamathematics." (*ibid.*, p. 250). One can invent a new calculus or a new game (which, in spite of appearances to the contrary, is what the metamathematician himself does), one cannot from the outside speak meaningfully of *the* calculus or *the* game.

Wittgenstein repeats, with the feeling of going against the usual conception, that in mathematics there is no "*not yet*" and no "*up to now*" (cf. *Philosophische Bemerkungen*, p. 187; *Philosophische Grammatik*, p. 481). There can be none save in the trivial sense in which one can say that one has not yet applied an existing computing procedure to such or such numbers. Now, the reference to the "not yet" and the "up to now" plays a crucial role in the critique that the intuitionists formulate against the classical conception. Brouwer considers the Hilbertian postulate of the solvability in principle of all mathematical problems to be perfectly dogmatic. Hilbert affirms that there is no *ignorabimus* in mathematics. Any well determined problem must be able to be and will be resolved: "The real reason why Comte never managed to find an unsolvable problem resides in the fact that there are no unsolvable problems at all. Instead of the stupid *ignorabimus* let our motto be: We must know. We shall know."[16]

Hilbert's error, from Wittgenstein's point of view, is that of according mathematical problems an existence and a meaning entirely dependent on the manner in which they are formulated – which must guarantee that they are 'well determined' – and which are in principle completely independent of the possibility of finding a solution for them and even more of the solution itself. It is precisely this idea that Wittgenstein does not accept. Hilbert is right in saying that where there is a problem there is a possible solution. But everything that resembles a mathematical problem is not (or, at least, is not yet) a mathematical problem. Only in the natural sciences,

16. D. Hilbert, "Naturerkennen und Logik", in *Gesammelte Abhandlungen*, J. Springer, Berlin, 1935, Band III, p. 387.

where the grammar of the hypothesis is not affected by the verification and where one can describe completely what one is looking for, independently of the possibility of finding it, can one give a meaning to the idea of questions the solution of which could remain hidden definitively. In mathematics, there is, in this sense, nothing which is hidden because that of which we would like to say that it will, one day, be discovered or, on the contrary, that it never will be, is something that we cannot really describe.

Wittgenstein maintains that in mathematics it is really the manner in which we look that determines what we are looking for, and the manner in which we found it that determines what we have found. Quite obviously this seems to be a paradox. But this apparent paradox is, for him, constitutive of the very essence of mathematics. To affirm that there is no *ignorabimus* in the natural sciences amounts to formulating an optimistic evaluation of our possibilities of knowledge and of our chances of knowing. But the question, in the case of mathematics, is without meaning, for reasons which are directly entailed by the logic of mathematical propositions, which should be radically distinguished from that of ordinary propositions. To ask oneself whether a mathematical question, the solvability of which depends on the invention of a new calculus or of a new system, will or will not, one day, be able to be solved, would amount to proceeding as if it were possible to ask oneself whether, before the game of chess existed, it would one day exist or not.

Wittgenstein says that proof "is not something that has as its effect that we believe a given proposition, but something that shows us *what* we believe, if, that is, there can be question of belief" (*Philosophische Grammatik*, p. 375). The conception according to which it is the proof itself that gives meaning to a mathematical proposition is indeed difficult to understand and even more difficult to accept. It entails formidable difficulties, of which Wittgenstein was, moreover, largely conscious, and which there could be no question of discussing here. But if one takes such a conception seriously it is just not possible to consider that things happen in the manner described by Dummett, for whom it is essentially because we consider a mathematical proposition to be equipped with a meaning, which allows to suppose that it already possesses one or the other of the two truth-values, that we accept to recognize it as

having the status of a proposition which describes a determinate objective reality.

Everything in Wittgenstein's works indicates that the direction followed, in the case of mathematical propositions, is not only quite different from that of the controversy between realism and anti-realism, as presented by Dummett, but that it is also quite the opposite. For him, we do not, on the basis of a certain idea of the meaning of a mathematical proposition, arrive at a determinate position on the kind of reality which mathematics describes. It is rather the picture of a certain reality that the proposition describes, that is to say, the tendency to assimilate it to a proposition of the ordinary kind, which confers on the mathematical proposition an appearance of meaning independent of the possibility of proving it, in other words, for Wittgenstein, of giving it a real meaning.

MEANING AND ACTIONS IN WITTGENSTEIN'S LATE PERSPECTIVE

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In the remarks which Wittgenstein dedicated to the problem of action it is possible to recognize some lines of development which start in the writings of the transitional period and lead to the late works on philosophical psychology. That does not mean that he gradually arrived at an articulated theory of action, in the style that many later analytic philosophers attempted, but only that he managed with greater and greater perspicuity and coherence to insert his concept of "voluntary action" (*willkürliche Handlung*) and of "aim-oriented behaviour" (*absichtliches Benehmen*) in the network of subjects forming the non-designative and pragmatic view of meaning characteristic of his philosophy after the TLP.[1]

1. Abbreviations used in the text:

TLP *Tractatus logico-philosophicus*, ed. by D.F. Pears & B.F. McGuinness, Routledge & Kegan Paul, London 1961.

Z *Zettel*, ed. by G.E.M. Anscombe & G.H. von Wright. Trans. by G.E.M. Anscombe, Blackwell, Oxford 1967.

PI *Philosophical Investigations*, ed. by G.E.M. Anscombe, Blackwell, Oxford 1953.

RPP I *Remarks on the Philosophy of Psychology*, Vol. I, ed. by G.E.M. Anscombe & G.H. von Wright. Trans. by G.E.M. Anscombe, Blackwell, Oxford 1980.

RPP II *Remarks on the Philosophy of Psychology*, Vol. II, ed. by G.H. von Wright & Heikki Nyman. Trans. by C.G. Luckhardt & M.A.E. Aue, Blackwell, Oxford 1980.

LW *Last Writings on the Philosophy of Psychology*, ed. by G.H. von Wright & Heikki Nyman. Trans. by C.G. Luckhardt & M.A.E.Aue, Blackwell, Oxford 1982.

BBB *The Blue and Brown Books*, Blackwell, Oxford 1964.

PR *Philosophical Remarks*, ed. by R. Rhees. Trans. by R. Hargreaves & R. White, Blackwell, Oxford 1975.

Besides, it would have been strange that the treatment of the theme of action escapes that style of analysis proposed in a fragment contained in Z for all the propositions on phenomena of mental life:

> The pedigree of psychological concepts: I strive *not* after *exactness*, but after a synoptic view. The treatment of all these phenomena of mental life is not of importance to me because I am keen on completeness. Rather because each one casts light on the correct treatment of *all*. (§§ 464-465)

In his later works it is possible to observe the emergence of new charaterizations of the concept of action, which, even if presented against the same background, reshape the theses maintained since 1930 and integrate them in a more ample frame of relationships with the achievements obtained not only in the field of the theory of meaning but also of the philosophy of mind.

It is believed, with good reason, that the more important treatment reserved by Wittgenstein to the theme of action is contained in PI and forms part of §§ 201-242 dedicated to the rule-following topic. In these paragraphs the arguments on action intermingle with those on rule-governed behaviour and are connected so strictly to the theory of meaning developed in the previous paragraphs that it becomes difficult to formulate them independently of the philosophical-linguistic theses maintained by Wittgenstein in the same context. The analysis of cases of rule-governed behaviour, of propositions on deliberate actions serves in effect to illustrate the impossibility of a language of pure sensations, of a "private language" and to reaffirm the pragmatic criterion of meaning – of meaning as use – that Wittgenstein polemically contrasted with the traditional descriptivistic theories, including the picture theory of TLP.

However, this part of Wittgenstein's contribution to a theory of action will not be here included in my considerations; instead I will

PG *Philosophical Grammar*, ed. by R. Rhees. Trans. by A. Kenny, Blackwell, Oxford 1974.

LPP *Wittgenstein's Lectures on Philosophical Psychology 1946-47*. Notes by P.T. Geach, K.J. Shah, A.C. Jackson, ed. by P.T. Geach, Harvester-Wheatsheaf, New York-London-Toronto-Sydney-Tokyo 1988.

OC *On Certainty*, ed. by G.E.M. Anscombe & G.H. von Wright. Trans. by D. Paul & G.E.M. Anscombe, Blackwell, Oxford 1969.

focus on another important group of remarks contained in PI, where the subject of action is inserted in a domain of problems of epistemological character and implanted in the distinction between "dispositions" and "states"[2], which is the heart of Wittgenstein's philosophy of mind. I refer to §§ 571-693 contained in Part I of PI, where the arguments deriving from the criticism of a private language remain in the background and the polemic against the received mentalistic and psychologistic theories of inner states becomes central. It is just in this context that the refutation of the reference of some dispositional verbs like: believe, hope, imagine, think, expect to mental states and the thesis of the dispositional character of propositions on voluntary actions are rooted.

As we know, Wittgenstein himself indicated the texts that were to constitute Part II of PI and the *corpus* of remarks later collected in Z choosing them from an enormous pile of notes which between 1946-1949 he had dedicated to the problems of the foundations of psychology. It was only after the subsequent publication in the 1980's of a great quantity of Wittgenstein's last writings that the actual weight of his mature contribution in this field could be fully appreciated. Neither the two volumes of RPP nor LW show a change in the general perspective expressed in PI and in Z, but they no doubt contribute to the clarification and sometimes to the development of some central theses. It is precisely our purpose to indicate the role that the problem of voluntary action plays in Wittgenstein's late philosophy of mind and the place it occupies within the system of propositions containing psychological verbs.

It is important to observe that it is only in the research on philosophical psychology that the concept of voluntary action assumes the meaning of an autonomous explicative category and is given more specific attention than it was the case in the central part of PI, where it was intended as a sort of corollary to the pragmatic theory of meaning. The relationship of a concept like this of action with thematic areas seemingly very remote like the analysis of sensations, images, states of consciousness and the phenomena of seeing aspects helps to discover the vast articulation of Wittgenstein's theses on the mind and meaning proving indirectly the

2. PI § 149.

rigorous, even if hidden, systematic character of his late perspective and to clarify, maybe definitively, the underlying motivations of his epistemology.

The idea that propositions on voluntary actions must be inserted in the grammar of dispositionals and subtracted from the grammar of states is the central thesis of §§ 571-693 of PI and is one of the subjects which, interwoven with others, recur in sections VIII-XI of the work. In Wittgenstein's arguments with which he develops his ideas, it is easy to recognize a *pars destruens* and a *pars construens*. The first one consists in the usage of the distinction between dispositions and states to get rid, once and for all, of the "misleading parallels" which undermine the explicative claims of scientific psychology and of its introspective methods, the second lies in the developing on the basis of such a distinction a "conceptual" analysis of the phenomena of mental life which would be an adequate instrument to locate voluntary actions in the pedigree of psychological concepts. The "plan" for the treatment of such concepts was never to be completed by Wittgenstein, but the posthumous writings published in Z and later in RPP I-II are its impressive draft.

The *pars destruens* of Wittgenstein's arguments is certainly not new, going back to at least the transitional works and to the attempt, carried out in BBB to de-mystify the propositions which, containing verbs like: intend, understand, know, conjecture, imagine, believe, wish, expect, doubt, etc. seem to refer to "personal experiences", inner states or processes. In the context of the investigations conducted in 1930-32 in PR and in PG Wittgenstein had already given the first clarification of the *status sui generis* of such sentences, called by Russell "propositional attitudes" and which he himself in TLP 5.541 had indicated as "Sätze der Psychologie". In the transitional works the peculiarity of these constructs had been attributed to the difficulties with their analysis in terms of truth-functional logic and linked to their irreducibility to extensional sentences.

In PR in particular, taking as an example the subclass of dispositionals consisting of propositions on intentions and expectations, Wittgenstein demolishes Russell's thesis according to which they are "external relations" whose meaning is given by reference to

objects intended or objects expected, which would be in a way the "fulfillment" of the intention or expectation expressed in the proposition. To Wittgenstein they are rather "internal relations", which don't obey a descriptive model of analysis and therefore appear resistant to the treatment by means of truth-functional logic. They rather require a rule-following-purposive model, more adequate to determine the meaning of propositions on actions, not on the basis of extra-linguistic reference but of purposes, interests or intentions "internal" to their expressions.

Wittgenstein's polemic against Russell regarding the analysis of dispositional contexts is certainly inspired by the discovery of the role that the intentional element plays in the language.[3] The attribution of a high number of expressions of our language not to a designative but purposive or intentional model of analysis permitted Wittgenstein to perceive from now on the affinity between dispositionals and activities and to locate the propositions on actions in the wide class of sentences which he calls in PR "internal relations". Nevertheless, in PR he remained prisoner of the distinction between the "inner" and "outer" which was to prevent him from harvesting the fruit of his discovery. Moreover, in the transitional phase of his thought he did not yet complete the *pars destruens* of his argument on dispositionals. If it is true that he proved that intentional constructions are not external but internal relations and that this *status sui generis* is shared by a great class of dispositionals, he had not yet denied that the meaning of these constructions is not given by the reference to inner states or processes. This new negative argument is explicitly formulated in BBB and leads up to the *pars construens* of the concept of voluntary action, which is elaborated in terms of the grammar of dispositionals developed in PI, RPP I-II and LW.

Unfortunately the terminology adopted by Wittgenstein in PR in order to qualify intentional constructions as internal relations is inadequate and misleading. He may have realized the fact that it did not appear immune from psychologistic influences, if he avoids accurately to use the term of "internal relations", which occurs only once in Part II of PI in the context of the discussion of "seeing-as", i.e.

3. PR § 20.

when the overcoming of psychologism had been achieved and eliminated the danger of misunderstandings. In effect the conception of internal relations in PR seems still immersed in the conception of intentionality formulated by Brentano in his *Psychologie vom empirischen Standpunkt*, according to which an intentional relationship: "a believes/imagines/hopes that b" is different from a physical relation "a is to the left of b" because in the latter the objective existence of the terms of the relations is required, in the former it doesn't (one can believe, imagine, hope something that is not there).

Wittgenstein was to break free from the "internalistic" view of intentionality, when it became clear that the distinction between intentional or psychological sentences and physical or extensional ones did not mean a revival of Brentano's psychology but its rejection, as radical as that of Russell's conception of propositional attitudes. He will refuse the proposal to determine the meaning of dispositionals in terms of external relations as well as through internal criteria, i.e. by reference to inner experiences or *Erlebnisse* and he will interpret them as expressions of linguistic techniques or practices, whose meaning depends on the system of rules in which they are "embedded", on the circumstances under which experiences take place. The difference between intentional and extensional constructions does not concern in any way a difference between the objects of internal or external relations but is a "conceptual" difference which requires different grammars valid to learn their use.

§§ 571-693 of PI in a way link the internalistic approach to the intentionality of the transitional works and the theory of voluntary action developed in the writings on philosophical psychology. The most famous and perhaps the most important remark that recurs there is the distinction in § 664 between "surface grammar" and "depth grammar" in the use of words. In the light of this distinction Wittgenstein lays out the problem of the "grammar of the states", or better, of the verbs treated grammatically as "states" (§ 573), which is the central argument in these paragraphs. In §§ 571-610 and 661-693 one can observe, on the one hand, the development of the analysis of intending, believing, expecting, hoping, having an opinion, willing, etc., which goes back to PR and, on the other hand,

the introduction, in the course of the analysis of "willing" in §§ 611-660[4], of the concept of voluntary action whose clarification will cast light on the depth grammar of all the verbs which according to the surface grammar are considered "states".

The first argument of §§ 571-693 is that the meaning of the so called propositions on personal experiences or *Erlebnisse*, in which psychological verbs such as intend, understand, know, want, will, believe, hope, have an opinion, etc. occur is not given by reference to, but depends on "outward criteria". Above all Wittgenstein gets ready to reject the hypostatization of "feelings" (*Gefühle*) or "psychological atmospheres" (*psychologische Atmosphären*) which serve in philosophy to explain mental states or processes, including thinking.[5] Wittgenstein claims, instead, that one cannot expect any clarification of the meaning of verbs like "to have an opinion" if we say that it is the state of the soul or of the mind of Mister N.N., for example (§ 573). It is rather the consideration of the whole context within which a person arrives at an opinion and can change it, wishes some things detesting others, takes up habits which make certain situations familiar, or acquires by means of a long training the skill required to master a language that offers the criterion on the basis of which we say that Mr. N.N. has an opinion.

It is not the reference to inner criteria, to a "quite impalpable fine atmosphere of the speaking and acting" accompanying the utterance of a sentence in which verbs like hope, intend, imagine, believe occur or to a "particular feeling of familiarity and naturalness" connected to the use, for example, of knowing and of understanding that can be a criterion of meaning for expressions of mental processes. According to Wittgenstein, the explanation of inner states "stands in need of outward criteria" (§ 580), i.e. their meaning depends on the context in which the verbs describing internal

4. P. F. Strawson in his masterly review of PI, *Mind*, LXIII, 1954 and in G. Pitcher (ed.), *Wittgenstein. The Philosophical Investigations*, Macmillan, London 1968, pp. 22-64, drew attention to these paragraphs.

5. See PI § 598: "When we do philosophy, we should like to hypostatize feelings where there are none. They serve to explain our thoughts to us. '*Here* explanation of our thinking demands a feeling!' It is as if our conviction were simply consequent upon this requirement." Clearly Wittgenstein refers to Russell's and W. James's views.

experiences are used, on the situations in which they are "embedded" and from which they "arise" (§§ 581, 591). Would it make sense to hope – Wittgenstein wonders –

> for the space of one second – *no matter what* preceded or followed this second? What is happening now has significance – in these surroundings. The surroundings give it its importance. And the word "hope" refers to a phenomenon of human life. (§ 583)

"'Grief'" – Wittgenstein says in another passage – "describes a pattern which recurs, with different variations, in the weave of our life" (PI II, p. 174). Hope, grief, happiness are parts of a pattern which assume their meaning from the interplay with others. Understanding, intending, hoping, having an opinion are then expressions of skills acquired in the linguistic practice, "special applications of language, for special purposes" (PI § 609).[6]

If it is true, then, that the argument formulated in PI §§ 571-693 about utterances which grammatically seem to refer to "states" still belongs to the *pars destruens* of Wittgenstein's grammar of dispositionals developed in the transitional works – from PR to BBB – nevertheless the demand for outward criteria of meaning for the propositions on mental phenomena is a clear harbinger of the arguments of the *pars construens* to be formulated in the "plan for a treatment of psychological concepts". Among the "logical characteristics" of concepts such as knowing, believing, understanding, intending, willing, imagining, having an opinion, etc. one can observe that in contrast to "states" like seeing, hearing, tasting or to sense perceptions or emotions like being hungry, cold or afraid, feeling pain, shame or anger, they express "dispositions", i.e. consolidated linguistic abilities, aim-oriented behaviours, actions which are "subject to will" (RPP II § 63). In other words, when we speak of a thing "that simply happens to us", that "comes when it comes, and I cannot bring it about" (PI §§ 611- 612) we contrast these states with those which, instead, are "voluntary", that we can bring about; here we speak of what we do, about our "actions" (§ 612).

6. "Can only those hope who can talk? Only those who have mastered the use of a language. That is to say, the phenomena of hope are modes of this complicated form of life." (PI II i, p. 174)

In §§ 611- 612, which are dedicated to the analysis of what is wrongly considered a state, namely to the analysis of the "willing" – and at the same time to that of "intending" – there emerges the importance of voluntary actions as a subclass of the special class of dispositionals. It is in reference to this class of expressions that Wittgenstein introduces the argument according to which the determination of meaning on the basis of "outward criteria" does not apply to states (*Zustände*) but to actions (*Handlungen*), to voluntary actions (*willkürliche Handlungen* or *Willenshandlungen*). Also regarding the notion of willing we can say that the criterion to determine the meaning of propositions on actions subject to the will – I lift my arm and how do I know that I lifted it?[7] – is not given by reference to introspective acts on whose basis there is a metaphor according to which the will is the "motor" of all voluntary actions (RPP II § 78). The will does not accompany the action, but is in a way identified with it: "it is not a mover, but what is moved" (PI § 618), it is in some way the "mark" which characterizes the subclass of dispositions called by Wittgenstein voluntary actions. The meaning of the willing and intending is once again the "doing".

The arguments introduced in PI §§ 611-660 correspond to an extensive complex of texts included in some sections of Part II of PI, in Volume II of RPP and in the analogous fragments of Z. Collecting the scattered remarks dedicated in these texts to the subject of voluntary action, it is possible to distinguish with sufficient clarity the main arguments which form this time the *pars construens* of Wittgenstein's grammar of actions, i.e. the connection of what he calls his "main problem", that of a "conceptual" analysis of psychological concepts, with the "epistemological problem of willing" (Z § 590).

The core of the arguments of the *pars construens* which emerge from the mentioned complex of texts – particularly from the cen-

7. See PI § 612: "I should not say of the movement of my arm, for example: it comes when it comes, etc. And this is the region in which we say significantly that a thing doesn't simply happen to us, but that we *do* it. 'I don't need to wait for my arm to go up – I can raise it.' And here I am making a contrast between the movement of my arm and, say, the fact that the violent thudding of my heart will subside."

tral § 111 – could be expressed by stating that the outward criteria of meaning belong to the grammar of actions, i.e. to the contexts or language-games in which we learn to use concepts that occur in the propositions on "creative acts" (*schöpferische Akte*):

> I learn the concept 'seeing' along with the description of what I see. I learn to observe and to describe what I observe. I learn the concept 'to have an image' in an entirely different context. The descriptions of what is seen and what is imaged are indeed of the same kind, and a description might be of the one just as much as of the other; but otherwise the concepts are thoroughly different. The concept of imaging is rather like one of doing than of receiving. Imagining might be called a creative act. (And is of course so called.)[8]

As we saw when discussing the arguments of the *pars destruens*, once again Wittgenstein articulates his ideas not by means of logically constructed arguments, but by means of examples which form a "synoptic view" within which the characteristic traits of propositions expressing c r e a t i v e acts are derived from the difference and the confrontation with d e s c r i p t i v e contexts and language-games in which we learn the use of concepts "along with the description of what" the concepts designate.

To exemplify the variety in which we learn the employment of psychological concepts Wittgenstein makes the example of two pairs of verbs: in PI and RPP I he uses the pair seeing-as/seeing (*Sehen als/Sehen*)[9], in RPP II and LW the pair imagining/seeing (*Vorstellen/Sehen*)[10]. It is easy to understand that Wittgenstein considers the phenomena of seeing-as and imagining to be clear examples of what is intended by voluntary action or creative act. To the topics of "seeing aspects" and of the "imagination" he devoted – and it is hardly necessary to remind the reader of this – his continuous attention, dedicating to them not only some of the most fascinating pages of his mature works, but also attributing to them a prominent position in philosophical psychology.

