

Ludwig
Wittgenstein

Philosophical
Investigations

The German text, with an English
translation by G. E. M. Anscombe,
P. M. S. Hacker and Joachim Schulte

Revised 4th edition by P. M. S. Hacker
and Joachim Schulte

Wittge

About the pagination of this eBook

Due to the unique page numbering scheme of this book, the electronic pagination of the eBook does not match the pagination of the printed version. To navigate the text, please use the electronic Table of Contents that appears alongside the eBook or the Search function.

For citation purposes, use the page numbers that appear in the text.

Über die Paginierung dieses Buches

Aufgrund des eindeutigen Schemas der Seitennummerierung dieses Buches, passt die Paginierung des eBooks und die Paginierung der gedruckten Version nicht zusammen. Benutzen Sie bitte, um im Text zu navigieren, das elektronische Inhaltsverzeichnis, das neben dem eBook oder neben der Suchfunktion erscheint.

Benutzen Sie für Zitierzwecke die Seitenzahlen, die im Text erscheinen.

PHILOSOPHISCHE UNTERSUCHUNGEN

PHILOSOPHICAL INVESTIGATIONS

PHILOSOPHISCHE UNTERSUCHUNGEN

PHILOSOPHICAL INVESTIGATIONS

LUDWIG WITTGENSTEIN

Translated by

G. E. M. Anscombe, P. M. S. Hacker and
Joachim Schulte

Revised fourth edition by

P. M. S. Hacker and Joachim Schulte



This fourth edition first published 2009
© 2009 Blackwell Publishing Ltd

Edition history: Basil Blackwell Ltd (1e, 1953; 2e, 1958);
Blackwell Publishing Ltd (3e, 2001)

Blackwell Publishing was acquired by John Wiley & Sons in February 2007.
Blackwell's publishing program has been merged with Wiley's global Scientific,
Technical, and Medical business to form Wiley-Blackwell.

Registered Office

John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex,
PO19 8SQ, United Kingdom

Editorial Offices

350 Main Street, Malden, MA 02148-5020, USA
9600 Garsington Road, Oxford, OX4 2DQ, UK
The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

For details of our global editorial offices, for customer services, and for
information about how to apply for permission to reuse the copyright
material in this book please see our website at www.wiley.com/wiley-blackwell.

The right of Peter Hacker and Joachim Schulte to be identified as the authors of
the editorial material in this work has been asserted in accordance with the
Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this publication may be reproduced, stored in
a retrieval system, or transmitted, in any form or by any means, electronic,
mechanical, photocopying, recording or otherwise, except as permitted by
the UK Copyright, Designs and Patents Act 1988, without the prior permission
of the publisher.

Wiley also publishes its books in a variety of electronic formats.
Some content that appears in print may not be available in electronic books.

Designations used by companies to distinguish their products are often claimed
as trademarks. All brand names and product names used in this book are
trade names, service marks, trademarks or registered trademarks of their respective
owners. The publisher is not associated with any product or vendor mentioned in this
book. This publication is designed to provide accurate and authoritative information in
regard to the subject matter covered. It is sold on the understanding that the publisher
is not engaged in rendering professional services. If professional advice or other expert
assistance is required, the services of a competent professional should be sought.

Library of Congress Cataloging-in-Publication Data

Wittgenstein, Ludwig, 1889–1951.

[Philosophische Untersuchungen. English]

Philosophical investigations / Ludwig Wittgenstein ; translated by G.E.M. Anscombe,
P.M.S. Hacker, and Joachim Schulte. — Rev. 4th ed. / by P.M.S. Hacker and Joachim
Schulte.

p. cm.

English and German.

Includes bibliographical references and index.

ISBN 978-1-4051-5928-9 (hardcover : alk. paper) — ISBN 978-1-4051-5929-6

(pbk. : alk. paper) 1. Philosophy. 2. Language and languages—Philosophy. 3. Semantics
(Philosophy) I. Anscombe, G. E. M. (Gertrude Elizabeth Margaret) II. Hacker, P. M. S.
(Peter Michael Stephan) III. Schulte, Joachim. IV. Title.