The problem of seeing aspects and of its categorial difference from the phenomenon of seeing dominates the whole section xi of

8. RPP II § 111; Z § 637.
9. PI II, xi and RPP I §§ 1-33; 411-436; 860-1137.
10. RPP II §§ 63-147; LW §§ 165-178; 429-732.

Part II of PI[11] and serves to emphasize the difference between "actions" and "states" which appears also in the first paragraph of RPP I almost as if to indicate the Leitmotiv of the entire work:

> Let's consider what is said about such a phenomenon as this: seeing the figure sometimes as an F, sometimes as the mirror-image of an F.
>
> I want to ask: what does seeing the figure now this way now that consist in? – Do I actually see something different each time; or do I only *interpret* what I see in a different way? – I am inclined to say the former. *But why*? Well, interpreting is an action. It may consist, e.g., in someone's saying "That's supposed to be an F", or he doesn't say it, but when he copies the sign he replaces it by an F; or he considers: "What may that be? It'll be an F that the writer slipped with". Seeing isn't an action but a state. (A grammatical remark.)

Even if given less space than the notion of seeing aspects, the subject of imagination was considered by Wittgenstein of primary importance, as he indicates it – along with sensations and emotions – as one of the three topics of his project for a philosophy of psychology[12]. In fact, in Wittgenstein's considerations on the nature of seeing-as and of the imagination one can identify, as we shall see when examining § 63 of RPP II, a guideline for the construction of a map of psychological concepts, which seems to be Wittgenstein's real intention in his journeys in the boundless landscape of philosophical psychology. In the map we can see the "tie-up" as well as the difference of the concepts: "The language-games employing these concepts are radically different – but hang together" (Z § 625). This map makes possible the confrontation of the diverse classes of concepts within the context in which they are embedded. The idea introduced in § 580 of PI, that the meaning of verbs expressing inner processes depends on "outward criteria", also called by Wittgenstein "system", "context" and sometimes "background" or "language-game" appears at the end of the quoted § 1 with extreme clarity, and it is re-affirmed in other passages, e.g. in the persuasive § 303 of RPP I:

11. On this subject see M. Budd, "Wittgenstein on Seeing Aspects", *Mind*, 96, 1987, pp.1-17.

12. RPP II §§ 63; 148. See parallel paragraphs in Z §§ 472, 488, 489, 490, 491, 492.

> In order to know your way about an environment, you do not merely need to be acquainted with the right path from one district to another; you need also to know where you'd get to if you took this wrong turning. This shows how similar our considerations are to travelling in a landscape with a view to constructing a map.

The draft with which Wittgenstein presents his "plan" in a well-known fragment which occurs in RPP II and in Z epitomizes the synoptical style which characterizes his theses on psychological concepts.[13] The plan, as we have seen before, is called a "map", sometimes a "pedigree" (*Stammbaum*)[14], sometimes a "classification" or a "catalogue" of such concepts[15], in the sense that it serves to discover and to put in evidence logical characteristics and grammatical differences which allow one to attribute to certain constructs a role within the whole class of sentences containing psychological verbs. The uncertainty that still governs the chronology and the order of presentation of the substantial material of Wittgenstein's *Nachlaß* makes it difficult to say whether the formulation of the plan is a real project for further investigations, or better a *résumé* of the research already undertaken and not adequately developed. Actually, § 63 of RPP II – as well as the additional § 148 – has a structure which lends itself to an interpretation in the second sense. Let us just quote the entire § 63 which contains essential, even if sketchy indications regarding the place attributed by Wittgenstein to voluntary actions in the classification of psychological concepts and therefore of direct interest in our subject:

> Plan for the treatment of psychological concepts.
> Psychological verbs characterized by the fact that the **third person of the present is to be identified by observation, the first person not.**
> Sentences in the third person of the present: information. In the first person present, expression. ((Not quite right.))

13. On the topics of RPP I see C. Peacocke, "Wittgenstein and Experience", *Philosophical Quarterly*, 32, 1982, pp. 162-80 and of RPP I-II G.P. Baker & P.M.S. Hacker, "The Grammar of Psychology: Wittgenstein's 'Bemerkungen über die Philosophie der Psychologie'", in S. Shanker (ed.), *L. Wittgenstein: Critical Assessments*, II vol., Croom Helm, London 1986, pp. 353-72.

14. RPP I § 895; Z 464.

15. Z § 488; RPP I § 837; RPP II § 148.

Sensations: their inner connexions and analogies.
All have genuine duration. Possibility of giving the beginning and the end.
Possibility of their being synchronized, of simultaneous occurrence.
All have degrees and qualitative mixtures. Degree: scarcely perceptible-unendurable.
In this sense there is not a sensation of position or movement.
Place of feeling in the body: differentiates seeing and hearing from sense of pressure, temperature, taste and pain.
(If sensations are characteristic of the position and movements of the limbs, at any rate their place is not the joint.)
One *knows* the position of one's limbs and their movements. One can give them if asked, for example. Just as one also knows the place of a sensation (pain) in the body.
Reaction of touching the painful place.
No local sign about the sensation. Any more than a temporal sign about a memory-image. (Temporal signs in a photograph.)
Pain differentiated from other sensations by a characteristic expression. This makes it akin to joy (which is not a sense-experience).
"Sensations give us knowledge about the external world."
Images:
Auditory images, visual images – how are they distinguished from sensations? Not by "vivacity".
Images tell us nothing, either right or wrong, about the external world.
(Images are not hallucinations, not yet fancies.)
While I am looking at an object I cannot imagine it.
Difference between the language-games: "Look at this figure!" and: "Imagine this figure!"
Images are subject to the will.
Images are not pictures. I do not tell what object I am imagining by the resemblance between it and the image.
Asked: "What image have you?" one can answer with a picture.[16]

Despite the schematic character and the seemingly asystematic listing of different themes which appear, at first sight, to be mentioned at random, § 63 has a clear structure organized in t h r e e correlated blocks. The first block refers to the fundamental characteristics of the whole class of psychological verbs, the second block provides an analysis of sensations and the third includes a list of

16. [Bold type added by R. Egidi.]

remarks dedicated to images. §148 mentions another theme which should integrate the preceding systematic catalogue adding, so to speak, a new "chapter" on "emotions" (*Gemütsbewegungen*). It is clear that Wittgenstein emphasizes here the necessity to distinguish the treatment of sensations from that of images according to the different grammars they obey: the grammar of states and of dispositions he introduced in § 149 of PI.

To the question what the "characteristic trait" shared by the entire family of psychological concepts is, Wittgenstein answers, in the introductory block of § 63, that it is the "asymmetry" of propositions in which the verbs are employed in the first and third person of the present ("I believe to come" and "he believes to come").[17] While in the latter employment the propositions have a "descriptive" meaning, i.e. the sense of an "information" (*Mitteilung*) that can be verified or falsified "by observation", in the former case, instead, they cannot refer to information, as it wouldn't make sense to inform myself about my belief to come. Psychological verbs in the first person present, are rather the "expression" (*Äusserung*) of the disposition or ability to do something. As opposed to the verbs in the third person with their informative, descriptive function, the former evoke a kind of concept related to that "of doing" (*eines Tuns*).

The asymmetrical use of psychological verbs in the first and third person shows, in other words, that they do not constitute a uniform class of utterances but a variety of classes obeying different grammars. Sensations and images are indicative of two fundamental classes governed respectively by the grammar of states and by that of dispositions. § 63 mentions the theme of the will and sums up a thesis which runs through Wittgenstein's writings on philosophical psychology, i.e. the view that verbs for voluntary actions do not share with sensations the epistemological *status* of concepts which we use as a description or as a "picture" of something, that "takes place whether we will it or not" (RPP II § 116), but have a "relationship" with images, intentions, vision of aspects whose concepts resemble those of actions, i.e. they are used in contexts that "we control" and "can also be compared to *creating* a picture" (§ 115).

17. RPP I § 836; RPP II §§ 63; 279-292; LPP, pp.191-212, 276-308.

In the s e c o n d block of § 63 Wittgenstein enumerates the "logical characteristics" of sensations expressed by concepts like seeing, hearing, tasting, etc., and "their inner connexions and analogies" which justify our putting them together as belonging to the same class of psychological constructs.[18] Two kinds of characteristics are pointed out. The first one concerns the temporal, qualitative and spatial characteristics which are typical of all the sensations and those which differentiate them from other states, a topic extensively discussed in PI and later writings.[19] The characteristics that all sensations share are: "genuine duration" (*echte Dauer*), degree and course (*Grad* and *Verlauf*), "qualitative mixtures" (*qualitative Mischungen*), simultaneity and the possibility to determine their synchronization.[20] Localization in the body is another characteristic that not all sensations share and that differentiates e.g. pain and joy as well as "seeing and hearing from sense of pressure, temperature, taste and pain". The second characteristic emphasized in § 63 concerns the epistemological *status* of sensations, i. e. their having a cognitive import, as they "give us knowledge about the external world". This essential trait that sensations share with all types of "states" is clearly linked to the fact that we learn the use of verbs for sensations along with the description of observable objects that we see, hear, taste and which inform us, therefore, about their truth or falsity.

In the f i n a l block of § 63 the logical characteristics of images are derived by contrast from those of sensations. The differences that Wittgenstein points out are essentially of f o u r kinds. Above all one can observe that images do not exhibit the logical characteristics of the first kind attributed to sense-perceptions: they don't have the simultaneity and the possibility to be synchronized, which are typical of sensations ("While I am looking at an object, I cannot imagine it"). Another difference concerns the language-games within which sensations and images respond to orders ("Look at this figure!" and "Imagine this figure!") and to questions ("Asked 'What image have you?' one can answer with a picture", but one cannot

18. RPP II § 59; Z § 474.
19. PI §§ 243-251; RPP I §§ 305-459; RPP II §§ 321-501.
20. RPP II §§ 50-62.

answer with a picture to the question "What sound do you hear?").

However, the last block of § 63 is almost entirely dominated by a more important difference that opposes images to the second kind of characteristics attributed to sensations: images do not have an epistemological *status*, they "tell us nothing, either right or wrong, about the external world". In this sense "false" sensations, like hallucinations or after-images, cannot be "images" in Wittgenstein's sense.[21] The characteristic that he eventually attributes to images and that, along with the previous one, they share with the whole class of dispositions is to be "subject to the will". This characteristic, then, makes the utterances containing words like imagining, intending, believing, seeing aspects, etc. that class of propositions which in other texts Wittgenstein calls actions and, more exactly, voluntary actions or creative acts. In reality the last characteristic is strictly bound to the previous one, as its corollary. According to Wittgenstein, to say that images do not have an epistemological or cognitive *status* means that they are "subject to the will", they are not descriptions but "activities". § 80 clarifies this nexus in a conclusive way and makes it the central argument of the *pars construens* of Wittgensteinian grammar of action and perhaps the leading theme of his treatment of psychological concepts:

> It is just because imaging is subject to the will that it does not instruct us about the external world.
> In this way – but in no other – it is related to an activity such as drawing.
> And yet isn't easy to call imaging an activity.

Wittgenstein points out this idea when he emphasizes in § 125 the difficulty to think the nexus between the logical characteristics shared by images and actions and draws attention to the fact that "the degree of this relationship has yet to be investigated".

At this point it is perhaps possibile to realize why Wittgenstein considers psychological verbs for sensations categorially different from those for images and why they occur in propositions that do not have the meaning of a report on mental states or processes, but form a separate class of propositions whose criteria of meaning are

21. See also LPP, pp. 210-12.

of an outward nature, derived from a context expressing a recognized praxis. Now, we know from § 608 of PI that the propositions which obey outward, pragmatic criteria of meaning bear, so to speak, the mark of "voluntary actions", of actions "subject to the will".

The synopsis of § 63 does only partial justice to the extensive scrutiny of psychological concepts Wittgenstein undertook throughout all the writings of his late phase. Actually, it seems to have some gaps. What is missing is, for example, a reference to the great theme of the difference between "motives" and "causes", which nevertheless holds a position of prominence in the analysis of "intentions" Wittgenstein undertook in PI[22] and to a further characteristic that Wittgenstein attributes in OC to the "convictions"[23], i.e. that they "do form a system, a structure" (§ 102).[24] However, it is easy to understand that in the sketch proposed in § 63 Wittgenstein tried to draw attention to the fundamental characteristics of images which sum up, according to him, their categorial difference from sensations and are then in a position to validate the central theses of his philosophical psychology. In effect, the non-cognitive and voluntary (subject to the will) character of images – and by extension of intentions, hopes, conjectures, expectations, beliefs, and convictions – allows one to attribute to the grammar of dispositions, and in particular to the actions, those psychological concepts that within the traditional surface grammar had been treated as concerning "states".

Here and there in the fragments collected in RPP I-II and in LW there are traces of the arguments developed in PI on the causal inefficiency of intentions with respect to states. Also the texts published in LPP testify that in his lectures of the time Wittgenstein came back again and again to the argument of "motives" as to the request of contextual, outward criteria for the explanation of actions.[25] On the other hand,

22. PI §§ 641-647; 661-662; II, pp. 224-225. See also LPP, pp. 213-28.

23. Forms of conviction are belief, certainty, doubt, etc. (RPP I § 836).

24. See also OC § 106.

25. RPP I §§ 630-633; 905-906; II §§ 172, 175; LW §§ 907-908. In contrast to the physical or empirical explanation Wittgenstein exemplifies in PR § 172 the "intentional explanation" (*intentionale Erklärung*) as concerning concepts like "the highest point of a curve".

also the arguments on the systematic meaning of dispositionals is anything but absent in the writings on philosophical psychology, as in the passages where the possibility of describing human behaviour – in contrast to that of describing observable facts – is given "by showing the actions of a variety of humans, as they are all mixed up together. Not what *one* man is doing *now*, but the whole hurly-burly, is the background against which we see an action, and it determines our judgement, our concepts, and our reactions."[26] To the character of states, which "can suddenly change into other ones" Wittgenstein opposes "the absence of surprise" (PI § 628; RPP II § 88) which takes place in the language-games where there isn't anything "that *happens* to us" but where we ourselves suggest the rules of the game and master and control the situation.

In the remarks on the logical characteristics of psychological concepts connected to § 63 Wittgenstein does not seem in any case interested in integrating the points emphasized in his synoptical catalogue. In §§ 64-182 of RPP II he dwelled on the arguments collected under the label of the "epistemological problem of the will" and discusses the special meaning he attributes to his concepts of "voluntary" ("subject to the will") and "creative". In the sequence of §§ 78-131 he warns above all about the misunderstanding that such expressions could provoke if one considers the will as "a kind of motor" producing images (§ 78).[27] According to Wittgenstein it is not possible to speak about the voluntariness of actions in the same sense in which we say that tasting or not tasting an object is voluntary or involuntary. Regarding dispositions as images, intentions, hopes, doubts, convictions we use the term "voluntary" or "involuntary" in the sense that we give to orders like "'Imagine that' or again 'Don't imagine that'" (§ 83). We take or receive, for example, what we taste, whereas what is imagined "does not happen to us" but, so to speak, we create it (§ 111). Saying that images are voluntary and sensations are involuntary does not mean to distinguish "between sensations and images, but rather between the language-games in which we deal with these concepts" (§129), between the contexts within which we have learnt their usage. "If

26. RPP II § 629; Z § 567.
27. See also LPP, pp. 154-91.

one says 'Imagination has to do with the will'" – Wittgenstein concludes – "then the same connection is meant as with the sentence 'Imaging has nothing to do with observation'" (§ 131).

The confrontation of the different language-games, which characterizes the grammars of images and of sensations, clarifies that in the latter case we deal with empirical propositions subject to direct observation, whereas in the former case we deal with propositions whose meaning is given on the background of a consolidated certainty, of a shared habit, of received techniques and practises. As such, images are intangible and infallible and in this sense, and in no other, they are immune from the verification and falsification. It then becomes clear why it is wrong to claim that the use of psychological verbs like: imagine, intend, believe, understand, see aspects, etc., refers to personal, incommunicable and indescribable experiences, to internal private processes, accessible only to ourselves. If it is true that this class of psychological verbs does not speak about the world and therefore cannot be true or false, nevertheless they do not refer to inner, incommunicable private experiences. This class of concepts does not have in any sense an epistemological *status*. The understanding of their meaning, the learning of their use does not belong to the context of knowledge, but to that of creation, i.e. they do not describe objects but stand for actions.

THE TROUBLED HISTORY OF PART II OF THE *INVESTIGATIONS*

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There have been some doubts and even some controversy about the relations between the two writings which were published posthumously in 1953 under the name *Philosophische Untersuchungen.* The typescript published by the editors Anscombe and Rhees as "Teil I" ("Part I") carried the title "Philosophische Untersuchungen" given to it by Wittgenstein. It is not known whether the typescript published as "Teil II" had the same or a different title or any title at all. The names "Teil I" and "Teil II" are by the Editors.

The beginning pages of the typescript for Part I (TS 227 of the Catalogue of Wittgenstein's *Nachlaß*) contain the Preface, dated "Cambridge, im Januar 1945". The Preface, however, also exists in the form of a separate typescript dated by Wittgenstein in handwriting. This separate typescript – TS 243 of the Catalogue – came to light only in 1977. It is not in every detail identical with the printed typescript (of TS 227). It looks as if the printed version is a later revision of the separate typescript. For this speaks the change of the word "two" to the word "four" in the sentence which says that the author when re-reading *Tractatus* with a friend (Nicholas Bachtin) came to the opinion that the *Tractatus* and the *Investigations* should be printed together – an idea which turned out to be impracticable in 1953.

Originally, i.e. at the time when it was dated, the Preface must have belonged to a different text which does no longer exist in the form of *one* complete typescript. This was what I have called "The Intermediate Version of the *Untersuchungen*". It was presumably there complete in the beginning of 1945. Later that same year Wittgenstein greatly expanded this version by adding to it about 400 new remarks selected from manuscripts from the early 1930's onward. It is this expanded version which now constitutes Part I of

the printed book. There may be some improvements made by Wittgenstein to it after 1945, but no whole remark in Part I postdates that year.

The preserved TS 227 is, for all I can understand, *not* identical with the copy from which the printing of the book took place. It has numerous insertions which are not in Wittgenstein's handwriting. They are presumably copied from the printing typescript which seems to have been the only complete copy at the time of Wittgenstein's death. If I am right, the "original" typescript of Part I thus is lost.

This regrettable fact also remains something of a mystery. I have been told that checking matters sometime in the 1970s with the publisher, Basil Blackwell, had revealed that the entire typescript of the book had been returned by registered mail to one of the editors. Professor Anscombe, however, cannot remember having received it. I myself have not been able to confirm the information about its return after printing.

The bulk of the remarks in Part II were selected by Wittgenstein from manuscripts written between May 1946 and May 1949. More than half of them date from the time October 1948-March 1949. It is just possible that there are a few remarks of slightly earlier date than May 1946, viz. those which stem from the undated part of MS 130 of the Catalogue.

The selection of remarks resulted in another *manuscript*, MS 144. This manuscript, evidently, was the basis of the *typescript* from which Part II of the book was eventually printed. In reply to an inquiry by Mr. Heikki Nyman many years later (1980), Rush Rhees attests that of this typescript there existed, in addition to the top copy, also a second copy. The top copy, he said, had certain corrections in Wittgenstein's hand. This was the copy sent to the Printer. The second copy, Rhees thought, had been lost in the meantime. (I find this last thing sad and also worrying.)

Unlike what is the case with Part I of the *Investigations*, the remarks in Part II are not numbered. (An attempt to number them would show that there are 372 remarks, i.e. paragraphs or clusters of paragraphs separated from the immediately preceding and the immediately following paragraph by a "space". In Part I there are 693 remarks.) Also unlike what is the case in Part I, the remarks in

Part II are lumped together in what I shall call "sections". The editors numbered them i, ii, . . ., xiv. In MS 144 and also – as recalled by Mr. Rhees – in the typescript they stand without a number. In the manuscript their separation is indicated by the fact that each section begins and ends on a sheet of its own, i.e. one on which no remark belonging to another section is written. How their separation was marked in the typescript I do not know.

MS 144 contains a number of remarks which do not appear in the printed text. But the printed text does not contain any remark which is not, occasionally in a slightly changed wording, also in the manuscript. It is a plausible conjecture that these discrepancies in wording result from the "certain corrections" in Wittgenstein's own hand which Rhees said were in the (printing) typescript.

Among the omitted material from MS 144 are five entire sections. They are all very short ones; none of them contains more than two individual remarks. It seems to me obvious that these sections were not in the typescript; otherwise the editors would have printed them.

The last section in the printed text was given the number xiv by the editors. In the manuscript it is written on a separate sheet which is inserted between two sheets with consecutive writing on them. It seems excluded that Wittgenstein himself had thought that this was the definite place for it. According to the Editors' Note in the printed volume, this section stood on a separate sheet also in the typescript and evidently out of context. The editors' decision to place it last in the book was in my opinion right without doubt. If I correctly remember, they consulted me too about this change and got my unconditional approval.

In one case, the division into sections in the printed text appears doubtful. From the manuscript one gets the impression that the section numbered xi ends with the last remark on p. 219 of the *printed* text.[1] This is the remark beginning "The words 'It's on the tip of my tongue' ...". After it follows, in the manuscript, one of the omitted short sections. After this omitted section follow, in succession, sections xii and xiii of the printed work. But in this, viz. the printed text, section xi continues for another ten pages (pp. 220-229). In the manuscript, this continuation follows *after* (the printed)

1. Wittgenstein 1953.

section xiii. MS 144 thus ends in fact with the last remark of (the printed) section xi, which goes "There might actually occur a case when we should say 'This man *believes* he is pretending'".

It is unfortunate that we cannot check the arrangement of the sections in the manuscript against their order in the typescript from which the book was printed. We must assume that the sections xii and xiii followed *after* (the present) section xi and that this was the order approved of by Wittgenstein himself. Less certain is whether the two sections in the manuscript between which stood sections xii and xiii were meant to be joined to one section (the present xi) or whether Wittgenstein wanted them to remain separate. As it stands, it occupies much more than half of the entire Part II. On the other hand, I can see no *obvious* ground for dividing it into two at the place mentioned above, i.e. after the last remark on p. 219 of the printed book.