B3376.W563P53 2009

192—dc22

2009023572

A catalogue record for this book is available from the British Library.

Set in 10.5/13pt Sabon by Graphicraft Limited, Hong Kong
Printed in Singapore

Editors' and Translators' Acknowledgements for the Fourth Edition

The idea that we should produce a revised translation of Wittgenstein's *Philosophische Untersuchungen* was brought up at what turned out to be one of the last meetings of the Wittgenstein trustees. We and our colleagues — Nicholas Denyer, Anthony Kenny and Anselm Müller — came to the conclusion that it would be best to build on the foundations laid by G. E. M. Anscombe in her translation of Wittgenstein's second great work. The trustees, with the exception of Anthony Kenny, became members of what is now the Wittgenstein editorial advisory committee. This group was joined by David McKitterick, the Librarian of Trinity College, Cambridge, who has been an enthusiastic supporter of our project. We are greatly indebted to him for his help.

We thought that a few months' individual work and three or four weeks together would suffice to complete the task. With that in mind, we applied to the Rockefeller Center at Bellagio on Lake Como for a period of residence to work together, and were granted a stay of four weeks in these beautiful surroundings. But although each of us had spent several months preparing for our meeting, we found that the amount of work still necessary was far greater than anticipated. The shock of discovering that we would be lucky to reach §189 by the end of our stay was mitigated by the generous hospitality offered by the Rockefeller Center in September–October 2006.

It was evident that far more time than originally anticipated was necessary, and we had to ensure that we could meet periodically to discuss the work each of us did independently. In this we were greatly helped by St John's College, Oxford, and the Philosophy Department of the University of Zürich, whose assistance enabled us to have a further four extended meetings. Moreover, in the summer of 2007 the Kalischer family gave us the use of their magnificent home in Berlin, which made it possible for us to spend a fortnight's intense discussions in this *locus amoenus*.

When we had a complete draft, we thought to benefit from responses of Wittgenstein scholars to our revised translation. We applied to the European Translation Centre in Athens for a week's stay in their residence at Lefkes on the island of Paros. Generous financial support was forthcoming from Trinity College, Cambridge, and when it was found that we had failed to allow for the fact that the value of currencies tends to fluctuate, the Faculty of Philosophy of Oxford University and the University of Athens stepped in to help. So, we met for a week at Lefkes to discuss the fruit of our labours with Hanjo Glock, Anthony Kenny, Vassiliki Kindi, Brian McGuinness, Eike von Savigny, Severin Schroeder, Edna Ullmann-Margalit and Stelios Virvidakis. Anthony Kenny's chairmanship of the meetings was exemplary, and we are grateful to him for steering us through the shoals and rapids. We are especially indebted to Vassiliki Kindi, who surpassed herself as organizer, helpmate, contributor to our discussions and friend. These intense and lengthy discussions led to a great number of changes in our revised translation.

In addition, we received long and invaluable lists of specific comments and questions from Brian McGuinness and Eike von Savigny, both before and after the meetings on Paros. Questions on or relevant to our revised translation were raised in correspondence with Hanoch Ben-Yami, Stewart Candlish, Lars Hertzberg, Wolfgang Kienzler, Grant Luckhardt and Josef Rothhaupt. We also profited from examining specific points discussed in writings by Stewart Candlish, Roland Hall and David Stern.

Patience is a publisher's crowning virtue. We thank Nick Bellorini of Wiley-Blackwell for unstintingly exercising this virtue in our regard. And we are most grateful to Jean van Altena for her copy-editing and invaluable suggestions for improvement.

P. M. S. Hacker
Joachim Schulte

Contents

Editorial Preface to the Fourth Edition and Modified Translation	viii
The Text of the <i>Philosophische Untersuchungen</i>	xviii
<i>Philosophische Untersuchungen</i> <i>Philosophical Investigations</i>	1
<i>Philosophie der Psychologie – Ein Fragment</i> <i>Philosophy of Psychology – A Fragment</i>	182
Endnotes	244
Register	267
Index	288

Editorial Preface to the Fourth Edition and Modified Translation

1. *The previous editions and translation*

The *Philosophical Investigations* was published in 1953, edited by G. E. M. Anscombe and Rush Rhees, and translated by Anscombe. A second edition was published in 1958, in which minor corrections (misspellings and punctuation) to the German text were made, and a large number of small changes and 28 significant alterations were made to the English text. In 2003, after Anscombe's death, a third, 50-year anniversary edition was published by Nicholas Denyer with a small number of further alterations to the translation that Anscombe had made over the years in her copy of the previously published text. The third edition unfortunately did not follow the pagination of the first two editions.

Anscombe's translation was an impressive achievement. She invented an English equivalent for Wittgenstein's distinctive, often colloquial, style. This was no mean feat. For she had to find not only English analogues of Wittgenstein's stylistic idiosyncracies, but also an English rhythm that would convey the character of Wittgenstein's carefully crafted prose. Her success is indisputable.

Nevertheless, there are errors of different kinds in the first three editions and in the translation. It was because of these that the Wittgenstein editorial advisory committee agreed to the production of a new edition. But, given the excellence of the Anscombe translation, it was resolved that rather than making a completely new one, we should build on Anscombe's achievement and produce a modified translation, rectifying any errors or misjudgements we discerned in hers. It should be emphasized that many of the errors in the Anscombe–Rhees editions could not have been identified in the 1950s, prior to the availability and extensive study of the Wittgenstein *Nachlass*, some crucial items of which did not come to light until decades later.

2. *The fourth edition*

The most important editorial change we have made is to drop the division of the book into two parts. What was Part I is now the *Philosophical Investigations*, and what was Part II is now named *Philosophy of Psychology – A Fragment* (which we abbreviate ‘PPF’). We explain our reasons for this alteration in the essay on the history of the text of the *Investigations* below.

A further important change we have introduced is to print the slips that were added by Wittgenstein to the typed text of the *Philosophical Investigations* in boxes in their designated places wherever that is now known, rather than at the foot of the relevant page as *Randbemerkungen*. The rationales for their relocations are given severally in endnotes.

In a couple of places, we have introduced Wittgenstein’s original squiggles or drawings. In §169 a meaningless sequence of typographical symbols was typed into the text as a *substitute* for the ‘arbitrary pothooks and squiggles’ (mentioned in §168) that are evident in *Eine Philosophische Betrachtung*, p. 182. So we have reproduced the latter. Again, PPF §108 benefits from the insertion of the little drawing, printed in *Last Writings on the Philosophy of Psychology* I, §88, which illustrates the remark that different concepts touch and run side by side for a stretch, but one shouldn’t think that all such lines are circles.

Because the new edition is also a modified translation, with some translated sentences longer than hitherto and others shorter, it has not been possible to preserve the identical pagination of the first and second editions. Since the vast majority of English writings on Wittgenstein have made copious references to those editions, we have inserted the pagination of the first two editions in the text between small verticals (e.g. |123|) at the points of page-breaks.

There are some editorial changes in the new edition of what was previously referred to as ‘Part II’. The lost TS 234 was based on MS 144, which consists of loose sheets clipped into a folder.¹ It is not known to what extent the present order of sheets was Wittgenstein’s (the foliation is not in his hand). Most of the remarks collected in this folder come from MSS 137 and 138, that is, from manuscripts that were written between October 1948 and spring 1949 and hence not used for the dictation of TSS 229 and 232 (published as *Remarks on the*

¹ All references to Wittgenstein’s Nachlass are to von Wright number, followed by page number or section number (§) or both, as in the Bergen electronic edition. References to Wittgenstein’s published works are by title and either section or page number.