There are a good many discrepancies between the order of *remarks* (inside the sections) between MS 144 and the printed text. But there are also in the manuscript precise indications in Wittgenstein's hand about how the changes of order should be made. When Heikki Nyman and I in 1980 undertook the production of a typescript on the basis of MS 144 observing these indications, we came up with the same order as the remarks have in the printed text – but for *two* exceptions. Although minor, they seemed to us noteworthy:

The first occurs on p. 208 of the printed book. On this page there is a remark beginning "Wie lehrt man ein Kind . . ." followed by a remark beginning "Eine *Art* der Aspekte . . .". As I read Wittgenstein's indication in the manuscript, these two remarks should occur in the reverse order. It also strikes me that this is definitely the *better* order.

The second discrepancy in the order of remarks relates to pages 210 and 212 of the printed text. According to the author's univocal instructions in the manuscript, the two remarks on p. 212 beginning "Es ist beinahe, als ob . . ." and "Denk dir eine physiologische Erklärung . . ." should, in that order, follow immediately after the remark on p. 210 beginning "Von einem beliebigen Schriftzeichen . . ." (and immediately before the remark "Ich möchte sagen . . ."). I think every careful reader will agree with me that this change in

order makes good sense whereas the actually printed order is slightly confusing.

It is practically certain that the typescript had no indications that the order of the remarks mentioned on pp. 208, 210, and 212 should be different from the order they have in the book. If there were such indications, the editors would surely have taken notice of them. But it *is* possible, in my opinion, that the order in which the remarks appeared in the typescript was due to an oversight by Wittgenstein himself.

It was this which made me think that Wittgenstein had perhaps not *dictated* the typescript himself from the manuscript, but had given it to a typist who then in the two places mentioned had failed to observe Wittgenstein's indications in the margin.[2] However, in view of facts some of which came to my notice only later and some of which, though known to me, I had failed to fit into the picture, I now wish to withdraw this conjecture:

On 18 February 1949 Wittgenstein wrote from Dublin to Norman Malcolm of his intention first to go to Vienna and then to return to England and dictate the stuff he had been writing since the autumn of 1948 – and send a copy of it to Malcolm.[3] In March Malcolm invited Wittgenstein to come to stay with him and his wife in Ithaca, N.Y., where Malcolm was teaching at Cornell University. Wittgenstein accepted the invitation. He did not send what he had dictated to Malcolm, but had it with him when he arrived in the United States in the middle of the summer.[4]

When did the dictating take place? On 4 June Wittgenstein was again writing from Dublin to Malcolm telling him that he intended to go to Cambridge in about two weeks' time "to dictate some stuff". Wittgenstein stayed with me and my family at Cambridge from 26 June to 2 July, and then again from 7 to 12 July. On 21 July he started his voyage across the Atlantic. There is every reason to think that during his stay with me at Cambridge he dictated his stuff, even though I have no distinct recollection of this. Professor Anscombe remembers that Wittgenstein was then dictating. I myself vividly

2. von Wright 1982, p. 135.
3. Malcolm 1984, p. 136.
4. Malcolm 1984, p. 66.

recall that Wittgenstein, when staying in my house, read to me and discussed with me stuff which is in Part II of the *Investigations*. But whether the reading was from a manuscript or from a typescript I can no longer recall. It could have been from either.

If what Wittgenstein had dictated at Cambridge was identical with the typescript of Part II, then what he brought with him to Malcolm was not only things he had written since the autumn of 1948 – although, as already said (p. 182), more than half of the content of Part II dates from October 1948 and after.

I am not aware that Wittgenstein had dictated anything after his return from the United States in the late autumn of 1949. But, as we know, he wrote a considerable amount in the time he still had to live after the discovery of his mortal illness.

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How did Wittgenstein himself view the relationship between the two parts of the *Philosophische Untersuchungen*? More precisely: How did he see the lost typescript based on MS 144 in relation to the earlier TS 227? In their "Editors' Note" for the printed book, Anscombe and Rhees write:

"If Wittgenstein had published his work himself, he would have suppressed a good deal of what is in the last thirty pages or so of Part I and worked what is in Part II, with further material, into its place." ("Thirty pages" must here refer to the *printed* text, not to the typed text.) I don't think one can reproach the editors for not having, at that time, pronounced themselves more fully on the matter. As their words stand, however, they now give rise to a number of questions.

When did Wittgenstein tell Anscombe and Rhees of his plans? Both visited Wittgenstein in Dublin in December 1948. At that time a major part of Part II had been written – but neither the manuscript MS 144 nor, needless to say, any typescript for this part of the book existed. Of writings *posterior* to Part I (= TS 227), there existed already two bulky typescripts, viz. those with the catalogue numbers TS 229 and TS 232. The former is based on manuscripts ranging from May 1946 to October or November 1947 and a short section

of remarks extracted from manuscripts anterior to May 1946. TS 232 again is a selection of remarks written in the period November 1947 – August 1948. No other typescript dictated by Wittgenstein after 1948 is known, except the now lost typescript for Part II. Nor have we evidence that there had existed any late typescript in addition to those already mentioned at the time when Anscombe and Rhees saw Wittgenstein in Dublin.[5] For all I have been able to ascertain, Wittgenstein did not talk about his plans to the future editors of *Investigations* after he had left Dublin in 1949.

Another question of some interest is the place, in relation to Part I and Part II of the Investigations, of the collection of cuttings from other typescripts published unter the name *Zettel* (used by Wittgenstein for referring to them in talking). More than half of the remarks in *Zettel* are from the period 1946-1948; of the rest the earliest go back to 1929.[6] When they were cut from the typescript we do not know. Perhaps the cutting stretched over several years; but it is also possible that it was done with some specific end in view *after* August 1948. It is a plausible conjecture that by the "further material" referred to in the editors' note Wittgenstein had in mind mainly the "*Zettel*".

In my essay on the origin and composition of the *Investigations* I suggest that "Zettel belongs between the two disconnected members of the *chef d'oeuvre* of Wittgenstein's 'later' philosophy and thus constitutes the middle part of what could also be thought of as a trilogy".[7] The writings which form Part II of the printed work always struck me as a departure in a somewhat changed direction. But these observations do not exclude the possibility that Wittgenstein himself had wanted the two parts of the work to form a more

5. A puzzling fact is, however, that TS 232, presumably dictated at Cambridge in October 1948, is paginated 600-774. I have no explanation for this pagination. *Prima facie* it would point to the existence of another typescript paginated 1-600. No trace of it remains. Moreover, the last remark in TS 229 was written (in MS 135) in October 1947 and the first remark in TS 232 was written in the same manuscriptbook in the beginning of November that same year. There is thus no appreciable gap in time separating the *writings* for TS 229 and TS 232, although the dictation of the former took place long before the dictation of the latter.

6. Maury 1981.

7. von Wright 1982, p. 136.

integrated whole than they actually do.

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I never asked Wittgenstein about his plans of publishing. It was only after his death that I got to know that he had appointed me in his will one of his "Literary Executors". I remember distinctly, however, that he once told me that he had given up plans of publishing in his life-time. Instead he entertained the idea that he might take a number of copies – I think he mentioned thirty – of what he had written and let them be circulated among friends and pupils. I do not remember exactly *when* he told me this. The writings to which he was referring can hardly have been others than those included in the *Investigations*.

It seems to me on intrinsic grounds certain that Wittgenstein regarded the typescript for Part II as a more finished product than the other typescripts which he had dictated after the typescript for Part I. I cannot see any good reason why the editors, Anscombe and Rhees, ought not to have printed it together with Part I.

The *Philosophische Untersuchungen* remained a torso. This may be unsatisfactory. But for it one cannot blame the editors who did their best to present the book to the world.

A Postscript on the Preface to Philosophische Untersuchungen

After having written the above essay on Part II of the *Investigations* I undertook a closer study of the two versions of the Preface to the book. Some observations worth recording were made:

The separate typescript of the Preface, TS 243, came, as stated above p. 181, to the notice of the *Nachlaßverwalter* only in 1977. It had been kept together with another previously unknown typescript, TS 239, which is a revision of the first half (TS 220) of the pre-war version of the *Investigations*. The revision was probably made late in 1942 or early in 1943. The Preface is dated, in Wittgenstein's handwriting, "Cambridge im Januar 1945". Both typescripts had been in the possession of Mr. Yorick Smythies, who probably had

got them from Wittgenstein himself.

The second version of the Preface is *not* a separate typescript but occurs on the first four pages of the preserved typescript, TS 227, of Part I of the *Investigations*. The date "Cambridge, im Januar 1945" is typed, not handwritten. On the same page, where the Preface ends, follows the beginning of the first remark ("Augustinus in den Confessionen I/8: . . ." of the main text. (In a later printing "Confessionen" has been changed to "Confessiones".)

I shall henceforth refer to TS 243 as the *earlier* and to the opening pages of TS 227 as the *later* version of the Preface. There can be no doubt about the implied chronological relationship of the two versions.

The later or TS 227-version has, above the rubric "Vorwort", the title of the book *Philosophische Untersuchungen* and the Motto. Both are missing from the earlier version.

The Motto, however, was originally from Hertz's *Prinzipien der Mechanik*, and went as follows: "Sind diese schmerzenden Widersprüche entfernt, so ist zwar nicht die Frage nach dem Wesen beantwortet, aber der nicht mehr gequälte Geist hört auf, die für ihn unberechtigte Frage zu stellen." These words were typed but have been crossed over and replaced, in handwriting, by the quotation from Nestroy which is in the printed book.

The earlier typescript version has some 25 changes and corrections, evidently in Wittgenstein's handwriting. I should classify all of them as "minor" and of little interest. (The typed text is nearly identical with a handwritten draft in MS 129 which dates from the autumn of 1944.)

The typed text of the later version is practically the same as the *corrected* text of the earlier version. One can thus regard the typed later version as a re-typing of the earlier version. But in the later version there are also some ten or more changes and additions in handwriting. (Among them is the change of the motto.) The printed Preface observes all these alterations in the typed text.

All the handwritten changes in the preserved copy of the later Preface (in TS 227) are *not*, however, in Wittgenstein's own hand. The handwriting which is not Wittgenstein's can be identified as belonging to Professor Peter Geach. The explanation for this is obviously as follows:

Only the now lost copy of TS 227, from which the printing of the book took place, was a copy on which the author himself had made all the changes which he thought desirable – leaving a second copy of the typescript (the one which has survived) incomplete in a few details. But the editors evidently thought it advisable to insert also the missing changes into the other copy so as to make it too "complete". We can be grateful to them for this.

Some of the changes which Wittgenstein himself had made in the later version of the Preface deserve special attention:

The last sentence of the third paragraph of the Preface "– So ist also dieses Buch eigentlich nur ein Album." is a later addition. The sentence is also found in the undated part of the manuscript book MS 130. It was *presumably* written in 1945. (The dated part of the MS 130 is from May to August 1946.)

The very last paragraph of the Preface begins in the typed text as follows: "Daß dieses Buch nicht gut ist, weiß ich. Aber ich glaube, daß die Zeit, ...". This Wittgenstein replaced by the handwritten, and subsequently printed words "Ich hätte gerne ein gutes Buch hervorgebracht. Es ist nicht so ausgefallen; aber die Zeit ist vorbei, ...". However, there was also another, evidently earlier, variant, which is crossed over. It goes "Ich hätte gerne ein gutes Buch hervorgebracht, ja ein *sehr* gutes; aber es ist nicht so ausgefallen. Und die Zeit ist vorbei, ...". This earlier variant, however, is not in Wittgenstein's but in Professor Geach's handwriting.

Of greater interest is a third change which evidently is by Wittgenstein himself. It occurs in the fifth paragraph of the Preface. In the typed text (of both versions) the paragraph begins "Vor zwei Jahren ...". In the second version "zwei" has been changed to "vier". The passage in question refers to conversations which Wittgenstein had had with Nicholas Bachtin. It is known that they took place in 1943, thus two years before the date of the Preface. The change of "zwei" to "vier" must therefore have been made in 1947.

If Wittgenstein made this change in 1947, why did he not change the date of the Preface? Was it an oversight of his that he let the year "1945" stand? This is a question which we cannot answer.

Another intriguing question is this: When did the retyping of the earlier Preface take place? The later Preface, as we have seen, is an integral part of TS 227. And it can be regarded as certain that the

earliest date of TS 227, i.e. the typescript for the first part of the *Investigations*, is the second half of 1945. (It is also known that Wittgenstein made further changes in it in still later years.)

If TS 227 was produced in the second half of 1945, which I think it probably was, it would not have been necessary for Wittgenstein to change the date of the Preface from January to a later month of that same year. The fact that he made one important change in it in 1947 is not strong support for the hypothesis that the retyping and subsequent production of the rest of TS 227 took place in that year. What makes the question of the retyping (and date of TS 227) interesting is that an answer to it might throw additional light on the status and composition of what I have elsewhere called the "Intermediate Version" of the *Investigations*. The earlier version of the preface was, as said above, discovered together with TS 239. I used to think that the fact that they were kept together was a mere coincidence. However, further research may reveal that this was not so and that the relation of TS 239 to the "Intermediate Version" is different from what I originally thought. Such research still remains to be undertaken.

The fact is, however, that the Preface as left to us by Wittgenstein himself contains a "contradiction", viz. the discrepancy between its date and the change of "zwei" to "vier". There was a time when I used to think of the change as an editorial mistake. But renewed scrutiny of the papers has made me change opinion. In some later printings the word "zwei" has been restored. But this, though removing the inconsistency, has been done at the expense of what is a real editorial interference with the original.

REFERENCES

Malcolm, Norman: *Ludwig Wittgenstein, A Memoir*. New edition with Wittgenstein's letters to Malcolm. Oxford University Press, Oxford 1984.

Maury, André: "Sources of the Remarks in Wittgenstein's Zettel", *Philosophical Investigations*, Volume 4, Number 1, 1981. A similar compilation of information about *Philosophische Untersuchungen* by Maury was not accepted by the same journal and exists, so far, only

in the form of an Appendix to the typescript-edition of all the stages through which the book passed, prepared by a research group in Helsinki, 1979-1981.

von Wright, Georg Henrik: *Wittgenstein.* Basil Blackwell, Oxford 1982. A number of not unimportant corrections and additions to the original text were incorporated in the French (Trans-Europ-Repress, Mauvezin 1986) and German (Suhrkamp, Frankfurt am Main 1986) translations of the book.

Wittgenstein, Ludwig: *Philosophische Untersuchungen.* Basil Blackwell, Oxford 1953.

I DON'T KNOW WHAT I WANT

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In his article, "'I know what I want'"[1], Brian McGuinness argued that if Wittgenstein actually wanted to say what he may reasonably be taken to have meant with the following sentence from *Philosophical Investigations*, then he was wrong in an interesting sense:

> "I know what I want, wish, feel, ..." (and so on through all the psychological verbs) is either philosophers' nonsense, or at any rate *not* a judgment *a priori*.[2]

Without definitely committing himself, McGuinness offers the following interpretation:

> Thus the full sense of the statement quoted from Wittgenstein seems to be: *either* the phrase "I know what I want" is used for some purpose quite other than that of stating the fact it appears to be designed to state, *or* it is misused to state what can't or shouldn't be stated in this way, namely, that the words "I doubt whether I want this" are *senseless*.[3]

The deviant purpose of uttering "I know what I want" etc. is said to be something like

> to remind [others] of some more substantial fact, such as that one knows what's good for one, even if others don't, or that one has reached an age or a position where the other person has no right to interfere.[4]

I think McGuinness was right in this latter interpretation, and since the question whether or not that was in fact what Wittgenstein thought of such utterances is interesting in its own right, I shall establish

1. *Proc. Arist. Soc.* 57, 1956/57, 305-320.
2. P. 221. All quotations from the *Philosophical Investigations* are from the third edition, Oxford, Blackwell, 1967. Italics are Wittgenstein's unless stated otherwise.
3. *Loc. cit.*, p. 306. (McGuinness's italics.)
4. *Ibid.*

the interpretation, with some long-windedness, in section 1. It seems to me, however, that McGuinness took Wittgenstein to mean something he did not actually mean when he adduced, as an objection to Wittgenstein's view,

> that it is possible to use the phrase "I know what I want" to state a contingent fact without using it in any special or ironical sense.[5]

and, furthermore,

> that the words "I doubt whether I want this" donot seem to be senseless at all.[6]

This point, in turn, seems to be interesting because wherever Wittgenstein says that, in saying "I know what I want", you do not state a contingent fact about yourself, and that it is senseless to utter "I doubt whether I want this", he consistently refers to statements of facts and to expressions of doubt of a kind that differs, in an important way, from those facts and doubts that are envisaged by McGuinness; this I shall argue in section 2. More than that, think Wittgenstein was not only right in this contention, but was so for interesting reasons which differ from those he gave himself; an outline of those reasons I shall sketch in section 3.

Section 1: "*It's up to me.*"

"Prior to my acquaintance with McGuinness's article, the relevant interpretation of some "I know ..." utterances was, in a very vivid form, brought home to me by our eldest son who, when warned at the dinner-table not to salt his soup too highly, snapped back: "I myself know best how much salt I want." Taken in what grammarians take to be the sentence's literal meaning, his utterance was deplorably wrong; however, sentence meanings are theoretical constructions from selected cases of sentence use, and the standard meaning of our son's utterance does not figure among those preferred cases. It simply meant: "It's my own business." ("If it's too much salt, I shall put up with it.") This and related meanings are, I submit,

5. *Ibid.*
6. *Loc. cit.*, p. 307.

what "I know" utterances with embedded egocentric psychological clauses, according to Wittgenstein's convincing view, have got as their primary force: Their speakers insist on a socially acknowledged claim to a contextually specified authority position.

"I know" utterances lay claim to, or even take possession of, authority positions in many other cases, and very often do so where they do not embed egocentric psychological clauses. Wittgenstein states this in *On Certainty*, where he also notes the price the speaker has to pay for his move:

> Isn't it the purpose of construing a word like "know" analogously to "believe" that then opprobrium attaches to the statement "I know" if the person who makes it is wrong?
> As result mistake becomes something forbidden.[7]

With "I know" utterances embedding egocentric psychological clauses (which are not the topic of *On Certainty*, where they are only mentioned in passing) the situation is different: The speaker does not run any risk at all because his singular position is recognized from the start; he just affirms that he is making use of it.

In Wittgenstein's published writings, this subject has not been treated in a coherent way. However, Part I of the *Philosophical Investigations* contains some moderately conclusive passages which are well in line with what can be found in the *Remarks on the Philosophy of Psychology* and in the *Last Writings on the Philosophy of Psychology*. Thus even though no coherent picture can definitely be attributed to an edited work of Wittgenstein's (like the *Philosophical Investigations*, Part I), what emerges may all the same be a plausible way of putting two and two together.

It should be noted from the start that the kind of safety from attacks, or the kind of attacks the speaker is safe from, is different in different cases. In the selection of remarks on the use of psychological vocabulary which is known as Part II of the *Philosophical Investigations*, Wittgenstein states this fact very concisely:

> The kind of certainty is the kind of language-game.[8]

This has a more than accidental significance for McGuinness's

7. *On Certainty*, Oxford, Blackwell, 1974, remark 367.
8. P. 224.

chosen target-sentence; for the latter, within the (albeit transitory) arrangement of remarks of *Philosophical Investigations* II xi, opens a sequence that discusses the question whether one can satisfy oneself regarding other persons' 'inner feelings' etc., and having reached the conclusion that this is possible, Wittgenstein concludes section xi with considerations on the variety of things that can be expected from being sure within different kinds of language-games: I can justifiably express my intention with certainty although I need not carry it out; I can tell what my motives are because it is me who is questioned about them; there is mathematical certainty because stable agreement is quickly reached between mathematicians; there is certainty with respect to colour-judgments because colour-blindness is rare and agreement overwhelming; there is certainty with respect to others' feelings insofar as there is social competence in living together with one's fellow people. This diversity leads us to expect that in those passages where Wittgenstein treats of certainty with respect to "I know" utterances which embed egocentric psychological clauses, he uses examples in a way which is anything but systematic; the choice of examples is directed by quite different problems according to the relevant contexts. In the order of the *Philosophical Investigations*, the discussions relate to pain, to imagination, to voluntariness, and to intending to say something.

(a) *The right to complain.*

The utterance "Only I can know whether I am really in pain" occurs in the interlocutor's direct speech in *P.I.* § 246, but Wittgenstein is careful to direct his critique against its construal as a fact-stating utterance:

> It can't be said of me at all (except perhaps as a joke) that I *know* I am in pain. What is it supposed to mean – except perhaps that I *am* in pain?

However, since it can't be said of me at all, I can't say it, either; and in this case, the exception would be my utterance: "I *am* in pain" – i.e. "I know I am in pain" would have the force of my insisting on my authority to express my pain. This is immediately confirmed

by the first example Wittgenstein uses to explain what, on second thoughts, could also be meant by "Only I can know whether I am really in pain". In § 247, the opening section of the sequence on grammatical sentences which terminates with § 252, he states:

> "Only you can know if you had that intention." One might tell someone this when one was explaining the meaning of the word "intention" to him. For then it means: *that* is how we use it.
> (And here "know" means that [expressing] uncertainty is senseless.)[9]

That is to say: Insofar as "I know I am in pain" is acceptable as stressing a feature of "I am in pain", it stresses some feature like that it is up to the speaker to express his pain or to leave it. As far as I can see, this is the only reason Wittgenstein gives for saying, quite generally, in *P.I.* § 288 that someone's expressing doubt as to whether or not he is in pain would be odd. (This observation is used, in § 288, as a reason against construing pain utterances as recognition-based reports.) There may be different guesses as to what kind of authority Wittgenstein had in mind; my own guess is that what is at stake is any person's right to complain, a right that is socially recognized under a variety of familiar circumstances. Besides Wittgenstein's own self-criticism in *P.I.*, p. 189, my guess is based on what he says about what happens, within the language-game of pain expressions (after the latter have started it, see § 290), in §§ 282 c, 284 b, 286, 287, 303, 310, 403. (One might use, as a label, "the language-game of complaining and comforting".)[10]

(b) *The competence to determine the content of one's imagination.*

In *P.I.*, § 378, Wittgenstein states that if saying that one imagines the same thing twice were a recognition-based report, one would have to rely on criteria of sameness, and he has just stated, in § 377, that for what one is imagining, one has no such criteria. Therefore, I do not *recognize* what I am imagining. This means that in § 381

9. I have substituted "expressing" for "the expression of". – Cp. *Remarks on the Philosophy of Psychology*, Oxford, Blackwell, 1980, I 707: If someone has a definite intention, he can express it with certainty.

10. Cp. also *Remarks on the Philosophy of Psychology* II 659-662.

(which so manifestly has been inserted into the considerations on imagination that it would be absurd to draw contrary conclusions from its context in earlier manuscripts) the introductory sentence is uttered by the interlocutor:

> How do I [recognize] that this colour is red? – It would be an answer to say: "I have learnt English".[11]

The interlocutor's way of expressing his question manifests that he has been misled, by the certainty with which one can express what one imagines, into construing this certainty as knowledge; what he might have correctly asked would have been: "Why can I be certain in expressing that I am imagining something red?" And this is the question Wittgenstein answers: Learning English comprises, among other things, learning when to use such utterances as a means to determine what one is to be taken to imagine. This authority is not unlimited. When I claim to do sums in my head (i.e. to picture myself doing them), my results must not be accidental (§ 385)[12]; if I say I imagine something violet, I ought, in general, to be able to point to violet as the colour I am imagining (§ 388); if I claim to imagine people in the street to be concealing pain I must act as if they did (§ 391). Learning the use of utterances of imagination is, therefore, not simply learning to pronounce them; it is a competence which has to be acquired. However, a competent speaker of English masters it, and this is why, within certain limits, he is the acknowledged authority for deciding, by his very utterance, what his image is:

> The mental picture is the picture which is described when someone describes what he imagines.[13]

For the description is not a report on a pre-existing picture:

> (I cannot accept his testimony because it is not *testimony*. It only tells me what he is *inclined* to say.)[14]

11. I substituted "recognize" for "know". The German has "erkenne".
12. Cp. *Remarks* ... II 584f.
13. *P.I.* § 367.
14. *P.I.* § 386.

(c) *Notifying one's authorship of one's own actions.*

In §§ 611-632, Wittgenstein develops considerations on voluntary actions which are likely to belong to the most ambiguous passages of the *Philosophical Investigations*, both as regards purpose and content.[15] I shall briefly sketch what I take to be an important exegetical point which I have to rely on in order to adduce a further instance of using egocentric psychological "I know" utterances. While I shall not argue the exegetical point in sufficient detail, this should not be taken to imply that I take it to be uncontroversial; it just seems to constitute a promising way of making sense of two sections which look provokingly constructive, or theory-like, in the midst of a host of uncertain questions:

> So one might say: voluntary movement is marked by the absence of surprise. And now I do not mean you to ask "But *why* isn't one surprised here?"
>
> When people talk about the possibility of foreknowledge of the future they always forget the fact of one's own voluntary movements.[16]

Both sections are strongly consistent with the philosophical thesis that voluntary actions are controlled actions, i.e. actions that are an exercise of knowing how. If so, then predicting one's own action is simply one more manifestation of the required capacity; an action is one's own insofar as one can predict it (which is a very common phenomenon). With this idea in mind, let us go back to § 625:

> "How do you know that you have raised your arm?" – "I feel it." So what you recognize is the feeling? And are you certain that you recognize it right? – You are certain that you have raised your arm; isn't this the criterion, the measure, of the recognition?

Once more, the context is a critique of the idea that there are inner feelings (kinaesthetic sensations) which allegedly serve as an epistemic basis for a given kind of certainty. Wittgenstein acknowledges that this certainty is there; however, as the section's last

15. Stewart Candlish, in his "'Das Wollen ist auch nur eine Erfahrung'", in R. L. Arrington and H.-J. Glock eds., *Wittgenstein's Philosophical Investigations: Text and Context*, London and New York, Routledge, 1991, 203-226, has accomplished a great deal in clarifying the text.

16. *P.I.* §§ 628, 629.

sentence shows, it is the resoluteness with which I claim to have risen my arm myself which wrongly conjures up an act of justifying recognition of my authorship. If, within the range of whatever limits there may be for my behaviour to be regarded as controlled, I accept it as my own action, then my standing up for it is socially respected, and this is why I may say "I know that I did it".[17]

(d) *The prerogative of interpreting one's own utterances.*

With "I know what I mean", Wittgenstein repeats his exaggerated denial which we noticed above for "I know that I am in pain":

> "But can you doubt that you meant *this*?" – No; but neither can I be certain of it, know it.[18]

The kind of knowledge he wants to exclude has been stated three sections earlier:

> "I meant *this* by that word" is a statement which is differently used from one about an affection of the mind.[19]

It is, namely, something like a stipulation:

> But – can't I say "By 'abracadabra' I mean toothache"? Of course I can; but this is a definition; not a description of what goes on in me when I utter the word.[20]

Therefore, there may indeed be certainty in stating what one means; however, it is the certainty of someone who knows that no one has a right to contradict him:

> "And yet at the time I *meant* the one thing and not the other." Yes, – now you have only repeated with emphasis something which no one has contradicted anyway.[21]

It is no one's business to contradict the speaker because he is the recognized authority for interpreting his utterances:

17. Cp. also *Remarks* ... I 788, 851f., and *Last Writings on the Philosophy of Psychology*, Oxford, Blackwell, 1982, 183, 894.
18. *P.I.* § 679.
19. *P.I.* § 676.
20. *P.I.* § 665.
21. *P.I.* § 678.

> What makes my image of him into an image of *him*?
> Not its looking like him.
> The same question applies to the expression "I see him now vividly before me" as to the image. What makes this utterance into an utterance about *him*? [...] If you want to know whom he meant, ask him.[22]

"I know whom I mean" does not report that I know whom I mean; it is a usual way of reminding people of the speaker's right to clarify whom she or he has to be taken to have referred to.[23]

There are, in the *P.I.*, further *en passant* instances of similiar observations.[24] Thus McGuinness's interpretation is certainly correct, with the qualification, however, that Wittgenstein would certainly deny such uses of 'I know' to be special or ironical. In these cases, it is simply not the business of 'I know' to signal a knowledge claim[25]; and I shall try to show, in section 3, why this is just what is to be expected.

Section 2: *Conscious wants.*

At most, if not all, these places where Wittgenstein indicates what kind of authority a speaker may insist upon in making an "I know"

22. *Philosophical Investigations* II iii, p. 177. It is of no concern to the present problem whether the question is whom he meant with his image, or with his utterance. In the *Last Writings* ..., remark 317 is ambiguous in the same way, whereas 312, 313 define the utterance as the object of meaning.

23. Cp. *Remarks* ... II 250-254.

24. An utterance like 'I know what I am talking about' is implicitly treated as a defence against exaggerated requests for exactness in § 70; 'I know what I wish' as affirming one's right to articulate one's wish in §§ 437, 441; 'I know why I do this' as insisting on one's competence to express one's intention in §§ 247 (see above), 487, 640, 648, 659. – A moderately coherent sequence on anybody's right to determine what he is or has been thinking occurs in *Remarks* ... I 565-585 (cp. *Last Writings* ... 880).

25. This is why I think that attempts to explain the authority of such utterances as being due to a socially recognized position of the undisputed truth-teller get only one half of the correct story. See, e.g., Richard Rorty, *Philosophy and the Mirror of Nature*, Princeton U.P. 1979, esp. ch. IV 2.

utterance which embeds an egocentric psychological clause, he gives his hints for therapeutic purposes, viz. in order to free us from a construal of "I know" which has come to be referred to by labels like "privileged access" or "Cartesian privacy". This latter construal takes "I know that I Ψ", where Ψ is a psychological state of affairs, to be justified because "I Ψ" allegedly reports on a state of affairs which the speaker is in an optimal position to report on, a position like that of an observer who is immune from error:

> It is of course the indisputability that favours the picture of something's being described here, something that we see and the other does not, and that it is near to us and always accessible, but for the other is hidden: hence something that exists *within* us and which we become aware of by looking into ourselves.[26]

Note that Wittgenstein accepts the Cartesian starting point, viz. that the speaker is justified in uttering "I know that I Ψ"; he even accepts the fact that the speaker cannot be charged with error. What he rejects is the Cartesian explanation. There is, with such utterances, no report on a fact which the speaker has infallible access to. Rather than being epistemological, the certainty is a social one – or better, a socially defined immunity from attacks which is of diverse kinds in different cases.

There is no denying that Wittgenstein had difficulties in expressing his negative point: He overstated it, in ignoring at least two possible uses of "I know that I Ψ" utterances. In Part I of the *Philosophical Investigations*, he quite often criticizes the Cartesian picture by stating, quite generally, that locutions like "I know that I Ψ" (and related ones like "I doubt whether I Ψ", "I must find out whether I Ψ") are senseless, giving uses like the ones discussed in section 1 as the *only* kinds of exception. In his published writings, it is only the *Remarks on the Philosophy of Psychology* and the *Last Writings* (and the so-called Part II of the *Philosophical Investigations*) where he comes to take notice of the fact that "I Ψ" may be a report and that utterances like "I know which of my teeth is aching" can express epistemological certainty exactly in the way "I know which drawer the book is hidden in" does. So this is the first kind of omission. In section 3, I shall try to show why this does not

26. *Remarks* ... I 692.

weaken his position vis-à-vis privileged access construals. The second omission is the one McGuinness has analyzed in his article, viz. that of conscious psychological states, as e.g. that of a person who wants something without wanting it unconsciously (or 'sub-consciously'). Of such a person, one can truly say that she or he knows what she wants without, thereby, uttering a grammatical sentence which states something about that or any person's authority to express her or his wants.

McGuinness argues that when we would like to say (and actually do say) that someone wants something unconsciously, such that this person could truly say, "I don't know what I want", then it is not the case that this person wants something but does not know that this is what she or he wants; rather, he thinks the state of affairs has to be construed in a manner such that of everything the person really wants, she or he actually knows that she (he) wants it. (Sometimes nothing is actually wanted, because of conflicting desires; sometimes, the person consciously wants to find out what, if anything, she or he wants; etc.)[27] Thus all wants are conscious although the concept of an unconscious want is not spurious for creatures in command of a language with want-expressions; for with such creatures, want-expressing behaviour and verbal utterance may conflict.[28]

Although McGuinness's argument is very attractive, I shall not go into its details; rather, I confine myself to the substantial point where he takes himself to disagree with Wittgenstein: If a person consciously wants something, nay, if human wants are necessarily conscious, does then a person command the kind of knowledge of her or his wants which Wittgenstein definitely denies? Since I assume that Wittgenstein denies privileged access of the Cartesian kind in *any* case, we may even suspend the question whether *all* wants are conscious; some are sure to be so, and if being conscious of them gives the person privileged access to them, then Wittgenstein's omission was serious.

Fortunately for Wittgenstein, McGuinness's concept of one's being conscious of one's own wishes is as far from 'illumination' theories of the mind as one might wish:

27. *Loc. cit.*, p. 307.
28. *Loc. cit.*, pp. 317-320.

> [...] it is a truth about human beings that large parts of their conduct are such that, when they perform them, *either* they do so deliberately *or* they could or should do so deliberately. When they do things deliberately, they are said to want to do those things. This is why I know what I want.[29]

The point is brought out even more clearly in some of the things McGuinness says about the cases where we speak of unconscious wants:

> Unconscious wants too are so-called because of their resemblance to conscious wanting. The man behaves *rather* like one consciously pursuing an end (not *too* much so, or we shall say that he must know where all this leads), displays a certain amount of intelligence (again not too much, or we shall speak of calculation), and so on. [...]
> We have of course a reason other than this resemblance for saying of people that they unconsciously want things: namely, the possibility that they may be brought to admit that so-and-so was indeed what they wanted. [...]
> If on the other hand there is some meaning in [the utterance "Yes that's what I really wanted"] I take it to be the following: that in the past at a time when I could and perhaps should have been aware of what I was doing and have had reasons for it – when, that is to say, there could and should have been something that I wanted in the full sense – then I was acting in a fashion which was, up to a point, like that in which I should have acted had I wanted (in the full sense) a certain thing; further that had the past been different, in ways which did not involve my seriously considering what course to pursue, I should have acted still in a way similar to that of one wanting that thing; further, that if I *had* then seriously considered what to do, one of my first impulses, whether or not I later rejected it, would have been to act deliberately in that way; further, that even now I feel some sympathy with that motive of action.[30]

To put it crudely: To say that a person wants something is the more justified the better one can make sense of the actions and utterances in the light of this assumption, the more consistency is manifested in behaviour. Those are the typical cases where we say that the person knows what she or he wants to do. In this sense, then, clear-cut wants are conscious wants.

29. *Loc. cit.*, p. 320.
30. *Loc. cit.*, pp. 317, 318, 319.

If we say, in such a case, that the person knows what she or he wants, we do not, of course, want to say that anything like inner recognition is the basis of this knowing. (We would not even speak of knowledge.) McGuinness is right, then, in that Wittgenstein could not include this kind of knowing what one wants in his verdict; but this case was not among his targets anyway. I have doubts, by the way, whether a person could express, by uttering "I know what I want", what we express by uttering "She knows what she wants" in appreciating her conduct in such cases of resolute behaviour. This may have been Wittgenstein's reason for expressing his denial of privileged access by a verdict on the use of "I know what I want" at Part II, p. 221, rather than on our comment, "She knows what she wants". But even if "I know what I want" were not fit for expressing the fact that a want is conscious, McGuinness's point would remain unshaken, viz. that it is the more likely that a person knows (in the sense explained) what she or he wants, the more justified we are in saying that there is a want anyway.

Section 3: *Whom do we surprise in surprising ourselves?*

As I claimed above, the point Wittgenstein was after is different, and I shall argue that he was right. Not only is there no privileged access to one's own psychological states etc.; rather than there being no infallible knowledge, there isn't any knowledge at all. To establish this point, I shall not make use of Wittgenstein's own reason, viz. that in the case of one's own soul, there is nothing like wondering, doubting, finding out, learning and the like, i.e. that in such cases, there are no language-games of appealing to evidence. (Arguments on privacy do not concern us here; they only relate to incorrigibility, and one cannot prove that there is no egocentric psychological knowledge by showing that there is no infallible egocentric psychological knowledge.) The reason why I do not follow Wittgenstein's strategy (i.e. do not simply relate it) is that I find it defective. As this strategy shows, and as is amply confirmed by all lines of argument one can discern in *On Certainty*, Wittgenstein was strongly inclined to the classical conception that links knowledge to reasons. True, he was fully aware of what Gilbert Ryle

was to firmly establish as Knowing How, and competent language use, as well as rule-following in general, are analyzed as such in the *Philosophical Investigations*. However, his arguments against egocentric psychological knowledge manifestly rely on the classical conception:

> Other people cannot be said to learn of my sensations *only* from my behaviour, – for *I* cannot be said to learn of them. I *have* them.
> The truth is: it makes sense to say about other people that they doubt whether I am in pain; but not to say it about myself.[31]

Wondering seeks answers, doubting calls for reasons, finding out makes use of evidence, learning that something is the case relies on information. A critique that invokes such premises cannot be generalized to cover the possibility of knowledge which is neither based on reasons and evidence, nor can be unmasked as spurious by a proof that no such basis can be found. Could not, then, egocentric psychological knowledge be unfounded knowledge?

I take it that such knowledge exists, and I even think that knowledge which is based on reasons is simply a special case of it in the sense that knowledge as such need not be based on reasons, that knowledge which is based on reasons is knowledge as such, and that its being based on reasons is just causally responsible for its being knowledge as such. This conception, as far as I could find out, is due to John Watling.[32] It seems to have gone largely unnoticed; indeed, neither did I find it in anthologies, nor does it seem to have interfered with the avalanche of theories of knowledge (causal and other) that were launched by the Gettier examples. It can be understood as spelling out the following observation of Ryle's:

> 'Know' is a capacity verb, and a capacity verb of that special sort that is used for signifying that the person described can bring things off, or get things right.
> [...] to say that he keeps to the edge, because he knows that the ice is thin, is to employ quite a different sense of 'because', or to give quite a different sort of 'explanation', from that conveyed by saying that he keeps to the edge because he believes that the ice is thin.[33]

31. *P.I.* § 246.

32. 'Inference from the Known to the Unknown', *Proc. Arist. Soc.* 55, 1954/55, pp. 83-108; see, in particular, p. 89.

33. *The Concept of Mind*, London (Hutchinson) 1949, pp. 133, 135.

Watling describes some convincing examples[34] of people to whom we should unhesitatingly attribute knowledge that *p* even though they do not have reasons for maintaining that *p*. The common feature of his examples seems to be this: The person does not get the answers right by chance; she or he is successful in a proportion of cases which is so high that we attribute a disposition to get the answers right.[35] There is a problem of defining the class of questions within which success is to be counted; this will depend on the explanation which the knowledge attribution is used for. If of two persons who are each walking, at independently varying speeds, on different sides of a wall that hides them from each other, one person can say, at any one moment, whether or not she or he is ahead of the other one, then we explain this by a knowledge attribution only if the answer is or would be correct at almost any moment. If the cook can reply that the milk has to be added to the flour rather than the other way around, we say that he or she knows this if the answer fits into a coherent pattern of successful mixing of batters, sauces, and soups. And the fortune-teller correctly tells our future because he knows it only if he gets it right in incredibly many cases (and because he doesn't, he does not know).

Watling also gives a helpful explanation of the fact why good reasons are relevant for knowledge[36], and why Gettier reasons aren't: If someone relies on reasons which we actually do accept as a basis for a knowledge claim, then these reasons are such that relying on them constitutes a disposition to give correct answers. An example of this is basing one's expectations on laws of nature, rather than on accidentally true generalizations.[37] I submit that causal theories of knowledge, so far as they succeed, are after the same point; however, they confuse the capacity with the way the capacity is brought about. The same is true if learning is adduced as a faint kind of availing oneself of reasons. Recognizable kinds of Knowing That might possibly be acquired in ways unknown to us; however, this seems not to be the case.

34. *Loc. cit.*, pp. 89f.
35. *Loc. cit.*, p. 87
36. *Loc. cit.*, pp. 90f.
37. *Loc. cit.*, pp. 93f.

Let us ask, then, which kind of explanation attributions of psychological knowledge enter into. I hope to cover not too little ground if I offer the following as a regulative idea: knowledge of feelings, moods, motives, beliefs, sensations etc. of a third party is attributed where we want to explain *why the knowing person was not surprised* by the third party's behaviour which in turn is correctly explained with reference to the third party's feelings, moods, motives, beliefs, sensations etc. which are said to be known.

Now in general, nobody is going to be surprised by her or his own behaviour. (I shall presently comment on the case where there is such surprise.) Does this call for a general explanation which invokes the required explanatory psychological knowledge in all such cases? The answer seems to be no. Rather than requiring universal explanation, no explanation is necessary at all. "She is not surprised by what she does" is a statement so odd that one might tend to declare it to be a grammatical sentence in Wittgenstein's sense that *no person can surprise herself or himself by what she or he does*. Nothing is there to explain, then; attributions of egocentric psychological knowledge are idle. The manifest exceptions where I do indeed wonder why I just did this or that, and where I try to explain my behaviour such that I may, if I succeed, be said to know why I did it, say from jealousy, can and should best be used to make sense of the idea that I can behave towards myself as if I behaved towards a different person.

This may be an easy way out as long as it remains as unclear as that, although I hope the idea would prove sensible if it could be made more precise. Anyway, it is surely an idea of Wittgenstein's to compare a person who surprises herself or himself, to a two-person situation, or better to a person who is playing the roles of two different persons at a time. Discussing our problem in the context of "I believe" utterances in *Philosophical Investigations* II x, he says:

> I say of someone else "He seems to believe ..." and other people say it of me. Now, why do I never say it of myself, not even when others *rightly* say it of me? – Do I myself not see and hear myself, then? – That can be said.
>
> "One feels conviction within oneself, one doesn't infer it from one's own words or their tone." What is true here is: one does not infer one's

> own conviction from one's own words; nor yet the actions which arise from that conviction. [...]
> My own relation to my words is wholly different from other people's. [...]
> If I listened to the words of my mouth, I might say that someone else was speaking out of my mouth.[38]

I do not think that playing two different roles at a time is a dubious conception; talking to oneself is a further common instance. What I admit to be a questionable move is the idea that you slip into two different roles – observer and observed – as soon as you surprise yourself. You may then go on playing both roles without surprising yourself any further, because, in the role of your own observer, you manage to explain what you are doing, in the role of the person observed. I.e., although prepared for surprises, you aren't surprised. Relevant psychological knowledge about yourself can then be correctly attributed to you.

"Egocentric psychological knowledge", as I have used this term and related ones, has, therefore, to be construed with a grain of salt. The utterance "He knows that he is in pain" cannot correctly state about him what the utterance "She knows that he is in pain" states about her, unless he is playing a double role. Why, then, did Wittgenstein, at most places where he reminds his reader of this and related facts, drop that qualification? I think the answer is simple: He quite generally uses first person utterances to illustrate his point; and even reports on those, in indirect speech, are couched in this form (cf. *P.I.* § 246). "I know" utterances which embed egocentric psychological clauses, in anything which could be called their primary use, do *not* state that the speaker knows anything. The double role use can be brought about, but only in extremely complex setups. And what is more: It is epistemologically uninteresting. Whatever access the speaker has, in such cases, to her or his own soul is anything but privileged.[39]

38. Pp. 191, 192. Besides source remarks – more or less direct – in the *Remarks* ... I 710, II 419 (cp. I 495, 705, 708, II 812, 814, 816, 820), there are further observations related to the double role use of egocentric psychological utterances in *Remarks* ... I 711f., 715, 719, 744f., 752f., II 169, 838f.

39. I thank Stewart Candlish for many helpful comments and suggestions.

ETHICS AND AESTHETICS IN THE DEFINITION OF THE SELF. FREUD AND WITTGENSTEIN

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In our culture the notion of repetition is frequently accepted as a factor shaping linguistic, logical, mathematical and scientific procedures. This long tradition of acceptance includes the unheard-of presumption that somehow everything is known, that all replies are symmetrically aligned to their questions and that thinking, calculating and knowing are modes of retracing tracks which have forever been traced. "They are all numbers" we say, for example, so not distinguishing between natural numbers and integers, so sweeping away with bluster, as Wittgenstein says, the difference that exists between, say, the expression "two men entered the pub" and the expression "+two men entered the pub", so concealing the fact that while for multiplication the law of monotony is of unlimited validity, in the case of integers, whether positive or negative, this law is circumscribed in its application. "They are all numbers", we continue to say, as if the various extensions of the concept of number were merely specialisations of a single concept, always identical and repeatable – the superconcept of number.