Philosophy of Psychology I and II). A few remarks are taken from these earlier typescripts; some originate in MS 169 (which is contemporary with the later part of MS 137); another few have not been traced to earlier manuscript sources. It is not known whether the typescript used for printing the first edition of ‘Part II’ of the *Investigations* (TS 234) was copied by a typist from MS 144 or dictated to the typist by Wittgenstein. There is evidence that some mistakes were made in the composition of the typescript. It can safely be said that there are at least two points where the order of remarks intended by Wittgenstein and clearly indicated in MS 144 was not respected in TS 234. These errors were pointed out by G. H. von Wright;² they have been rectified here (see PPF §§220–1 and §§235–6).

It is clear that the remarks that were collected together in TS 234, as well as their arrangement, are very uneven. There is every reason to think that Wittgenstein would have made many changes had he continued to work on this material. Some of these changes would have consisted in shifting individual remarks to different positions, in joining separate paragraphs to other ones, and in severing sentences or paragraphs from certain remarks. Other changes would have involved redrafting and correcting sentences that were badly drafted or poorly adjusted to their context (some of these requirements will be pointed out in the endnotes). Readers of *Philosophy of Psychology — A Fragment* will be well advised to bear in mind that what we have there, unlike the *Investigations*, is work in progress.

A prominent feature of the Anscombe-Rhees edition of what they called ‘Part II’ is the subdivision of the text into ‘sections’ numbered i to xiv. The editors’ reasons for inserting these headings were in part external. As von Wright pointed out, in the manuscript ‘each section begins and ends on a sheet of its own’.³ However, as no copy of TS 234 is extant, we know nothing about the external characteristics of this typescript, and accordingly we cannot judge to what extent the criterion mentioned by von Wright may have been relevant to the editors’ decisions. In the case of the earlier sections it is often clear on the basis of the content of the remarks why they were grouped as they are. However, when one turns to section xi, it becomes equally clear that

² G. H. von Wright, ‘The Troubled History of Part II of the *Investigations*’, *Grazer philosophische Studien* 42 (1992), p. 184. Cf. J. Schulte’s Kritisch-genetische Edition of *Philosophische Untersuchungen* (Suhrkamp, Frankfurt am Main, 2001).

³ von Wright, ‘Troubled History’, p. 183.

Wittgenstein or his editors simply abandoned the project of arranging these remarks in an order analogous to that of sections i to x and xii to xiv. In the present edition, we have retained the old section headings, but our principal means of organizing the text and facilitating reference to passages from it is a simple numbering of individual remarks along the lines of Wittgenstein's own system in the *Investigations*. This method has the additional advantage of forestalling doubts about whether a paragraph beginning on a new page belongs to the same remark as the last paragraph on the previous page — a difficulty encountered on several pages of former editions.

3. *The German text*

The most important source for the German text of *Philosophische Untersuchungen* printed here is the first edition of the book (1953). This was based on one of three copies of the typescript of the *Investigations* and on what was apparently the sole copy (the missing TS 234) of what became 'Part II' of the book.⁴ As far as we know, the text of the 1953 edition is on the whole very reliable.

Work on Wittgenstein's *Nachlass* led to the critical edition (2001) of the currently extant typescripts of the earlier drafts of the *Philosophical Investigations*, as well as of the manuscript (MS 144) on which Part II was based. In this critical-genetic edition, many passages were elucidated by quotations from earlier manuscript versions of relevant remarks. In the light of this edition and additional work on the *Nachlass*, we have prepared a German text which differs from that of the first three editions in various respects. We have corrected a few obvious misprints like 'Wage' (§§142, 182, 259) in place of 'Waage' (often but by no means always misspelled by Wittgenstein); 'wir' in place of 'wie' (§282), and 'Sinneneindrücke' in place of 'Sinnesindrücke' (§486). A few oddities could be clarified by consulting the manuscripts. For example, in §433 the correct version reads, not 'in welchem Zeichen', but 'in welchen Zeichen'; and in §441 the unintelligible 'daß wir . . . Wunschäußerungen von uns machen' should read 'daß wir . . . Wunschäußerungen machen'

⁴ The typescripts from which the book was printed were lost sometime after publication. The third copy of the *Untersuchungen* proper came to light only in 1993. The few points where it deviates from the published text and/or the other extant copy of the typescript are described in J. Schulte's critical-genetic edition.