In our tradition there has been the dominant assumption that, in the various forms of knowledge, our linguistic and cognitive operations are none other than the incessant, monotonous repetition of a conceptional mechanism which is there, and always has been there, to anticipate any possible intellectual move or undertaking. Dominated by the primal scene, we believe that what we do is merely linear repetition of an operation already effected, and thus we end up by assuming the system of all things as a datum, which becomes the past and prehistory of our language and knowledge. This assumption becomes clear when we believe that the inference from or conclusion of a logical-mathematical piece of reasoning

already exists, previously deposited in the super-mechanism of our concepts, from which in fact it is to be *drawn* – as we say in everyday speech – to be drawn from the premises where it has been lodging for ever. Thus in *Principia Mathematica* Whitehead and Russell illustrate the *modus ponendo ponens* by observing that if *p* is true if *p* implies *q* then we can only *draw* the conclusion that *q* is true, as if it were a question of pulling out something already existing, ready prepared, like the change from a slot-machine. Whereas it would be necessary to state that if the conclusion derives from premises, these in their turn derive their sense from those very conclusions drawn from them.

Now, the reduction of our constructive procedures of knowing to the mere repetition of an identical content is reassuring and suits a blinkered mode of thinking which seeks to exorcise whatever is new and original. The limiting case of this attitude is found in what I might call the *Zukunftsangst*, the fear of future which, in pathological situations, appears in the patient as a catatonic stupor, where defence against novelty and future change is expressed by a refusal to give answers and in a monotonous repetion of the question – a means by which the patient arrests within time that sense of unchangingness which we cannot give up. Following Wittgenstein and Freud, we may recognize in the conceptual super-mechanisms, in the super-languages of so much philosophy and epistemology constructs just as mad as those manifest in the compulsion to repeat. The notions of the *a priori*, the transcendental, the analytic an so on to which everything would be predisposed, should be re-examined as symptoms of a particular form of compulsion to repeat by which we attempt to exorcise novelty and the risks of the present moment. Epistemological schemes of this kind assume that language and knowing find in an early experience – the primal scene – a basis which is clearly defined precisely by its own unchallengeability. And this operation of carrying back something of *now* to refer to something of *then* gives us our sense of security. This is a movement which can be reduced – as indeed Mach explained with reference to mechanical phenomena – to a referring of one unintelligible item to another unintelligible item. Explanation and demonstration within physical theory, according to Mach, do not consist in bringing the unintelligible down to the intelligible but in

bringing the uncommon, unusual unintelligibility down to another, more familiar and better-known unintelligibility.[1]

At this point however we must ask if repetition is indeed the monotonous and unvarying retracing of an identical content, as a certain logicising tradition and indeed common acceptance would have it. This notion of repetition is in fact not sufficient, whether we are referring to the compulsive repetition of obsessive neurosis, or to the repetitive schemes of the philosopher or epistemologist. The truth is, rather, that the term *repetition* is used to cover procedures which do not at all consist in doing the same thing or inexorably replaying the same content, but quite the contrary, in constructive reworking, in new, original decisions which have introduced into our knowledge such structures as infinitesimal notation, chemical symbolism or serial music – structures in no way inexorable since they did not exist before their deliberate construction. Structures, moreover, without which mankind managed to live comfortably for long enough. Now, repetition, understood as identical replay, disguises the operational aspect of language and knowing, putting forward instead the static, inert image of a primal scene of objects, representation of truth as an object, as a determinate presence. When we interpret a ritual and are profoundly moved, the effect does not come from the foundation-making character of a primal scene, an archaic event. Those epistemologists and anthropologists who would derive the meaning of a ritual from its primordial past are missing the point. Its interest and importance for us do not lie in the fact that it evokes a remote origin. On the contrary, it is the present working up, which we perform on the basis of the myth, which produces the profound impression. We may say that if depth is a trait of a past belonging to remote a time, then it is the depth of meaning which we attribute to a given myth which retrospectively projects its past, which creates it as the memorable primal scene by which we are so much struck. In this sense the myth does not have an explanation in the sense of mechanical causality, but it has a reason which lies in the indisputable evidence of its significance for

1. "Man führt ungewöhnliche Unverständlichkeiten auf gewöhnliche Unverständlichkeiten zurück", E. Mach, *Die Geschichte und die Wurzel des Satzes von der Erhaltung der Arbeit* (Prague, 1872), p. 31.

us. The event described in a primal scene, as in a myth, depends – so to say – on the retrospective capability of its meaning for us. Why does this thing happen? Because the myth has a terrible, unsettling significance. The circumstance that the event seems to us unsettling, terrible and fearful – the opposite of futility, banality – this itself is what has originated the event as a myth. What for us represents perspicuity and evidence is what traces the remote depth of the event. This then is not a genetic, cause and effect problem of before and after. We are talking rather of a constellation of symbolic forms developing one from the other, as the ellipse develops from the circle. No-one, presumably, would claim that, historically, the circle generated the ellipse.[2]

In these terms, repetition does not develop as a replay of an identical content but as a progression of new, different reactions to a theme – the teme of a neurosis – originating in a primal scene but which does not exist either as a necessarily historical event, or as a structure significant before and independent of the reactions and reworkings men bring to it in the course of their lives. Rather, one can state, with Wittgenstein and Freud, that the notion of origin deposited in the primal scene does not exist outside the elaboration of the theme inscribed in it. Repetition's descent from the primal scene is not the same as the derivation of effects from mechanical causality, nor is it the replay of a content instantaneously reproducing all its recurrences. It is like the ellipse emerging from the circle. On the one hand the ellipse is already contained in the circle, but on the other hand it derives from the circle by variations of form. Take the case of the child in Freud's *Jenseits des Lustprinzips* who is missing his mother. His game consists in throwing away from him a bobbin to which a thread is attached, and then drawing it back, repeating alternately the words "*fort*" (gone) and "*da*" (there).[3] Thus this child repeats innumerable times per day the primal scene of his torment because of the lack of his mother. But his repetition does not consist in a mechanical, linear replay of the content of that scene.

2. L. Wittgenstein, "Remarks on Frazer's Golden Bough", in C. G. Luckhardt (ed.), Wittgenstein. *Sources and Perspectives* (Hassocks 1979), p. 69.

3. S. Freud, "Jenseits des Lustprinzips" (1920), in: id., *Gesammelte Werke*, Bd. 13 (Frankfurt am Main 1972), pp. 11-15.

In what sense, one may ask, can a bobbin with thread attached, alternately thrown away and pulled back, repeat the alternate absence and appearance of the mother? If someone were to show me that scene, could I not simply say: I see a child pulling a bobbin attached to a long thread? It is not simply the alternation of presence and absence of the mother which suggests the explanation of the game. On the contrary, both scenes throw light on each other in the context of their formal connection. One could say that it is the child, with his play, who has structured the casual behaviour of the mother into a perspicuous and methodical representation. In that it is a repetition of the primal scene, the child's game contributes to forming and clarifying it, just as if it were an exercise to be completed. The repetition is not simply the replaying of a content already observed and fixed but includes a variation consisting in the reaction towards the mother that the child displays in his game, now that grief has burst into his life.

In this sense Freud's *Aus der Geschichte einer infantilen Neurose* is exemplary. Here the understanding of the primal scene of the parents' coition witnessed by a child of a year and a half is arrived at by him at the age of four, i.e. in the course of a *deferred thought*. It is interesting that in this case the primal scene begins to take on significance only after the deferred aesthetic working out, and the deferment therefore is interior to the primal scene itself. As I noticed earlier, the celebration of a ritual strikes us not because referring to an event remote in time – not all remote events have the effect on us of myth and ritual. As Freud observes in *Das Unheimliche*, "not everything which recalls removed motions of desire and past modes of thought from the origins of individual or of collective history is for that reason necessarily disturbing".[4]

The primal scene exists therefore in the deferred thought whose sounding of the depth of distant time is a function of the significance which the deferment itself adds to the theme it elaborates. "This significance", writes Freud, "which was lacking in the memory, could be deduced with certainty from concomitant associations".[5]

4. S. Freud, "Das Unheimliche" (1919), in: id., *Gesammelte Werke*, Bd. 13 (Frankfurt am Main 1972), p. 259.

5. S. Freud, "Aus der Geschichte einer infantilen Neurose" (1914), in: id., *Gesammelte Werke*, Bd. 12 (Frankfurt am Main 1972), p. 129.

The entire representation of the "Clinical Case of the Wolf Man" in Freud's *Aus der Geschichte einer infantilen Neurose* consists of a cascade of symbols, a progression of references spreading out into an evolution of forms which, I repeat, do not belong to the domain of mechanical causality but rather to that of the aesthetic development of symbolic forms one from the other.

The primal scene of the parent's coition *a tergo more ferarum* which the child observes – but which he might also simply have imagined or supposed – is the theme for an elaboration which builds up through the images of the mounting of animals, of women crouching in positions with their back parts in evidence more or less analogous to that of the mother, through a governess's threat of castration which rebounds and makes sense, so to say, in the child's presumed observation of the mother's genitals, interpreted as a wound and through the fables of *Little Red Riding Hood, The Wolf and the Seven Little Goats,* the grandfather's tale of the wolf, the child's homosexual inclination towards his father and so on up to the transfiguration of the father, through the religious typology of God and the son-made-flesh. These elaborations are not analytical replays of a single content, as the ellipse is not a simple repetition of the circle and just as the geometry of the cube in fact is the origin of its own geometry and nevertheless does not exist independently of the geometric discourse which develops around the cube, constituting the environment of its discourse and proofs, within which alone we can refer to the cube.

Now, regarding the compulsion to repeat, Freud observes that "these infantile scenes are not reproduced in analysis in the form of memories but are the fruit of a reconstruction – in other words we cannot reach the most remote infantile episodes as such".[6] There exists no primal scene without repetition, which is to say that there is no primal scene without retrospective aesthetic elaboration. As Freud observes in a note to *Aus der Geschichte einer infantilen Neurose* the child understood the significance of the episode of his parents' copulation "at the stage of dreams, at four years of age, not at the moment of the observation. In other words, at a year and a

6. S. Freud (1914), p. 80; Freud, *Traumdeutung* (1899), in: id., Gesammelte *Werke*, Bd. 2-3 (Frankfurt am Main 1972), p. 190.

half he gathered impressions the deferred understanding of which was made possible by his development, by his sexual excitement and sexual enquiries".[7]

In the circumstance of the repetition of a primal scene, Freud speaks of a prevalence of the general pattern compared with the individual experiences. In "The Case of the Wolf Man" the father is the object of the son's homosexual eroticism but is also his castrator according to the significance attributed to the scene of the parents' coition. Here too we would have, as Freud says, "the same victory of the pattern over the individual".[8] I believe that here we must say that in repetition there takes place the recurrence of a structural theme, specified in an aesthetic variety of forms. It is this recurrence which determines the throw-back to a primal scene, and hence to what Freud calls the prevalence of the general over the particular. These occurrences may be considered as distinct specifications which, taken together, make up the significance of the primal scene. Wittgenstein says that the different verifications of a hypothesis are not different ways of verifying the same content of a hypothesis, but are themselves distinct sections of the articulated structure of the hypothesis; what is verified in a different way must have a different meaning. And in the same ways as the hypothesis connects together all the distinct space-time sections of itself, so in psychic phenomena the primal scene connects together the various specifications and repetitions of the theme it has proposed. Whether with the scientific hypothesis or with the repetition of the primal scene, what we have is not the verification or the specification of the same meaning, but sections and symptoms, differing each time, of a single hypothesis or a single primal scene, respectively. What we have verified each time is a different symptom of the original scene which has set the theme of a neurosis. And just as it is not a hypothesis that is verified but the single propositions that derive from it, and which correspond to its various sections, so a primal scene is not capable of verification, whereas we can verify its various symptoms, representing its different specifications.

When we carry out the procedures of a calculation or the repeti-

7. S. Freud (1914), p. 64.
8. S. Freud (1914), p. 155.

tion of a primal scene, we therefore cannot say that we are always doing the same thing, which is however what we do say when, as Wittgenstein observes, we are tricked by our modes of expression, which seem to imply that the notions of identity and concordance are presupposed with respect to what we in fact do. Following Wittgenstein, it would in fact be correct to say that it is what we do that establishes the meaning of the notions of identity and concordance. These are not inert and static schemes of uniformity, predating our operations; on the contrary it is through our operations and calculations that we establish for example in mathematics the meaning of "doing the same, identical thing". We realize the meaning of the notions of identity and concordance contemporaneously with the effective procedure of calculating mathematically. We construct new steps, we create new mathematical entities through our operations and at the same time we say that we have established an identity between what we had already done and what we are doing now. It is what we do which shows what it means "to do the same thing". So, rather than multiply 16 by itself 15 times, I raise it to the power 15 and write 16^{15}. The proof of this calculation does not lie only in the fact that the multiplication of factors and the raising to a power give the same result, rather it is the proof which must show that we take the number 16 as a factor 15 times and we obtain the same result by these two routes.[9] *We may say that we establish the meaning of the notions of identity and concordance while we construct and invent our mathematical entities.*

Now I should like to say that the primal scene is not an ontological fundamental, it is not a substantial presence, and it does not manifest itself as an opinion or belief; just as the fact that we get up from a chair is not the manifestation of the opinion that we have two feet.[10] The primal scene is the vital aesthetic element within which we elaborate our behaviour and our attitudes. Men do not declare that they know that there are external objects such as chairs, tables, stars, books and trees, and the existence of all these things does not constitute the content of an opinion or belief, but it is a presuppo-

9. L. Wittgenstein, *Remarks on the Foundations of Mathematics* (Oxford 1956), Part II, 47.

10. L. Wittgenstein, *On Certainty* (Oxford 1969), 148.

sition implicit in all their actions, in all their behaviour. In other words, a man does not tell us, describe to us, his primal scene, but acts under its influence – we could even say that he describes his primal scene to us by the actions which he performs. That is to say that he now explains his primal scene not with *the grammar of his cognitions* but, so to say, with *the grammar of his actions*. As Freud observes,

> The subject does not say that he has been stubborn and mistrustful towards his parents' authority, but behaves in just this way towards his analyst. He does not remember having been without advice and help during his infantile sexual exploration, but carries with him a great many dreams and confused associations. He complains of being unsuccessful in everything he does and declares that it is his fate never to achieve the object that he undertakes. He does not remember having been deeply ashamed of certain sexual behaviour and fearful that it was discovered, but he shows that he is ashamed of the treatment to which he is subjecting himself, tries to keep it hidden from other people, and so on.[11]

But there is more: I should like to say that the Freudian notion of the primal scene reveals in an exemplary manner how truth does not consist in the representation of an object, of a determinate presence, but in the actions which are carried out. Yet in another sense truth stands there in front of us if we know how to seek it. The patient who cannot produce a word in the analyst's presence, who cannot remember, in reality is producing his primal scene in front of our eyes. "In the end", says Freud, "one realizes that this is his way of remembering". Whenever we have the patience and clarity of mind, we should be able to discover the truth in the silence which his actions reveal to us. These actions delineate something which was not there before: in their aesthetic development they trace the physiognomy of their origin. That obsessed boy in *Aus der Geschichte einer infantilen Neurose* of course fills us with distress, but also with admiration at the huge mad structure he has built up since that moment when grief entered his life and condemned him to compulsive repetition. By means of his distressed retrospective fantasizing he has gathered and elaborated into a synthesis – which

11. S. Freud, "Erinnern, Wiederholen und Durcharbeiten" (1914), in: id., *Gesammelte Werke*, Bd. 10 (Frankfurt am Main 1972), pp. 129-30.

did not exist before he made it exist – the entire environment of his life. The men and objects that surrounded him, his fables, the seductions of his sister, his nurse, the scullery-maid, poor peasant women are elaborated into something as original as his own life itself. And by means of repetition he has been able to stare deep back at the remembrance of the primal scene which has marked his whole life. And I should like to add that that boy has done it all by himself. After all, was it not Freud talking about children who said that they "have been underestimated, and truly we no longer know what may not be attributed to them"?[12]

Since the time in which he drew up the *Geheime Tagebücher* Wittgenstein gave voice to his striving for moral decency (*Anständigkeit*) and for a comprehensive aesthetical view (*Überblick*) capable of linking the scattered and disjoined aspects of life with one another. The deepening of this inner experience, connected with Wittgenstein's need to confess and to pull himself together (*sich sammeln*), aims to discover what he then called "das erlösende Wort" and "den erlösenden Gedanken".[13] For Wittgenstein the difficulty of this achievement lies not in a deficiency of intellectual ability or talent, but in an ethical attitude being centred on what one possesses rather than what one precisely *is*, which consequently prevents people from delving into their own lives. Wittgenstein traced this difficulty back to the will superimposing its deceptive ideals upon a reality, instead of ascertaining reality as it stands, neither for better nor for worse. However, such a task would presuppose the individual settling accounts with himself or herself, an undertaking which involves sacrifice and pain.

Ethical reflection ends up in being a work performed on oneself and on one's own interpretation, as the condition for achieving sound human understanding. In 1931 Wittgenstein wrote:

> Working in philosophy – . . . is really more a working on oneself. On one's own interpretation. On one's way of seeing things. (And what one expects of them.)[14]

12. S. Freud (1914), p. 137.

13. See L. Wittgenstein, *Geheime Tagebücher*, 21.11.1914, ed. W. Baum, in "Saber" (1985).

14. L. Wittgenstein, *Culture and Value* (Oxford 1980), p. 16.

Some years later, in 1937, he welded together ethical reflection and philosophical analysis with the recognition that the answer to philosophical problems consists in a new way of living and acting, in a new form of life, which will take the form of weeding out those disquietudes of the mind caused by misconception of language practices. When in 1944 Wittgenstein wrote that "that man will be revolutionary who can revolutionize himself"[15] he meant exactly that: in order to achieve a clear philosophical view and sound human understanding one must do away with images which have turned into metaphysical representations of facts, in the superstitious assumption of having got a grasp on things themselves once and for all. Our ability to wriggle out of the metaphysical picture which has held us captive depends on our assuming a deeper ethical attitude, one that will tie in with a different form of life and not consist in a mere individual enterprise.

To write in a truthful way one must escape from the philosophical idealizations and arbitrary conceptual schemes which one builds up while fooling oneself about the place from which one speaks, and therefore foredooming oneself to failure.

Wittgenstein wrote:

> You cannot write anything about yourself that is more truthful than you yourself are. That is the difference between writing about yourself and writing about external objects. You write about yourself from your own height. You don't stand on stilts or on a ladder but on your bare feet.[16]

These references to stilts and ladders are to be read as Wittgenstein's own criticism of his *Tractatus Logico-Philosophicus*, whose concluding sentence refers to such a ladder; *the Tractatus itself being just this ladder*. The *Tractatus* had been precisely such an ambitious attempt at climbing up a sort of theoretical ladder. Later on these stilts or ladders are revealed as the idealizations and sublimations erected by philosophical theories.

The strict connection between Wittgenstein's striving after ethical rigour and his rejection of philosophical theorizing shed light on the sublimation and distortion of analysis patterns which philos-

15. Wittgenstein (1980), p. 45.
16. Wittgenstein (1980), p. 33.

ophers perform when they mistake their representations for objects and facts standing out there in the world. In MS 213 (pp. 434-5, 413) Wittgenstein remarks that "the danger begins when we notice that the old model is inadequate and then instead of altering it as it were we sublimate it" and "all that philosophy can do is to destroy idols, without making new ones, – say out of the 'absence of idols'".[17] Philosophers, instead of assuming patterns, images and words as models or objects of comparison with which they deal with the world, are often inclined to turn these images and patterns into *super-concepts of super-facts*. Philosophers are often under a coercion which misleads them into *seeing* the ideal in reality because they believe that the ideal *must* lie out there, in reality itself.

The ethical discipline of delving into ourselves makes us climb down from the ladder on which our ideals and sublimations were set up, and implies a renunciation of feelings invested in those ideals. Getting down from our ladder means, so to say, coming down from the place of our false height and coming back to the place corresponding to our true height. But none of this implies any sacrifice of the intellect, but rather one of feeling and will. That is precisely the way Wittgenstein himself developed moving from the *Tractatus* to the position taken up in his later work. As he noted in his manuscript 213 (p. 406),

> philosophy does not call me for any sacrifice, because I am not denying myself the saying of anything but simply giving up certain combinations of words as senseless. But in another sense philosophy demands a renunciation, but a renunciation of feeling, not of understanding. Perhaps that is what makes it so hard for many people. It can be as hard to refrain from using an expression as it is to hold back tears or hold in anger.[18]

That sheds much light on how Wittgenstein conceived philosophical analysis as a kind of linguistic therapy of those illnesses, cramps and disquietudes of the mind spawned by philosophical problems. In the *Philosophische Untersuchungen* he writes: "The philosopher's treatment of a question is like the treatment of an

17. See A. Kenny, "Wittgenstein on the Nature of Philosophy", in: B. F. McGuinness (ed.), *Wittgenstein and His Times* (Oxford 1982), p. 5.

18. MS 213, p. 406, in: A. Kenny (1982), p. 16.

illness."[19] It is worth remarking that in spite of his criticism of Freud, yet not forgetting that in a text still unpublished he defined himself as a pupil of Freud, Wittgenstein shapes his logico-linguistic analysis as an activity and further as a kind of therapy purporting to bring out the condition of man being bewitched and held captive by false representations, illusions which have a peculiar character of *depth* (*den Charakter der Tiefe*).[20] This depth must now be read as contrasted with the metaphor in the *Tractatus* of height represented by the famous ladder which one had to climb up. Wittgenstein deliberately intends to raise again just those questions which for example boys ask themselves when they are studying mathematics and which schooling represses instead of answering. Wittgenstein purports to let these questions come out again, show themselves and speak, as it were, for themselves.

> A mathematician is bound to be horrified by my mathematical comments, since he has always been trained to avoid indulging in thoughts and doubts of the kind I develop. He has learned to regard them as something contemptible and, to use an analogy from psycho-analysis (this paragraph is reminiscent of Freud), he has acquired a revulsion from them as infantile. That is to say, I trot out all the problems that a child learning arithmetic, etc., finds difficult, the problems that education represses without solving. I say to those repressed doubts: you are quite correct, go on asking, demand clarification![21]

A further aspect of the resemblance between Wittgenstein's procedure and Freudian analysis consists in the fact that it does not limit itself to pointing out a mistake or misunderstanding, but also shows the source of it; that is, the mistake together with the source from which it stems.