(Wittgenstein forgot to cross out part of the variant formulation ‘Wunschaußerungen von uns geben’). In TS 227(a), one of the two surviving typescripts, Wittgenstein crossed out the ‘k’ in ‘keinen’ in §85(b), thus changing the sentence from ‘der Wegweiser lässt doch keinen Zweifel offen’ ('the signpost does after all leave no room for doubt') to ‘der Wegweiser lässt doch einen Zweifel offen’ ('the signpost does after all leave room for doubt'). This, in the context, makes much better sense. Similarly, ‘Gesichtseindruck’ ('visual impression') in PPF §231 is a misprint for ‘Gesichtsausdruck’ ('facial expression'), as is evident from MS 138, 6b. So too in PPF §306 ‘beim innerlichen Rechnen’ ('when we made internal calculations', according to Anscombe's translation) is almost certainly meant to be ‘beim innerlichen Reden’ ('when we speak to ourselves silently') on the model of MS 144, 92.

We have made no attempt to normalize Wittgenstein's characteristic use of commas; the only exceptions are two or three passages where we omitted a particularly distracting comma after the last item of a long list. An example is PPF §93: ‘daß die Verben “glauben”, “wünschen”, “wollen”, alle die grammatischen Formen aufweisen’; the comma before ‘alle’ has been dropped in our edition. We have, however, standardized his dots signifying ‘and so on’, reducing them to three, without any closing full stop when they occur at the end of a sentence.

In the typescripts as well as in the previous editions of the *Untersuchungen* there are many occurrences of forms like ‘etc.’ where a closing full stop follows an abbreviation. We have decided to print only one full stop in such cases. There are a number of sentences where a closing full stop or question mark is missing. In such cases we have supplied the missing sign. In the case of complete quoted sentences we print the last quotation mark after the closing punctuation mark. This is in conformity with Wittgenstein's normal practice.

A few common expressions have been standardized in the light of Wittgenstein's usual practice in his manuscripts. These are: ‘gar nicht’, ‘gar nichts’ in place of ‘garnicht’, ‘garnichts’; ‘inwiefern’ in place of ‘in wiefern’; ‘derselbe’ in place of ‘der selbe’; ‘so daß’ in place of ‘sodaß’; ‘statt dessen’ in place of ‘stattdessen’. In accordance with German typographical practice, we have spaced ‘z. B.’, ‘d. h.’, ‘u. s. w.’, etc.

We have capitalized nominalized forms where Wittgenstein forgot to do so. In such cases, however, we have exercised our judgement and proceeded with discretion, restricting modifications of the text to particularly clear and distracting cases where, for example, only one out of several nominalized words in the same sentence is spelled without a capital letter.

4. *The modified translation*

Anscombe's translation is now more than 50 years old, and English has moved on apace. Some of her orthographic conventions have become definitely archaic, such as her spelling of 'connexion' and 'shew'. These we have replaced by contemporary orthographic conventions. We have also favoured colloquial compression, as in 'I'm', 'I'll', 'he'd', 'we'd', 'isn't', 'aren't', 'won't' and 'wouldn't', rather more than Anscombe, in order to bring out the conversational tone of the writing. She was meticulous in her use of 'shall' and 'will', and 'should' and 'would', but time has eroded these distinctions, and we have tried to conform to current usage.