As happens in a psychoanalytic treatment, Wittgenstein assigns a decisive role to the acknowledgement expressed by the one who is confronted with the reconstruction of his philosophical misunderstanding and error, and then undergoes a deep-seated change. In the "Big Typescript" (MS 213, p. 410) Wittgenstein remarks that "we can bring someone's mistake home to him only when he acknowl-

19. L. Wittgenstein, *Philosophical Investigations* (Oxford 1953), Part I, 255.
20. See Wittgenstein (1953), Part I, 111.
21. L. Wittgenstein, *Philosophical Grammar* (Oxford 1974), pp. 381-2.

edges it as the right expression for what he feels. The point is: only when he acknowledges it as such is it the right expression (psychoanalysis)."[22]

Not only does Wittgenstein dismantle philosophical theorizing, but he calls into question philosophical problems themselves. In the end philosophy does not exist any more outside its own problem, which are precisely the problems of individuals, and must be dealt with from an ethical perspective since they are embedded in the situations of our life.

Wittgenstein asks himself what philosophical problems are like and then answers in the *Philosophische Grammatik*: "For philosophy isn't anything except philosophical problems, the particular worries that we call 'philosophical problems'."[23]

Philosophy, instead of developing into a theoretical construction, becomes an activity; philosophy itself is the philosophical action of descending into the depths of the grammar of language, in order to dissolve those false representations and illusions which are as deep as the problems of our life. Just as he who is not willing to descend into himself will remain superficial in his writing, which is "a form of deceit" (*eine Art Betrug*)[24], and consequently will be victim of an illusion, so he who sets up philosophical theories instead of descending into *deep grammar* (*Tiefengrammatik*), ends up being caught by *surface grammar* (*Oberflächengrammatik*) and becomes the prey of superstition (*Aberglaube*) and grammatical illusions (*grammatische Täuschungen*).

According to Wittgenstein, the need for philosophical theorizing arises always from a neurotic attempt to get behind what we have said in order to grasp a foundation, a cognitive constraint which would account for why we say what we say. On the contrary, Wittgenstein demands of us the courage to live without that foundation, while attributing to philosophy no more than the task of *describing*, instead of *explaining*, linguistic practices and our *ungrounded ways* of acting, since words themselves are deeds. This

22. See A. Kenny (1982), p. 4.

23. Wittgenstein (1974), p. 193.

24. See R. Rhees, "Postscript", in: R. Rhees (ed.), *Recollections of Wittgenstein* (Oxford 1984), p. 174.

view accounts for Wittgenstein's laying stress on the role of action, and particularly for his shaping the notions of meaning, understanding and proving in the pragmatic terms of action and reaction as a test against which one must put one's own language practices and interpretations.

In his analyses of language and mathematics, Wittgenstein excludes any possibility of absolute and final completeness and exactness. Furthermore he excludes that every possible doubt as such must be taken into account. A similar attitude is to be found in Freud: in certain theoretical writings, such as *Die endliche und die unendliche Analyse* and *Konstruktionen in der Analyse*, Freud states that an incomplete analysis is not necessarily an unsatisfactory analysis, if the incompleteness derives from having faced only the effective problems and real impulses to conflicts, without considering also all the possible problems and conflicts. For Freud, as for Wittgenstein, an analysis is *terminable*, not because it has reached its final stage, but because it has achieved a practical success, *rebus bene gestis*, as Freud writes.[25]

The activity of interpreting, that process of *seeing something as we interpret it*, accounts both for the circumstance underlined by Wittgenstein that "every view is significant for the one who sees it as significant"[26] and for the strict connection he makes between interpretation and inner experience. On his turning Frazer's conception of rite and myth upside down, Wittgenstein remarks that the depth of a ritual ceremony such as that connected with the idea of a human sacrifice does not consist of historical evidence, origin, hypothesis or conjecture. The deep and the sinister elements inherent in the representation of a human sacrifice do not become apparent merely by our coming to know the history of external actions; rather it is *we* who ascribe them from an experience of our own. It must be clear that this concept of the *inner nature* of a human practice, while excluding a kind of report which would boil down the practice only to specific actions as such, does not relate to any

25. See S. Freud, "Die endliche und die unendliche Analyse", in: id., *Gesammelte Werke* (Frankfurt am Main), Bd. 16, pp. 79-80; "Konstruktionen in der Analyse", in: ibid., p. 49.

26. Wittgenstein (1979), p. 71.

psychological introspection either. The notion of an inner nature refers rather to the context of all circumstances which, experienced together as a whole, correspond to what might be defined as the spirit of a practice.[27] This inner nature of a practice lies in people themselves, in the community of the form of life they share.

The synoptic view, die *übersichtliche Darstellung*, consists precisely in connecting the aspects of events and things within a context, in what Wittgenstein calls the activity of a *poetic composition* (*dichten*).

> I think I summed up my attitude to philosophy when I said: philosophy ought really to be written only as a *poetic composition.*[28]

The synoptic view, the perspicuous representation, is no frame already structured in itself in such a way that opening an eye suffices for something to be clear and to be seen; rather the synoptic view is as much made as discovered. There are as many aspects of the same thing to be looked at as there are ways of interpreting it and speaking about it, since, as Wittgenstein writes in the *Philosophische Untersuchungen*,

> we can also *see* something now as one thing now as another: "So we interpret it, and *see* it as we *interpret* it."[29]

Thinking is therefore for Wittgenstein also remembering (62); in fact, we could not perceive an event as terrible, disquieting, anything except banal, if it were not the echo of something terrible and disquieting already inside us. Is it not because of this that Wittgenstein, throughout his life, insisted on saying that one must have the courage of descending into oneself? The semantics of Wittgenstein and its technical development have their roots in an ethical attitude breaking with all those false representations which have held us captive, and descending into the deep grammar of our saying and acting inside the form of life we share.

It is worth remarking, with regard to all this, that the strict relation of different domains of intellectual life to the aesthetical and ethical element is a specific hallmark of contemporary Austrian culture,

27. See Wittgenstein (1979), pp. 75-6.
28. Wittgenstein (1980), p. 24.
29. Wittgenstein (1953), Part II, p. 193.

instantiated by such cases as Otto Weininger, Arnold Schönberg, Robert Musil, and on to Ingeborg Bachmann and Thomas Bernhard. A good deal of Austrian culture is the history of intellectuals who have had to fight against fear and cowardice. In a sense, their idea has been that nobody can give voice to what is going on if he does not become *the artist of his own life*, that is, to shape his life and at the same time to be prepared to break it up on changing his job, work and country. Such a man will not rest on his achievements lest one day he should doze off and wake up to find himself being swept away by an avalanche.

EXISTENTIAL PROPOSITIONS

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> *Die Frage nach der Möglichkeit von Existenzsätzen steht nicht in der Mitte sondern am Uranfang der Logik.*
>
> (Wittgenstein 1979, 10.)

1. *Introduction*

One of the most persistently lively areas of dispute in philosophy for more than two centuries has been the nature and analysis of existential propositions. We may think of Kant's criticism of the ontological argument, and many later essays on the question whether "existence is a predicate"; Brentano's attempt to demonstrate that all categorical propositions have the logical form of affirmations and denials of existence; Frege's and Russell's analyses of existence as a second-level concept, their denials of significance to singular existence propositions, and the later criticism of this view in free logic; Quine's insistence on variables and quantifiers as the harbingers of ontological commitment. Quite a passable cross-section of modern philosophy could be exposed by simply looking at how different philosophers have treated existentials. There have been many attempts to analyse existential propositions made with the aim of exposing their true logical form, and thus revealing exactly what they are stating. The multifarious approaches and the variety of examples thrown up in natural and logical languages have left a bewildering array of possible analyses of existential propositions. My aim in this paper is to discern some order in the data, and, using this, to tackle the question whether there is a privileged or pure form of expression of existence. It emerges that there are many ways in which existence can be said, but one way stands out from the others and it can be taken as a gloss on Wittgenstein's enigmatic remark:

true propositions stating the existence of particulars are the most basic of truths, and are those which, in a precisely defined sense, directly depict reality.

2. *A Classification of Nominals*

To help bring some order into the relative chaos of existential propositions it is expedient to first set out a classification of nominal expressions which is sufficiently flexible to cover both modern and traditional approaches to existentials.

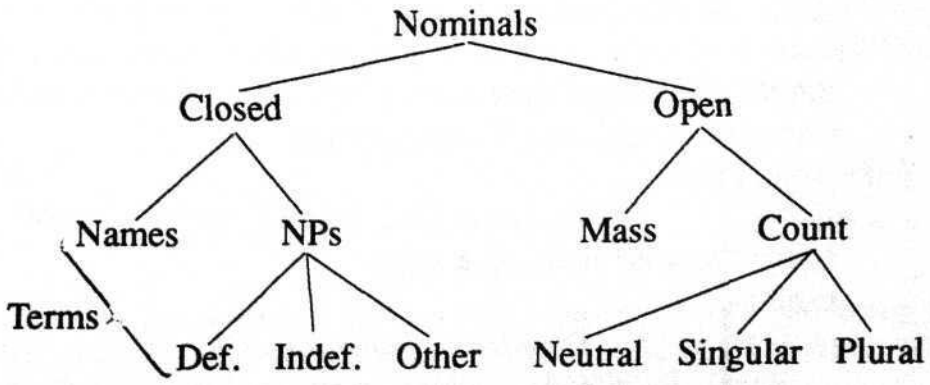
The expressions to be classified as a whole are noun-expressions, and for short we call them all *NOMINALS*. Nominals are divided into *OPEN* and *CLOSED*. Open nominals are simple common nouns and complex common noun phrases. They are unqualified by determiners, articles or quantifiers. They (or, more exactly, their uses) are divided into *MASS*, like *soot, potassium cyanide in this phial*,[1] which are modifiable by quantifiers like *a little* and *much*, and *COUNT*, which are suitable for modification by numeric quantifiers like *four* and others like *many, several*. What is counted and what is "massed" is to some extent variable from language to language. For instance, in English, *information* and *advice* are mass nominals – there is no such thing as **an information* or **some advices* – but German *Information* and *Ratschlag* are count, and German speakers often use the ungrammatical ones above instead of the grammatically correct *a piece of information, some pieces of advice*. It is clear that *piece of* (cf. Ger. *Stück*) is an all-purpose "count converter". Count nominals are further divided (in most languages) grammatically into *SINGULAR* and *PLURAL*, though in some languages, such as Japanese and Chinese, nouns are not generally inflected for number, and so are in themselves numerically *NEUTRAL*. Some languages have a special *DUAL* number, so "plural" must be restricted in those cases to three or more.

Closed nominals come in two sorts: *NAMES*, which contain no open nominal, and *NOUN PHRASES*, which are of the form determiner + open nominal. The latter divide according to the kind of deter-

1. To save on quotation marks, examples will be displayed in Italics.

miner. *DEFINITE NOUN PHRASES* have a definite article or something equivalent to one (such as a possessive pronoun) as their main or governing functor: they form the class of what are, semantically if not always syntactically, definite descriptions. Together with names, definite noun phrases form a functional subclass of definite nominals or *TERMS*. The remaining noun phrases comprise the *INDEFINITE*, with an indefinite article, or (what often amounts to the same thing semantically) no article (as in *Horses were galloping around the meadow* or *I enjoy wine with my meals*) and a further class called here *OTHERS*, which is not subdivided for present purposes. It comprises those quantifier phrases like *several apples* and *no wine* which are equivalent neither to one with a definite nor one with an indefinite article. There is some uncertainty as to where to draw the line between terms and non-terms; for instance Russell denied that definite descriptions are terms. Later we shall tentatively allow indefinite terms.

Expressions containing an open nominal as main subordinate can be classified according to whether this is mass or count, and if the latter, whether neutral, singular, plural etc. But names can also be divided into singular and plural, the latter sort including both simple and complex, conjunctive ones. Thus *Russell* is a simple singular name, *Pink Floyd* is arguably a simple plural name, and *Russell and Whitehead* is a complex conjunctive name formed of two simple ones. There are in addition mixed plural terms, combining descriptions and names, e.g. *Jason and the Argonauts*, and conjunctive descriptions, like *the Montagues and the Capulets*. The most general classes of the classification then look like



3. *A Spread of Examples*

Examples of existential propositions are taken from both natural and logical languages. For obvious reasons the coverage of natural languages will be rather sparse, but I attempt to reach a little beyond standard European languages. In addition to propositions which quite obviously express existence, like *Tame tigers exist* and *There are tame tigers*, others are mentioned which which have been taken to be existential because of their logical equivalence with more overtly existential propositions: for example in classical predicate logic *John exists* is equivalent to *John = John*. I confine attention to present-tense propositions; the problems raised by tense are important, but I wish to stay clear of them as far as possible. In each case a concrete example is given. I do not claim to have a sharp criterion for deciding just what is an existential proposition and what is not, and rely simply on intuition. It should be stressed that by "existential propositions" I mean ones which overtly assert existence and nothing else besides. So the predicate logic formula $\exists xFx \,\&\, Ga$ is not an existential proposition. Since it is equivalent to $\exists x(Fx \,\&\, Ga)$, which is an existential proposition, it follows that propositions logically equivalent to existential propositions are not always existential. I see nothing wrong in this.

3.1 *Examples from English*

3.1.1 *Using a Verb (such as* exist*) and Closed Nominal*

With Name
- Singular: *George Bush exists*
- Plural
  - Simple: *Pink Floyd exist*
  - Complex: *Russell and Whitehead exist*

With Noun Phrase
- Definite
  - Mass: *The gold in this ring exists*
  - Count
    - Singular: *The President of Austria exists*
    - Plural: *The Wright brothers exist*

Indefinite
Mass
With Indefinite Article: *Some [Sm] heavy water exists*[2]
Without Article: *Heavy water exists*
Count
Singular: *A tame tiger exists*
Plural
With Indefinite Article: *Sm tame tigers exist*
Without Article: *Tame tigers exist*
Other
Mass: *This water exists, Much polythene exists, No blue gold exists*
Count
Singular: *That man exists, No tame yeti exists*
Plural: *Several planets exist, Over two hundred tame tigers exist*

Other verbs can be employed instead of *exist*, for instance *subsist* or (in philosophers' English) *be*. With nominals signifying events, states and processes, *exist* is not generally acceptable, and other verbs and verbals such as *happen*, *take place*, *occur*, *go on*, *obtain* are used instead. This phenomenon is noticeable in other languages as well.

3.1.2 *Using the Construction* there is/are

These constructions require in English an indefinite article in the singular, whereas in the mass and plural forms either no article or the mass/plural indefinite form sm is used: it is not clear whether the complement is best treated as an open nominal or an indefinite closed nominal. I shall leave the question open until later.

Mass
Without Article: *There is gold in those hills*

2. This is the unstressed 'some' which is an article, unlike the quantifier 'some', which has stressed pronunciation. To mark this, the article will be written "sm". This article is like the French partitive *du, de la, des.*

With Article: *There is sm water on Mars*
Count
Singular with Article: *There is a constitutional monarchy in Europe*
Plural
Without Article: *There are gilded temples in Bangkok*
With Article: *There are sm tame tigers in Hertfordshire*

Two things may be noted. (1) Forms using *there is/are* are markedly less forced and artificial than those using *exist*. They sound like what real people rather than philosophers say. (2) Notwithstanding this, only forms with *exist* or other verbs can be used with terms: to borrow an example from Frege, **There is Charlemagne* is simply ungrammatical.

3.1.3 *Using an Adjective such as* real (*cf.* actual, existent)
Closed Nominal
Name
Singular: *George Bush is real*
Plural: *Pink Floyd are real, Russell and Whitehead are real*
Noun Phrase
Definite
Mass: *The paint is real*
Count
Singular: *The Palace is real*
Plural: *The soldiers are real*
Indefinite without Article
Mass: *Heavy water is real*
Count Plural: *Tame tigers are real.*

It seems appropriate to count these last two cases as closed nominals with no article (or, as a linguist might say, with a null article) rather than open nominals. The count singular case is rare or odd, e.g.? *A tame crocodile is real*, but a count singular without any article is clearly ungrammatical: **Tame crocodile is real.*

3.1.4 *Using* something, someone
Something stirred in the leaves, Someone is waiting at the door.

These are in my view dubious cases: initially I excluded them as not being existential propositions, but so many colleagues insisted they were that I have included them for later discussion.

3.2 *Examples from Other Languages*

3.2.1 *Equivalents of* there is/are

The French *il y a* + indefinite/partitive article + common noun (*Il y a une monarchie constitutionelle, Il y a des tigres apprivoisés, Il y a du sulfure d'hydrogène*) can take the place of *there is/are*, using a construction with *avoir*. Similarly in German we have the *es gibt* form with *geben*: *Es gibt eine konstitutionelle Monarchie, Es gibt zahme Tiger, Es gibt Schwefelwasserstoff*. In German however it is also possible to have a definite noun phrase with definite article or even demonstrative pronoun as complement, as in *Es gibt die Königin von England*, and this is stronger than the form with the indefinite article, as a Russellian theory of descriptions implies it should be. In certain circumstances even a proper name can occur as complement, despite what Frege says: to someone who doubts whether a certain person or place etc. really exists, we can reply *New York gibt's wirklich*, New York really exists. So *es gibt* is more like *exist* as a verb than we might think. The cleft construction with *there, il, es* can anyway be used as a stylistic variant with the verb for existence: *there exist(s), il(s) y existe(nt), es existiert/existieren.* All in all, the more common versions appear to be special idioms without great semantic significance in themselves.

3.2.2 *Greek*

Since it was first pointed out by Aristotle, it has been well known that the verb ειναι, *to be*, has an existential use, but the same verb has several "nuances", of which Charles Kahn has distinguished four: vital, locative, durative, and the "plain" existential.[3]

3. Kahn 1973, p. 233.

3.2.3 *Classical Chinese*[4]

To express existence, Classical Chinese uses the verb *yu*, which also means *have*. So *Wo yu ta shu* means *I have a large tree*, while *Yu ming* means *Destiny exists*. In addition to the form *yu X*, which has no grammatical subject, sometimes the special subject *t'ien-hsia, world*, is added: *T'ien-hsia yu X* can be translated word-for-word as *The world has X*, i.e. *There is X*. There is a special verb *wu* negating *yu*: *Wu kuei* means *Spirits do not exist* or *There are no spirits*.

3.2.4 *Japanese*[5]

Japanese is like English and other Indo-European languages in using the same verb for both existence and the copula, the difference between these being marked by other features of the sentence. In the existential use the verb is inflected for animate or inanimate subject: *There is/are X*, where X is one or more persons (recall that nouns in Japanese are neutral in number) is *X imas*, whereas if X is/are things, we have *X arimas*. The copulative use may be illustrated by *Onaga ka suite imas, I am hungry*. The existential verb in either form does not of itself carry locative information. In combination with other features, it can express possession, in a form reminiscent of the French *La plume est à moi, The pen is mine* or the Greek Εστι μοι χρηματα, *I have money*, but it seems in these cases still to have the basic meaning of existence.

3.2.5 *Hungarian*[6]

The verb *van*, 'to be', can express existence, location, and, with other constructions, possession. *Van Isten* means *God exists*, while *Van Isten az égben* means *God is in Heaven*. Had Descartes been Hungarian, he might have reasoned *Gondolkodom, tehát vagyok*. In existential uses, *van* is emphatic and has *létezik, exist*, as a synonym.

Evidence from different languages supports the idea that there is a variety of devices expressing existence, that verbs expressing

4. Graham 1967, pp. 6-7.
5. Makino 1968, pp. 15.
6. Kiefer 1968, pp. 58-60.

existence are frequently bound up with copulæ and/or possession, and that in many languages there is a close connection between expressions of existence and of location ("To be is to be somewhere").[7]

3.3 *Classical Logic*

Singular Existence Predicate
With Proper Name: E!(t)
With Definite Description:[8] E!($\iota x Fx$)
With Set Term:[9] $\exists!\alpha$

Using Identity: Classical Equivalent of Singular Existence: $t = t$

Using Existential Quantifier
General Predicative Form: $\exists x(Fx)$
With Proper Name and Identity (definition of singular existence in free logic): $\exists x(x = t)$
Analysed Description:[10] $\exists x \forall y(Fy \equiv y = x)$
Analysed Set Existence:[11] $\exists x(x \in \alpha)$

3.4 Leśniewski's *Ontology*[12]

Singular Existence: E!(a)
Its Standard Definition: $\Sigma b(a \in b)$
Other Equivalents: $a \in V$, $a \in a$, $a = a$, $\Sigma b(a = b)$, $\Sigma b(b = a)$

7. Cf. Lyons 1968, p. 390.
8. Cf. *Principia Mathematica* *14.02.
9. Cf. *Principia Mathematica* *24.03.
10. Cf. *Principia Mathematica* *14.02.
11. Cf. *Principia Mathematica* *24.03.
12. These symbols for Leśniewski's Ontology are mainly in Simons 1987, pp. 62 f. Their approximate meaning in English is as follows: E!: There is exactly one/exists; Σ: for some; ε: (the sole) ... is (a)/; V: object/thing; =: is identical with; E!!: There are at least two/exist; E: there is at least one; ⊏ is/are; ≡ is/are the same as; Δ is/are some of.

Plural Existence: E!!(a)
Its Standard Definition: $\Sigma bc(b \in a \,\&\, c \in a \,\&\, \sim(b \in c))$[13]

Neutral Existence: E(a)
Its Standard Definition: $\Sigma b(b \in a)$
Other Equivalents: $a \sqsubset \mathsf{V}$, $a \sqsubset a$, $a \equiv a$, $a \,\Delta\, a$, $\Sigma b(a \sqsubset b)$, $\Sigma b(b \equiv a)$, $\Sigma b(b \,\Delta\, a)$, etc.

These are not all of the possibilities that can be thought up for a term logic, e.g. we may combine existence-neutral copulæ with quantifiers having existential weight.[14] A term-logic devised by Lejewski distinguishes (what in our terminology are) non-plural definite terms from indefinite terms or count common nouns.[15]

4. *Singular, Plural, and Mass*

Some of the syntactic variations in the way sentences express existence are simply reflections of the kind of nominals occurring in them. Where (as in Japanese) there are different forms of a verb which reflect whether the speaker is male or female, this obviously makes no difference to what is attributed. Likewise, while to exist as an animate being is to exist differently than to exist as an inanimate being, this is no ground for saying *imas* and *arimas* correspond to different senses of *exist*, any more than the fact that left-handed people write in a different way from right-handed people implies an ambiguity in the verb *write*. It is however not only Japanese that restricts the form of the existence verb according to the nature of the subject: in English and many other languages a different word is used for events etc. than for things, as was pointed out above. There is indeed a rather important difference in the way predications treat events, processes and states (occurrents) on the one hand and things (continuants) on the other,[16]

13. Equivalents can be given using new defined functors, as in the singular and neutral cases.
14. The term logic in Simons 1982a uses such quantifiers.
15. Cf. Lejewski 1979.
16. Cf. Simons 1987, p. 130.

but this concerns not their existence as such but rather their having or nor having temporal parts and hence what is called a "strict identity through time". This reflects itself in the form of predication characteristic of occurrents and continuants respectively, but since it concerns time rather than the concept of existence as such, it does not stand in the way of seeing existence (or whatever word we use for the case neutral between continuants and occurrents) as univocal.

Likewise the singularity or plurality of a verb, like *exists/exist*, *there is/are*, is a concomitant of the number of the subject nominal rather than an expression of a special kind of existence, viz. singular or plural existence. Singular existence is simply the existence of one thing, plural existence is that of several things.

It might be argued that there is a crucial difference between the animate/inanimate case and the singular/plural case. The difference between animate and inanimate is a non-logical one, whereas that between one and many is logical. In support of this it could be pointed out that the Leśniewskian existentials E!(a) and E!!(a) have different and logically non-equivalent definitions in terms of ε and the other logical constants, and correspond to *a exists* and *a exist* respectively, although in Leśniewski's logic the nominals are all grammatically neutral in number, so it must be the difference between singular and plural which makes the logical difference.

This objection overlooks the fact that the paraphrases between Leśniewskian and English are only approximate. That certain English sentences are natural near-equivalents of logically distinct Lesniewskian ones does not entail that the logical difference is reflected in the sole syntactic difference between the English sentences. It may be that the paraphrases in fact hide the precise locus of difference. And this is the case here. Suppose we were to hypothetically extend English by a numerically neutral verb inflection **-em*.[17] Suppose further we have numerically neutral nominals. Then the neutral Lesniewskian existential E(a) could be accurately paraphrased into this extension of English as **a existem* or **There bem a*. The singular and plural E!(a) and E!!(a) would need to be

17. The actual archaic English endings *-eth* and *-en*, which sound more natural, cannot properly be used since the former was singular and the latter plural.

rendered as **There bem exactly one a* or **Exactly one a existem* on the hand and **There bem at least two a* or **At least two a existem* on the other. Here it is the whole quantifier, including the existential part and the numerical part, which expresses E! or E!!

Against this it can be argued that at least in one respect Leśniewski's system does recognize a syntactically marked difference between singular and plural, and this is precisely crucial, because we cannot express the Leśniewskian copula ε as **bem*, for that is neutral and must correspond to ⊏ rather than ε, which must be rendered as *is*. But once again, the approximate nature of the paraphrase between English and Leśniewskian gets in the way. For a start, it is grammatically bad English to put a plural term before *is*, but it is not grammatically bad Leśniewskian (it only yields a falsehood), to put a plural term before ε. We can as easily and more accurately render *a* ε *b* as **The sole a bem b*, so that the numerical uniqueness is parted from the verb *be* and wedded to the quantifier phrase *the sole*.

So far we have considered how the expression of existence can be divorced from devices expressing singular or plural, and so these features are inessential to the expression of existence as such, but reflect, as it turns out, either the grammatical number of an open nominal or the meaning of a numerical quantifier, or both. Examination of classical logic alone, with its embedded prejudice in favour of the singular, does not prepare us for this discovery: we need to consider a wider range of languages such as natural languages or Leśniewskian. By the same score, there is another dimension of variation covered by neither classical nor Leśniewskian logic, namely the distinction between count and mass nominals. For mass nominals, the distinction between one and many makes no sense. We may have more or less water, but not one water or three waters. The sort of sense that can be made of expressions like *three waters* is either that of *three kinds* or *three stretches* or *three servings of water*. But *kind of water*, *stretch of water* and *serving of water* are count nominals. Just as classical logic favours the singular, so classical and Leśniewskian logic favour the count. But we can evidently reason as well with mass nominals as with count: *All E.E.C. butter is subsidized, Some E.E.C. butter is Irish, therefore something Irish is subsidized* is evidently a valid syllogism in Datisi.

We can as well say of stuffs or amounts of stuff that they exist as we can say that of individuals, singly or severally. Scientific methods such as spectography or the use of sensitive chemical detectors are designed precisely to find out whether *there is* any of a certain stuff at a certain place.

As in the singular/plural case, there is no call to recognize a special sense or kind or mode of existence for masses of stuff. The logical difference between mass and count is reflected in the fact that if there are *a*s, then at least one individual is an *a*, whereas from the existence of sm stuff *m* we can infer neither the existence of an individual *m* (for there is no such thing) nor the existence of some minimal portion of *m*: for all *l o g i c* tells us, *m* might be divisible without end, as homogeneous stuffs were for Aristotle. That there are minimal portions of gold, water etc. is not a logical matter.

5. *Loci of Import*

The examples indicate that there are many ways in which existence comes more or less directly to expression in natural languages as well as in regimented or formal languages. They are widely spread because by varying the examples it becomes easier to see which parts of the propositions serve to express existence. To put the question precisely:

> In an existential proposition, which part or parts serve to express existence, and which do not?

We attempt to answer this question by considering the candidates in turn. In each case we work by a simple procedure of Baconian variation. If we have an existential sentence *S* containing a part *P* which is a candidate locus of the expression of existence, we replace *P* by another expression *P′* from the same class (name by name, indefinite by indefinite, etc.).[18] If the resulting sentence *S′* does not

18. The point of the restriction to the same class is to exclude obvious counterexamples. If in *Balthasar exists* we allow the replacement of the proper name by the quantifier *Nobody* we get an obviously non-existential sentence.

express existence, then we can say that *P* either expresses existence alone or helps in that context to express existence. By this procedure we can eliminate those features which clearly do not serve to express existence either alone or in concert. It is however dependent on our knowing which propositions are existential, and what the substitution classes for expressions are. Both of these are delicate questions in the case of natural languages, and clear-cut answers can only be expected from a regimented, logical language.

5.1 *Open Nominals*

By the variation test, open nominals in existential sentences do not express existence. For if we have an existential sentence like *There are tame tigers* or *Tame tigers exist*, replacing the open nominal *tame tigers* by another such as *round squares* gives us another existential sentence, even though the truth value may change (as here). However, we could concoct a special nominal *existent* which, when predicated of something, gives us an existential sentence.

5.2 *Terms*

Replace *George Bush* or *The Count of Monte Cristo* in an existential sentence by any other term, and we still have an existential sentence (though as in the previous example, not necessarily one with the same truth value). So terms as such do not serve to express existence.

5.3 *Articles, Determiners*

Consider a closed nominal with a definite article in an existential sentence, e.g. *The Queen of England exists*. What may we substitute for *the*? Other definite determiners such as *My favourite* leave us with an existential proposition. If we allow only the indefinite article as a substitute, we get *A Queen of England exists*, which is also an existential sentence, though one with different truth-conditions. By

this count, articles as such do not express existence, though they partly determine the logical force of an existential sentence. If on the other hand we allow other determiners to be substituted for *the*, then by considering *No Queen of England exists* we see that both of the articles contribute to the expression of existence (in conjunction, obviously, with the verb *exist*). The answer then depends on how wide we make the substitution class, which is not a clear decision in a natural language.

5.4 *Verbs* (exist *etc.*)

Here the answer is obvious: by changing the verbs *exist*, *take place* etc. in sentences like *George Bush exists*, *The Massacre of Glencoe took place* to such as *George Bush fishes*, *The Massacre of Glencoe is infamous* we can move from existential to non-existential sentences. It follows that such verbs express existence by the variation test. And surely the test would have been wrong had they not done so. However it is not the verb alone that expresses existence, but rather its being the main verb in a predication.

5.5 There is/are *type constructions*

Here the main difficulty, as with the articles, is deciding what the substitutes might be. If we allow *there is no*/*there are no* as acceptable substitutes, then they do express existence. But the substitute alternative for *there is no* is not *there is* but *there is a* or *there is sm* (for mass nominals) which contains an indefinite article in place of the negative determiner *no*, so it would appear to be the whole complex *there is* + article which expresses existence, as for the articles we have article + ... + *exist* which does so.

5.6 *Adjectives* (real *etc.*)

Since *George Bush is real* may be an existential sentence while *George Bush is tall* is not, it follows that *real* can, in conjunction

with other features (a copula in a simple predication) express existence.

5.7 *The Existential Quantifier*

In an existential sentence of classical predicate logic such as $\exists xFx$ it is clear that replacement of the existential quantifier $\exists$ by the universal $\forall$ takes us from an existential to a non-existential sentence, so it is the existential quantifier (together with its variables, without which it does not occur) that expresses existence. There are interesting logical issues connected with this. For Quine, existence, though *expressed* using the existential quantifier, is the existence of individuals, namely those which are in the range of values of the variables bound by *all* quantifiers. But under other circumstances, a quantifier of the same category and having the same inferential position within a logical system as $\exists$ need not express existence: such is the case where the quantification is understood substitutionally, or in the case of Leśniewski's *particular* quantifier Σ. This does not express existence in Leśniewski's system: the sentence

$$\Sigma a{:}\sim\Sigma b.b\ \varepsilon\ a$$

which is a theorem of Leśniewski's logic, means that for some a, no a exists. Clearly the quantifier Σ cannot be expressing existence, for otherwise the sentence would be self-contradictory. Hence the particularity aspect of the particular quantifier, which $\exists$ and Σ share, is not the feature responsible for the expression of existence. It is possible to define contextually a particular quantifier with existential import in a Leśniewskian system as

$$\exists aA \equiv \Sigma a(\mathrm{E}(a)\ \&\ A)$$

making it perfectly clear that the contribution of particular quantification is separated from the existential import, carried in the conjunct '$\mathrm{E}(a)$'.

5.8 *Copulæ*

In the sentence $a \varepsilon b$ the functor ε of singular inclusion is generally treated as a singular copula corresponding to the copulative *is* of English and similar particles in other languages. This functor can express singular existence in the sentence $a \varepsilon a$, it being clearly not the term a which does so. Also, other functors of the same syntactical category can replace ε and yield a sentence which is not existential, for instance the functor ω defined as

$$a \omega b \equiv \sim(\mathrm{E}(a)) \,\&\, (b \varepsilon b \vee \sim(b \varepsilon b))$$

which is true, for any term b, iff there are no as. As the examples above made clear, other functors of Ontology may take the place of ε in expressing existence. Thus it would appear that copulæ may express existence. However, as before, we should be wary of jumping to this conclusion because the standard paraphrases of Leśniewskian into English obscure the role of these functors. A more careful analysis shows that they are not simple copulæ but binary quantificatory functors, expressing not *is* or *are* alone but rather such phrases as *All ... are ...*, *Some ... are ...*, *The sole ... is a ...*, and are thus more than simple copulæ. It is the whole combination, together with the fact that the subject and predicate terms must be the same, which allow existence to be represented. Mere copulation occurs only when a non-verb is the complement or main part of a predicate, e.g. *He is in the garden*, *Jude is a stonemason*, *The church is cold*, and functions as a mere syntactic converter building a predicate from the complement and offering a peg on which to hang the usual verbal inflections of person, number, tense etc. As such, a copula does not have any substitutes. The *isn't* of ordinary speech, though it has been held to be a negative copula,[19] is simply the superficial slurring together of copula and the standard *not* forming a negative predicate. Thus in a sense, the copula is too fundamental to be a locus of existential import, not least since negative predicates like *is unreal* and *is nonexistent* may be considered to deny existence despite their copulative form. Admittedly such cases are not without

19. Cf. Sommers 1982, p. 177.

controversy, it being held by classical logicians that singular denials of existence must be false or meaningless, but there are plenty of examples from everyday and scientific speech which contradict this view, which is why free logic developed as an alternative to classical logic.

Nor are other binary functors such as =, which can be used to express existence, copulæ. In a sentence $a = a$, which is equivalent to E!(a), it is not = alone which expresses existence, but = together with the fact that the term before is the same as that after the functor. The whole means *a is self-identical*, and it is the whole predicate *is self-identical* which expresses existence. Of course it can only do this because in any predication $a = b$ both first and second positions are existentially loaded, in that the sentence can only be true if both terms designate an existing individual. Here however we are not inquiring into existential import in general, which is a wider and more complex subject, though it is not separate from our narrower one, as this consideration indicates.

Summary

The results of this section may be summed up. We have found four expression types which undoubtedly are involved in expressing existence, namely special verbs such as *exist*, special adjectives such as *real*, the *there is* construction, and the existential quantifier of standard logic. In addition, articles and other determiners can help to determine or modify the sense of existential propositions. The results are not original, but they have been arrived at by a fairly careful procedure. Further, one or two layers of their veneer of familiarity were stripped off in the previous section: existence is not just singular, or count existence.

6. *Variants and Expressive Inadequacies*

It is evident that the choice between a verb and a copula + adjective complement construction (*exist* vs. *is real*) is a matter of superficial grammatical form only. The same would have applied had we found some special open nominal expressing existence. Complex nominals like *real thing*(*s*) and *real stuff*, though not

exactly beautiful, can occasionally be found doing this job in the wild. In this case it is the adjective *real* which (together with the copula) is doing the lion's share of the job of expressing existence: the nouns *thing* and *stuff* are simply dummies completing the whole to a nominal rather than adjectival complement and marking the difference between mass and count. Philosophers' English might, we suggested, offer a nominal like *existent* (understood as noun, not adjective: cf. the German *Seiendes*, *Existierendes*). As with other open nominals, in English this would be either mass or count, and if the latter, inflected for singular or plural. So such nominals combine the expression of existence with marking whether it is stuff, one individual, or several individuals that is/are said to exist. It looks then as though the only way we could have everything together that we need to express existence without co-expressing some other feature like count or mass would be to have a verb like *exist* and yet not mark it for any of these grammatical features. That does not happen in English, nor have I found an exact analogue in any other language. Japanese and Chinese, which do not inflect for number, still have other concomitant features, e.g. the Japanese distinction between *imas* and *arimas* on the one hand, and the possessive and locative flavourings of Chinese *yu* on the other hand. If we had an inflection neutral between mass and count neutral (as indeed English grammatical singular is neutral between mass and count singular) in the way **-em* was supposed to be numerically neutral, we should have such a "pure" expression of existence. We could imagine English extended with such an inflection. However, English would further have to be modified to allow such a verb to co-occur with new features marking countability and number, so the necessary reforms would have to be quite extensive. It would seem simpler and æsthetically less excruciating to forget modifying English and develop an artificial idiom.

A direct comparison between the existential quantifier and the English *there is* construction (and equivalents in other languages) is made less than straightforward by the lack of simple syntactic fit between natural languages with open nominals and predicate logic. *There is an a* can be approximated in predicate logic only by $\exists xAx$, where A is a predicate corresponding to the nominal *a*. In a semi-English, semipredicate-logical mixture Ax may be rendered *x is an*

a, but since there are no open nominals in predicate logic, the phrase *is an a* has no internal structure for predicate-logical syntax. When we make such suggestive paraphrases, we are stepping beyond both English and predicate logic into an idiom richer than either: richer than English in having bound letter variables, and richer than predicate logic in having open nominals and a copula.

In 3.1.4 we included examples of particular categorical propositions as possible existentials. Personally I prefer to deny that they are. I think what people have in mind who call them existential is that their equivalents in predicate logic have an existential quantifier at the front. But on that count, any particular categorical proposition, like *Some cats eat bats*, must be taken as existential, and that opens the floodgates to so many examples that I find it better to exclude them. Those whose linguistic intuitions are untutored by exposure to predicate logic would I think tend to deny that propositions beginning with a phrase of the form *some c* are existential, even if they are logically equivalent to existentials. But we have already seen that the property of being an existential proposition is not closed under logical equivalence. If these propositions are then not existential, it follows that Brentano's attempt in his *Psychologie* to show that "every categorical proposition can be translated without any change of meaning into an existential proposition"[20] will not work, as Brentano himself later admitted.[21] The "translation" relation between natural and logical languages is a notoriously slippery one, but what I think the examples show is that the "translations" of one and the same logical formula may be such that one is existential and another not: for another "translation" of $\exists x$(*x is a cat & x eats bats*) is *There is a bat-eating cat*, and that is plainly existential.

It may be that my understanding of the term "existential proposition" is too narrow for some tastes, in which case I can hand the critic that term and reserve a new one, "narrowly existential propositions", for what I am considering. Including the cases *Something fs*, whether we understand *something* as indivisible (like German *etwas* or Polish *cos*)

20. Brentano 1973, p. 213. Brentano calls the negations of existential propositions also existential.

21. Ibid., footnote.

or as divisible, *some thing* (like French *quelque chose*), and thus a special case of the *some c* construction, gives a wider class, of what I shall call broadly existential propositions. But this is still not so broad that any sentence of the form *Some c fs* is existential.

Standard logicians' paraphrases of predicate logic sentences of the form $\exists xFx$ may take a form like *There is an x such that Fx* or *There exists an x such that Fx*. While we readily convey what is meant, syntactically the construction is bastard because it treats the variable *x* first as a dummy common noun, then as a pronoun or proper name. Properly, it should be *There exists an object such that F(it)* or just *There is something such that F(it)*. This is a trifle closer to idiomatic English, but loses the variable, albeit retaining the variable's closest English relative, the pronoun. If we treat the variable as a nonce name introduced for the scope of the quantifier we fare better: *There is an object – call it for now 'x' – such that Fx.*[22] The combination of existential quantifier and variable is thus only partly an expression of existence: the other role of the symbol group $\exists x$ is to set up a local name or tagged pronoun to reach into the quantifier scope and bind other occurrences there. So it is wrong to say the existential quantifier as it stands, as a variable-binder, is a pure expression of existence. We need to separate the variable-binding role from the role which distinguishes the existential from other quantifiers. The way to do this has been shown by Ajdukiewicz and Church:[23] devolve the variable-binding role onto a specialized operator which just binds variables and does nothing else, and express the rest using a functor applying to the complex expression thereby formed. We use Church's lambda for the binder: then instead of $\exists x...x...$ we have $\sigma(\lambda x[...x...])$, where the expression $\lambda x[...x...]$ is a one-place predicate, of category S<N>, and σ is no variable binder but a higher-order functor taking the predicate and yielding a sentence, i.e. is of category S<S<N>>.[24] It is in terms of such a

22. The quantifier becomes what Guido Küng calls a *prologue functor*, because the nonce name used within the scope is mentioned in the prologue. Cf. Küng 1974.

23. Church 1940, Ajdukiewicz 1935.

24. In this notation angle brackets replace Ajdukiewicz's slash: for more details, see the next section.

functor that one can give the most sensible interpretation to Kant's and Frege's view that existence is a higher-order predicate. The most unadulterated English equivalent of σ is *something*: for any monadic predicate (category S<N>) the sentence $\sigma(F)$ is well formed. In English, such monadic predicates, yielding a sentence with a name unaided, are intransitive verbs, so an English sentence as close as possible to the form $\sigma(F)$ would be *Something swims*; in German we should have *Etwas schwimmt*, in French *Quelque chose nâge*.[25] The reason it sounds wrong to say an expression like *something* expresses existence is that we are used to talking about existence using a language with nominals, whereas in predicate logic the only nominals we have are singular terms, and they do not combine congruously with σ to give a well-formed sentence. Thus Frege and Russell could say that it is nonsense to say of an individual (i.e. something named by a singular proper name) that it exists: that would mean, in their view, treating the expression $*\sigma(a)$ as if it were a well-formed sentence, which it is not. We are accustomed to it making sense to ask *what* is said to exist. In predicate logic we cannot answer "a swimmer" or "something that swims", for they use nominals, and we cannot (according to Frege and Russell) answer "John" because of the incongruity problem. So, if talk of existence is tied to nominals, then paradoxically, predicate logic has nothing to say about existence in the general *there is* or *es gibt* sense. The nearest approach to existence would be the second-order predicate σ. Of course we already met the sentence $\exists x(x = a)$, standardly used for singular existence in free logic, (though perfectly well formed, if trivially valid, in classical predicate logic) and from this we can extract the complex predicate $\lambda y[\exists x(x = y)]$, which is notated E! This then is the only way what in natural language passes as one sense of *exists* can be talked about in predicate logic; paradoxically again, in view of the views of the founders Frege and Russell, it is singular existence. This is something other than their favoured $\exists$, or σ, though it may be defined using either of them. To regiment the full gamut of examples we need something more than predicate logic, even in its free form, can offer, since it does not have open nominals.

25. Of course in these natural languages we have to remember that a difference is made between persons and non-persons: cf. *someone, einer/jemand, quelqu' un.*

In this respect, as in various others, Leśniewski's term logic is much closer to natural language than is predicate logic, for his terms need not be singular, so the numerically neutral monadic predicate E, which generalizes the E! of free logic, goes a long way to expressing existence *tout pûr*. That it does not quite do so is due partly to the restriction of the terms to count ones. For another thing, Leśniewski does not distinguish between open and closed nominals: the most elegant paraphrases of his sentences into English make the letters *a*, *b* etc. open nominals, but the most logically satisfactory make them terms.[26] These two cases have to be carefully separated rather than run together, as it is evident from the examples that there is a clear and thoroughgoing distinction between existence as used with definite nominals, like *Balthasar Roesenhoeser exists*, and with indefinite or open nominals, as in *Tame tigers exist*. This distinction must be clarified and elucidated, and a language which slurs the distinction cannot be our instrument for doing so.