In the changes we have introduced to the first 107 remarks of the *Investigations*, we have paid careful attention to Wittgenstein's responses to Rush Rhees's translation of 1938–9 (TS 226). Wittgenstein went over Rhees's often imperfect draft carefully, together with Yorick Smythies, and he made numerous changes and corrections on the typescript by hand. To be sure, he was not a native English speaker, and not all of his corrections are improvements. But where he changed a translation that was subsequently used also by Anscombe, his proposal always merits close attention. Moreover, many of the changes he introduced make his intentions at that time (1939) clear, and the fact that he did *not* change some of Rhees's translation where it differs importantly in meaning from Anscombe's is always noteworthy.

Some of the substantive changes we have introduced into the translation are systematic. Anscombe had a marked preference for minimizing the use of the third-person impersonal pronoun 'one', often translating Wittgenstein's use of the German word *man* by the second-person pronoun 'you'. This made the text appear to be more of a conversation with the reader than it actually is. We have throughout respected Wittgenstein's choice of pronominal form. Anscombe translated *seltsam* and *merkwürdig* by 'queer'. We have translated *seltsam* by 'odd', 'strange' or 'curious', and *merkwürdig* by 'remarkable', 'strange', 'curious' or 'extraordinary'. Wittgenstein's use of *Erklärung* ('explanation') and *Definition* ('definition') was not always respected in Anscombe's translation, but we have kept to Wittgenstein's choice of words. So too, his choice of *Sinn* in some contexts and *Bedeutung* in others was not observed in the translation, but we have abided by Wittgenstein's preferences. Hence, where he speaks of “primäre” und “sekundäre” Bedeutung' (PPF §276; p. 216(d) in the first two editions), we have translated ‘“primary” and “secondary” meaning’ rather than Anscombe's ‘“primary” and

“secondary” sense’. Anscombe was not consistent in her translation of *Gebrauch*, *Verwendung* and *Anwendung*. We have translated *Gebrauch* by ‘use’, *Verwendung* by ‘use’ or ‘employment’, and *Anwendung* by ‘application’. ‘Use’ also does service for *benützen*. In general, however, we have not allowed ourselves to be hidebound by the multiple occurrence of the same German word or phrase in different contexts. It by no means requires always translating by the same English expression, but rather depends on the exigencies of the context and the author’s intention. So, for example, we have translated *Praxis der Sprache* in *Investigations* §21 by ‘linguistic practice’ rather than by the more ponderous ‘practice of the language’, and *Praxis des Spiels* in §54(b) as ‘the way the game is played’, because this is how Wittgenstein wanted it translated.

Some German words that Wittgenstein employs are problematic for any translator. So, for example, his use of *Satz* has no obvious English equivalent, and choices have to be made between ‘sentence’, ‘proposition’, and even ‘remark’. So, for example, in *Investigations* §§134–5 the German has *Satz* throughout, but it would be infelicitous to translate the word by ‘sentence’ in all its occurrences here. In many cases, we have gone along with Anscombe’s choice between ‘sentence’ and ‘proposition’, but not in all. For example, in §105(a) Wittgenstein wrote ‘Wenn wir glauben, jene Ordnung, das Ideal, in der wirklichen Sprache finden zu müssen, werden wir nun mit dem unzufrieden, was man im gewöhnlichen Leben “Satz”, “Wort”, “Zeichen” nennt.’ Anscombe translated the latter clause by ‘We become dissatisfied with what are ordinarily called “propositions”, “words”, “signs”.’ But Wittgenstein here is focusing on linguistic *signs* (as is evident from the subsequent paragraph (‘And we rack our brains over the nature of the *real sign*’) — so we have opted for ‘sentence’ here. Again, in §§395–6, it is clearly the *sentence*, not the proposition, that is supposedly guaranteed its sense by the imagination. And in §554, Wittgenstein is talking about applying the operation of negation to *sentences*.

Similar recurrent difficulties arise with the translation of *Seele*, since it cannot always be correctly rendered by ‘soul’. Anscombe was clearly aware of the problem, and in many remarks rightly opted for ‘mind’ as a correct translation of *Seele* (e.g. §§6, 37, 188, 196, 357, 358, 648, 651, 652), and usually translated *Zustand der Seele* correctly as ‘state of mind’. However, in some remarks she questionably opted for ‘soul’. For example, in §283(d): ‘And can one say of the stone that it has a *Seele* and *that* is what has the pain? What has a *Seele*, or pain, to do with a stone?’ — what is at issue is *mind*, not *soul*, and the problems of mind and body, not of the soul and the body. Similarly, in the final

paragraph of this remark: ‘For one has to say it of a body, or, if you like of a *Seele* which some body *has*. And how can a body *have a Seele*’, it is clear that the discussion concerns *mind* and body. So too, in §§357, 391, 424, 454, and PPF §76. By contrast, in PPF §§23–6 it is primarily the soul that is under discussion, because §23 opens with the observation that ‘religion teaches that the soul can exist when the body has disintegrated’. However, §24 requires some indication that ‘mind’ or ‘soul’ are equally apt.

In the case of *Empfindung* the German noun has a much wider application than the English ‘sensation’. In many contexts, the translation ‘sensation’ is unproblematic. But in some cases the use of the German *Empfindung* is perfectly natural, while ‘sensation’ would be quite mistaken. So, for example, in §151 ‘Vielleicht hatte er eine Empfindung, die man “das ist leicht” nennen kann’ is to be rendered ‘. . . what may be called the feeling [not “the sensation”] “that’s easy!”’. So too, in §160, one can speak of reading something with the *feeling* of saying something one has learnt by heart, but not with the *sensation* of saying something one has learnt by heart. §§272–5 are very problematic in this respect, for ‘Empfindung von Rot’ is neither ‘sensation of red’ (where is this sensation? — in the eye?) nor ‘feeling of red’. Since Wittgenstein switched from ‘Rotempfindung’ in §272 and §273 to ‘Farbeindruck’ and ‘visueller Eindruck’ in §§275–7, we have translated ‘Empfindung von Rot’ as ‘visual impression of red’ in §§272–3 and ‘colour impression’ in §274. Similarly, in §312, where Wittgenstein speaks of *Gesichtsempfindung*, we have changed Anscombe’s ‘visual sensation’ (visual sensations are, for example, sensations of glare when blinded by strong light) to ‘visual impression’. In §400 *Empfindung* presents yet another difficulty: what the idealist has discovered in speaking of the *visual room* ‘was a new way of speaking, a new comparison, and one could even say, a new *Empfindung*’ — here neither ‘sensation’ or ‘feeling’ nor ‘impression’ will do. We have opted for ‘experience’ as the closest approximation, but perhaps what Wittgenstein had in mind was ‘a new sensibility’. Similar systematic difficulties attend the German use of ‘*wollen*’ and its relation to ‘*Wille*’ (especially in §§611–19). Anscombe chose to translate the verb in these contexts uniformly by ‘to will’ and its cognates, which is highly artificial as well as misleading. There is no easy solution to the problem, but we have used ‘to want’ and its derivatives where possible, and sometimes (as in §611) both. So too, *Vorstellung* and its cognates present formidable difficulties for the translator, which we have sometimes resolved differently from Anscombe, e.g. §§300–1, 389, 402.

Occasional Anglicisms crept into Wittgenstein's German. At one point, Anscombe failed to notice his (mis)use of *Meinung* to signify 'meaning (something)', translating §639 as 'One would like to say that *an opinion* develops' (which is perfectly accurate) instead of '... that meaning something develops' (which is surely what Wittgenstein meant (see MS 129, 166f.)).