7. *Existence with Open, Definite and Indefinite Nominals*

Let us envisage a language which, unlike predicate logic or Leśniewski's Ontology, has not two but three basic syntactic categories: SENTENCE (S), TERM (N); and OPEN NOMINAL (C). (The question of where to put indefinite and other NPs will be dealt with presently.) Such a language is more like English than most logical languages.[27] The grammar of the language is categorial: aside from the three basic categories we allow functor categories: if α, $\beta_1,...,\beta_n$, are categories then the category of functors taking arguments of categories $\beta_1,...,\beta_n$ in order and yielding an expression of category α is written $\alpha<\beta_1,...,\beta_n>$. The complex expression formed by combining such a functor a with its arguments $b_1,...,b_n$ will be written $a(b_1...b_n)$, with the functor preceding its arguments in parentheses. We have a small vocabulary sufficient to illustrate the forms of this language

26. See Simons 1982b.

27. But cf. the language of Lejewski 1979, mentioned above, and for another example, Lewis 1972.

Category name	Index	Instance	Comment or Near Equivalent
Term	N	*t*	Not necessarily singular
Open Nominal	C	*c*	Inflection optional
		θ	*thing* (dummy noun)
		e	*existent, being* (as noun)
Adjective	C<C>	r	*real*
Intransitive Verb	S<N>	*f*	Inflection optional
		E	The existence predicate
Noun Copula	S<N><C>	ι	Cf. is *(a)/are* in English
Adjectival Copula	S<N><C<C>>	υ	*is/are*
Article	N<C>	τ	Definite: cf. *the* in English
Quantifier	S<S<N>><C>	s, a, n,	*some, all, no,*
		d_k, d^m	*at least k, at most m*
2nd-order predicate	S<S<N>>	σ, α, ν	*something, everything, nothing,*
		δ_k, δ^m	*at least k things, at most m things*
Open Intransitive	S<C>	S	*Something's (There's)*
		A, N,	*Everything's, Nothing's,*
		D_k,	*At least k things' re,*
		D^m	*At most m things' re.*

Here we have the means to form broadly existential propositions in a number of ways, using terms, predicates, adjectives, and open nominals. Here are examples of these ways with some approximate natural language glosses of particular cases

(1) E(*t*) *t exist, t imas, Van t*
(2) E(τ(*c*)) *The c exist, Den c gibt's*
(3) ι(e)(*t*) *t are beings, t ist ein Seiendes*
(4) υ(r)(*t*) *t is real, t ist wirklich*
(5) σ(*f*) *Something f-s, Etwas f-t, Cos f-a*
(6) s(θ)(*f*) *Some thing f-s, Quelque chose f*
(7) σ(ι(*c*)) *Something is a c, Etwas ist (ein) c, Cos jest c*
(8) s(θ)(ι(*c*)) *Some thing is (a) c, Quelques choses sont des c*
(9) S(*c*) *There-is/are c, Il y a du c, Es gibt c, Yu c*

By the variation test, all of the expressions E, e, r, σ, s and S express existence, since their replacement by other functors from the same syntactic category can yield a sentence which is not existential. In the case of E, we simply choose some other predicate like *f*, in the case of e and r we choose any ordinary noun or adjective, for the other cases we can take the universal positive and negative quantifiers from the same category (listed above).

It may be noticed that with the exception of E, all the other existential functors are members of a family with relations among one another analogous to those between the quantifiers of English (which are very like those of category S<S<N>><C> above) and the variable-binding quantifiers of predicate logic $\exists$, $\forall$, $\exists_k$, $\exists^m$. And it would seem as if $\exists$ were just the special case $\exists_1$. However, this overlooks the fact that the numerical quantifiers (with k and m sub- and superscripts) are the partners of *count* nominals. For the case of mass nominals, count quantifiers make no sense. But it is just as possible to have special mass quantifiers as it is to have special count ones: we replace the numerals by indications of *quantity* or *amount*. Thus (in English) we have such expressions as *at least 250 Kg*, *at most 2 litres*, *exactly 12 eV*. There are indeed sentences like *There is at least 250 Kg of platinum in Fort Knox*. The very terminology of *quantifiers* ought to be suggestive here. That we cannot use certain of these specialized quantifiers with certain nominals, e.g. we cannot use length quantifiers with electric charge, is not different in principle from the fact that we cannot count water. The thought that $\exists$ is always just $\exists_1$ is one more facet of the general logicians' prejudice in favour of the countable. In the case of mass nominals, $\exists$ has to be left alone rather than made a special case: it is here, as in the count case, as Frege put it, the denial of zero, but here as a quantity, not a cardinality.

The functor S resembles E except that an open nominal replaces the term as argument, but because open nominals are general, S is also one of a family. Sentences (5)-(9) also show that it would be possible to define σ in terms of s and θ, and S in terms of s, θ, and ι. Since s(θ) is already a syntactically connected expression of category S<S<N>>, it will serve itself as the definiens of σ. For S, all that is required is a little structural syntactic shuffling.[28]

28. The shuffling can be done using the combinator **B** of Simons 1989. We can then define S as **B**(σ)(ι).

Since the definite description in (2) also contains an open nominal, we might consider what its logical relationship to the other quantifying functors is, especially recalling the Russellian analysis of existentials with descriptions. Note that while Russell's analysis will deliver acceptable results for singular terms, it does not work for mass and plural terms, because Russell's uniqueness condition is not fulfilled. Descriptions like *the tablets in this bottle* and *the snow on Mont Blanc* are referential despite there being more than one tablet and more than one portion of snow in question. Sentences like *The tablets in this bottle are harmless* and *The snow on Mont Blanc is contaminated* are not correctly analysable using Russell's theory. The former means (a) that there are (at least two) tablets in this bottle, and (b) that they are *all* harmless. The latter means that there is snow on Mont Blanc and *some* of it (i.e. part of that totality of snow) is contaminated. In each case however the use of the definite article signifies a totality: all of those tablets are harmless, part of all of that snow is contaminated. The logical analysis of the rest of the sentence depends on the predicate used. Existential sentences using plural and mass descriptions assert the existence of a totality, and there is such a totality if there are at least two individuals (a plurality, in other words) in the one case, or just some of the stuff in the other, for provided there is some of the stuff, there is a maximal portion, which is the totality. Hence there is a general Russell-style analysis for existentials using descriptions of all types: it is

$$\mathrm{E}(\tau(c)) \equiv \exists x \forall y (y \, \iota \, c \equiv y \leq_c x),^{29}$$

where we have written $y \, \iota \, c$ in place of the more correct but less familiar looking $\iota(c)(y)$, and the indexed predicate $\leq_c$ is a part-whole predicate proper to the nominal c which might be read *is a c-part of*. For plurals, $y \leq_c x$ is the relation of y being one c or several cs among the cs x, for mass nominals it is y being c which is part of the c x. The analysis covers Russell's analysis of the singular as a special case because if x is only one c, the only c that can be one or several of x is x itself, fulfilling the uniqueness condition. As with

29. This analysis follows that in Sharvy 1980.

S, it is possible to syntactically reshuffle the parts of (2) into a configuration allowing us to define a new open nominal T,[30] which could be approximated as *something's-the*.

Could we repeat such an analysis with *indefinite* descriptions? In fact, with care, it can be done. Suppose we introduce a new indefinite description functor η, which, given an open nominal c, yields the *indefinite term* $\eta(c)$. The Russell-style analysis of propositions involving such indefinite terms is simpler than that for definite descriptions: for instance for monadic predicates we should need only

$$f(\eta(c)) \equiv \exists x(x \iota c \,\&\, f(x)).$$

In the special case of E we have $E(\eta(c)) \equiv \exists x(x \iota c \,\&\, E(x))$, but the second conjunct is superfluous because of the existential quantifier, so we arrive at the simple

$$E(\eta(c)) \equiv \exists x(x \iota c).$$

In English paraphrase for the singular case this becomes the self-evident: *A c exists if and only if something is a c*, while for the plural we have [*Sm*] *cs exist iff something are cs*, and for the mass case it is [*Sm*] *c exists iff something is c*. All of these command assent. By the meaning of σ we have the equivalence $\sigma(\iota(c)) \equiv \exists x(x \iota c)$, and hence the following general existential sentences, formulated with the various expressive means at our disposal, are logically equivalent:

$$E(\eta(c)) \quad \exists x(x \iota c) \quad s(\theta)(\iota(c)) \quad \sigma(\iota(c)) \quad S(c).$$

This puts in a formal setting the facility we experience in natural language in shuttling back and forth between different ways of "saying the same thing" in the case of existential propositions. Of the five "existential" expressions E, $\exists$, s, σ, S, all use slightly different auxiliary means to say the same thing, but again E stands out as somehow different, since it alone can stand next to a plain

30. $T = \mathbf{B}(E)(\tau)$. The syntactic category of the **B** is different in this case, but the final result is still S<C>.

name. To get it to participate in the general existential claim above, we need to introduce indefinite terms, which, because they do not clearly mark scope in the way functors or operators do, must be interpreted carefully if they are not to lead to fallacious reasoning. It is not least for that reason that predicate logic reveals the logic of sentences with indefinite descriptions more perspicuously than ordinary language.

By virtue of the logic of the part-whole predicate $\leq_c$, $E(\eta(c))$ and $E(\tau(c))$ are equivalent *except in the singular case*. So one can understand why more attention has been payed to singular definite descriptions: for other cases, existential quantification alone suffices.

We can also understand why indefinite NPs in existentials seem to hover uncertainly between being terms, being indefinite closed nominals, and being open nominals. In a regimented setting, these possibilities can be kept cleanly apart, while their logical equivalence to one another shows how in a certain sense it "does not matter" which analysis is chosen.

For particular existential sentences we have the alternatives $E(t)$, $\iota(e)(t)$ – or, in the more familiar way of writing, $t\ \iota\ e$ – and $\upsilon(r)(t)$, which we should naturally have as logically equivalent. They illustrate a general possibility in such a language. If we have any category α we can introduce an α-copula ε_α of category $S<N><\alpha>$ and an expression E_α corresponding to existence in the category α by the equivalence

$$E(t) \equiv \varepsilon_\alpha(E_\alpha)(t).$$

The expressions e and r are the special cases E_C and $E_{C<C>}$ respectively. We should thus have an indefinite number of ways of expressing particular existence, one for each category. But clearly they are all subordinate to E, and most of them (and the corresponding copulæ) correspond to nothing in a natural language. Even the original cases *t is real*, *t is a being* strike one by their artificiality.

8. *Will the Real Existence Please Stand Up?*

After seeing that there are many ways in which existence can be said, the question arises whether there is one sense or use which is somehow more basic than the others. The multifarious equivalences

would tend to undermine this idea. Statements to the effect that it is the existential quantifier, or *there is*, or some other favourite, which "really" express existence, and all the others are somehow derivative, may be suspected as arising from a one-sided logical diet. Part of the aim in this paper has been to provide a broad enough range of examples to avoid this danger to a greater extent than usual. What we have found however, is that there is a marked distinction between expressions used to make various kind of general existence claims, and those used to make claims of particular existence, especially using E and its neighbours E!, E!! etc. But given the definability of E in terms of other functors, this may seem to be a mere syntactic peculiarity. It also raises the dread question whether "existence is a predicate".

I think that the question as to logical priority cannot be settled purely by considering logical relations like definability. Rather we should look outside logic to the facts that make existential propositions true. By a *fact* I do not intend some special category of entity, but only *whatever it is that makes propositions true*. I do not believe there is a separate category of items called facts whose job it is to make propositions true, rather that items from sundry categories can fulfil the role of fact or truth-maker.[31] Indeed, *anything whatever* is a truth-maker. I say that entities *a* make the proposition *p* true if and only if that *a* exist entails that p:[32] in symbols:

$$a \models p =_{\text{Df.}} \mathrm{E}(a) \rightarrow p.$$

From this it follows trivially that every entity is the truth-maker for at least one proposition, namely, one to the effect that it exists. There is no need for a special breed of particular existential facts other than the things themselves. Ontologically, there is no need to fear a strange property called existence: such a property is not needed to explain how particular existential propositions are made true. What about general existential propositions like S(*c*)? Obviously for such a proposition to be true we need at least one *c*. Any such

31. On truth-makers in general and the role of moments (tropes) as truth-makers, see Mulligan, Simons & Smith 1984.

32. The plural here subsumes the singular and any mixture of mass and count.

c, say *X*, makes it true that it exists. What then makes it true that *X* is a *c*? This will vary from case to case. If it is essentially a *c*, then it is a *c* solely by virtue of existing, so no further truth-maker is needed. If its being a *c* depends on accidental features, then they are further truth-makers for *X is a c*, so *X* and these other features are jointly sufficient for the truth of *X is a c* and hence for the truth of S(*c*). In each case, the truth of a general existence proposition is ensured by the truth of some particular existential proposition whose truth may also depend on the existence of other things. Ultimately, we arrive always at particular items as truth-makers for an existential proposition. So it seems that particular existence in the form of E is the more basic, in the sense that general existential propositions are always dependent on particular existential facts. But this is not logical priority (e.g. priority in definition), and the existential facts on which the truth of all existential propositions rest are simply whatever there is. True particular existential propositions are special in directly reflecting reality, but there is nothing in reality called existence.

REFERENCES

Ajdukiewicz, K. 1935. "Die syntaktische Konnexität". *Studia Philosophica* 1, 127. English translation: "Syntactic Connection", in McCall 1967, 207-231.

Alleton, D. J., Carney, E., & Holdcroft, D., eds., 1979. *Function and Context in Linguistic Analysis*. Cambridge: Cambridge University Press.

Brentano, F. 1973. *Psychology from an Empirical Standpoint*. London: Routledge & Kegan Paul.

Church, A. 1940. "A Formulation of the Simple Theory of Types". *Journal of Symbolic Logic* 5, 56-68.

Davidson, D. & Harman, G., eds. 1972. *Semantics of Natural Language*. Dordrecht: Reidel.

Graham, A. C. 1967. "'Being' in Classical Chinese". In Verhaar 1967, 139.

Kahn, C. H. 1973. *The Verb 'Be' in Ancient Greek*. (= J. W. M. Verhaar, ed., *The Verb 'Be' and its Synonyms*, Part 6). Dordrecht: Reidel.

Kiefer, F. 1968. "A Transformational Approach to the Verb *van* 'to be' in Hungarian". In Verhaar 1968, 53-85.

Küng, G. 1974. "Prologue Functors". *Journal of Philosophical Logic* 3, 241-254.

Lejewski, C. 1979. "Idealization of Ordinary Language for the Purposes of Logic". In Alleton *et al.* 1982, 173-186

Lewis, D. C. 1972. "General Semantics". In Davidson & Harman 1972, 169-218.

Lyons, J. 1968. *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.

McCall, S., ed. 1967. *Polish Logic 1920-1939*. Oxford: Clarendon Press.

Makino, S. 1968. "Japanese 'Be'". In Verhaar 1968, 1-19.

Sharvy, R. 1980. "A More General Theory of Definite Descriptions". *Philosophical Review* 89, 607-624.

Simons, P. M. 1982a. "Plural Reference and Set Theory". In Smith 1982, 199-260.

– 1982b. "On Understanding Leśniewski". *History and Philosophy of Logic* 3, 165-191.

– 1987. *Parts*. Oxford: Clarendon Press.

– 1989. "Combinators and Categorial Grammar", *Notre Dame Journal of Formal Logic* 30, 241-261.

Verhaar, J. W. M., ed. 1967. *The Verb 'Be' and its Synonyms*, Part 1. Dordrecht: Reidel.

– 1968. Ibid., Part 3.

– 1973. Ibid., Part 6: see Kahn 1973.

Wittgenstein, L. 1979. *Notebooks 1914-1916*. 2nd ed. Oxford: Blackwell.

LIST OF PUBLICATIONS BY BRIAN McGUINNESS

Review of *From a Logical Point of View* by W. V. O. Quine, *Oxford Magazine* 1954.

"Pictures and Form in Wittgenstein's *Tractatus*", *Archivio di Filosofia*, no. 2-3, 1956, pp. 229-247 (reprinted in Copi, I. and Beard, R. W. (edd.), *Essays on Wittgenstein's Tractatus*, 1966).

Review of *Emotive Propositions* by S. Halldén, *Mind* 1957.

"I Know what I Want", *Proceedings of the Aristotelian Society* 57 (1957), pp. 305-320.

Review of *The Philosophy of Plato* by R. C. Lodge, *Mind* 1958.

Review of *Plato's Philosophy of Mathematics* by A. Wedberg, *Philosophical Review* 1959.

(With D. F. Pears) translated L. Wittgenstein, *Tractatus Logico-Philosophicus*, London: Routledge and Kegan Paul, 1961 (2nd edition 1971).

Articles "Certainty", "Moore, G. E.", "Russell, B.", "Wittgenstein, L.", in *A Catholic Encyclopaedia of Theology*, 1962 onwards.

"The Mysticism of the *Tractatus*", *Philosophical Review* 75 (1966), pp. 305-28 (German translation in *Texte zum Tractatus*, Frankfurt am Main: Suhrkamp, 1989).

Edited with a postword P. Engelmann, *Letters from Ludwig Wittgenstein with a Memoir*, Oxford: Blackwell, 1967 (German edition Wien/München: Oldenbourg, 1970).

Edited F. Waismann, *Ludwig Wittgenstein und der Wiener Kreis*, Oxford: Blackwell (also Band 3 of Wittgenstein: *Schriften*, Frankfurt am Main: Suhrkamp), 1967 (translated with J. Schulte for English edition 1979).

"Philosophy of Science in the *Tractatus*", *Revue Internationale de Philosophie*, 23 (1969), pp. 155-64.

Edited with T. Nyberg and G. H. von Wright, translated with D. F. Pears, L. Wittgenstein, *Prototractatus*, London: Routledge and Kegan Paul, 1971.

"Bertrand Russell and Ludwig Wittgenstein's *Notes on Logic*", *Revue Internationale de Philosophie* 26 (1972), pp. 444-60.

"Comments on Professor von Wright's 'Wittgenstein on Certainty'", in von Wright, G. H. (ed.), *Problems in the Theory of Knowledge*, The Hague: Nijhoff, 1972, pp. 61-5.

Edited in the Vienna Circle Collection (VCC) J. Schaechter, *Prolegomena to a Critical Grammar*, Dordrecht: Reidel, 1973.

"The Grundgedanke of the *Tractatus*", in Vesey, G. (ed.), *Understanding Wittgenstein*, London: Macmillan, 1974, pp. 49-60 (German translation in *Texte zum Tractatus*, Frankfurt am Main: Suhrkamp, 1989).

Assisted G. H. von Wright in editing L. Wittgenstein, *Letters to Russell, Keynes, and Moore*, Oxford: Blackwell, 1974.

Edited in the VCC Ernst Mach, *Knowledge and Error*, 1976.

Edited in the VCC F. Waismann, *Philosophical Papers*, 1977.

Edited in the VCC F. Kaufmann, *The Infinite in Mathematics*, 1978.

"Wittgenstein's Intellectual Nursery-training", in Berghel, H. et al. (edd.), *Wittgenstein, the Vienna Circle and Critical Rationalism*, Wien: Hölder-Pichler-Tempsky, 1979, pp. 33-40.

Edited with G. H. von Wright, Ludwig Wittgenstein, *Briefe*, Briefwechsel mit B. Russell etc., Frankfurt am Main: Suhrkamp, 1980.

Edited in the VCC Hans Hahn, *Empiricism, Logic and Mathematics*, 1980 (German version *Empirismus, Logik, Mathematik*, Frankfurt am Main: Suhrkamp, 1988).

Edited G. Frege, *Philosophical and Mathematical Correspondence*, Oxford: Blackwell, 1980.

"The So-called Realism of Wittgenstein's Tractatus", in Block, I. (ed.), *Perspectives on the Philosophy of Wittgenstein*, Oxford: Blackwell, 1981, pp. 60-73.

Edited and contributed to *Wittgenstein and His Times*, Oxford: Blackwell, 1981.

"Freud and Wittgenstein", in the above, pp. 27-43 (also in German and Italian translations).

"Wittgenstein's Earliest Philosophy", in Morscher, E. and Stranzinger, R. (edd.), *Ethics – Foundations, Problems, and Applications*, Vienna: Hölder, Pichler, Tempsky, 1981, pp. 434-6.

Translated "Language" by F. Rossi-Landi and M. Pesaresi, in Williams, R. (ed.), *Contact: Human Communication and its History*, New York: Thames and Hudson, 1981.

"The Path to the *Tractatus*", *Revista Portuguesa de Filosofia*, 38 (1982), pp. 7-12.

"Wittgenstein on Probability, a Contribution to Vienna Circle Discussions", *Grazer Philosophische Studien* 16/17 (1982), pp. 159-74.

"Wittgenstein's Persönlichkeit", Vorwort to Nedo, M. and Ranchetti, M. (edd.), *Ludwig Wittgenstein, sein Leben in Bildern und Texten*, Frankfurt am Main: Suhrkamp, 1983.

"Collettività e pensiero", in Lentini, F. (ed.), *Individuo, Collettività e Stato*, Acquario, 1984.

With J. C. Nyìri "Introduction" to Karl Wittgenstein, *Politico-Economic Writings*, Amsterdam/Philadelphia: Benjamins, 1984.

Edited G. Frege, *Collected Papers on Logic, Mathematics, and Philosophy*, Oxford: Blackwell, 1984.

"Language and Reality in the Tractatus", *Teoria* 5 (1985), pp. 135-44.

"Ornament und Askese in der Denkweise Wittgensteins", in Pfabigan, A. (ed.), *Ornament und Askese im Zeitgeist des Wien der Jahrhundertwende*, Wien: Brandstätter, 1985.

Edited and contributed to special number of *Synthese* (64/1985) on Moritz Schlick (also in German as *Zurück zu Schlick*, Wien: Hölder-Pichler-Tempsky, 1985).

"Wittgenstein and the Vienna Circle", contribution to the above (*Synthese* 64 (1985), pp. 351-8).

"Sraffa, Wittgenstein e i problemi del metodo logico", in Bellofiore, R. (ed.), *Tra teoria economica e grande cultura europea: Piero Sraffa*, Milan, 1986.

Edited in the VCC Ernst Mach, *Principles of the Theory of Heat*, 1986.

Wittgenstein. A Life. Young Ludwig (1889-1921), London: Duckworth, 1988 (German translation: *Wittgensteins frühe Jahre*, Frankfurt am Main: Suhrkamp, 1988; Italian translation, Mondadori, 1991; translations into French (Editions du seuil), Japanese (Hosei University Press), and Spanish (Alianza) forthcoming).

"Wittgenstein and the Value of Science" (opening address at the 11th

international Wittgenstein Symposium 1986), in O. Weinberger et al. (edd.), *Philosophy of Law, Politics, and Society*, Wien: Hölder-Pichler-Tempsky, 1988, pp. 360-4.

Edited (with J. Schulte) L. Wittgenstein: *Logisch-philosophische Abhandlung/Tractatus logico-philosophicus*, Kritische Edition, Frankfurt am Main: Suhrkamp, 1989.

"Ernst Mach and His Influence on Austrian Thinkers", in *Traditionen und Perspektiven der analytischen Philosophie. Festschrift für Rudolf Haller*, Wien: Hölder-Pichler-Tempsky, 1989, pp. 149-56.

(With G. Frongia), *Wittgenstein, a Bibliographical Guide*, Oxford: Blackwell, 1990.

"'Der Löwe spricht . . . und wir können ihn nicht verstehen'. Zu Wittgensteins hundertstem Geburtstag", "*Der Löwe spricht . . . und wir können ihn nicht verstehen*", Frankfurt am Main: Suhrkamp, 1991, pp. 7-19.

The End of Philosophy, Essays on Wittgenstein, London: Routledge (forthcoming).

"Wittgenstein et la deuxiéme guerre mondiale", in P. Soulez (ed.), *Les philosophes et la deuxiéme guerre mondiale* (forthcoming).

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