Three recurrent errors run through Anscombe's translation. First, she commonly mistranslated *manch(er, -e, -es)*: for example, as 'much of the use of (§7)' rather than 'certain uses', 'much else besides' (§21) rather than 'some other things', 'many ways' (§73) rather than 'various ways', 'a good deal that you will not say' (§79(d)) rather than 'some things you won't say', 'many mathematical proofs' (§517) instead of 'some mathematical proofs', and so on. Second, she apparently misunderstood the usage of *wohl*, taking it to be more categorical than it is. So, for example, she translated 'Aber es wird wohl auch der Ton . . .' (§21) as 'No doubt the tone . . .' where we prefer 'But probably the tone . . .'; she translated 'Ähnlich dachte sich wohl Frege die "Annahme"' (boxed note after §22) as 'This will be how Frege thought of the "assumption"' instead of 'It may well be that this is how . . .', 'der wohl nur beim Philosophieren vorkommt' (§38) as 'which doubtless only occurs when doing philosophy', instead of 'which may well occur only when . . .'; and so on. Finally, there are occasions where the use of the German definite article *der* (*die, das*) should not be translated by a definite, but by an *indefinite* article. For example, it is mistaken to translate 'so nenne ich sie deswegen nicht den Befehl, mich anzustarren etc. . .' as 'I don't on that account call it *the* order to stare . . .' rather than ' . . . an order to stare' (§498). Again, the slogan quoted in §560 should not run 'The meaning of a word is what is explained by *the* explanation of its meaning' but rather: 'The meaning of a word is what *an* explanation of its meaning explains'. And so on. Since in German the indefinite article and the number word 'one' are homonyms (*ein*) Wittgenstein tended to italicize *ein* when he meant 'one' as opposed to 'a'. Anscombe preserved these italics in translation, but in English such italicization is unnecessary.

Wittgenstein's punctuation was often idiosyncratic. It is, of course, impossible to transfer into English the elaborate punctuation conventions of German, let alone all of Wittgenstein's idiosyncratic additions to it. Anscombe was sparing with her use of punctuation. But Wittgenstein explicitly noted his own preference for heavy punctuation, in order to slow the reader down (MS 136, 128)⁵, so we have been a

⁵ See Wittgenstein, *Culture and Value*, 2nd edn (Blackwell Oxford, 1980), p. 68.

little more liberal in our use of commas than Anscombe. On the other hand, we have reduced his frequent use of colons before quoted sentences and replaced his colons by commas. We have respected Wittgenstein's use of short and long dashes, but wherever possible, have avoided following a comma or semi-colon by a dash — which looks uncommonly ugly, preferring to delete one or the other. In some cases, however, we have replaced a pair of short dashes by commas. As in the German text, we have standardized his 'dots of laziness', but in conformity with English convention have added one as a full stop when they occur at the end of a sentence. We have accepted his practice of using double quotation marks to begin a quotation, with single quotation marks for quotes within quotes. He also used single quotation marks as scare-quotes, and this too we have accepted. Wittgenstein wrote before the days of systematic and methodical differentiation of the use from the mention of a word or phrase by quotation marks (which became uniform in the second half of the twentieth century). His use, and lack of use, of quotation marks is not always systematic. We have for the most part abided by it, since it is usually perfectly clear. But in a couple of places it renders a passage almost unintelligible, and there we have changed it (e.g. §458, see end-note). We have by and large not followed his practice of employing both question mark and exclamation mark at the end of an interrogative sentence that is surprising or especially emphatic. For reasons that should be obvious from case to case, we have sometimes added italics and sometimes removed italics from Anscombe's translation.

There are various quotations, references and allusions in Wittgenstein's text. These we have attempted to identify. But, not wanting to clutter up his text with footnotes, we have relegated these identifications to the endnotes. It is there too that we have explained, where we could, the import of Wittgenstein's occasional double-bracketed notes to himself. Our primary use of endnotes, however, is to explain our differences with Anscombe's translation, where they do not speak for themselves. All endnotes are indicated by a marginal asterisk adjacent to the relevant remark or paragraph within a remark.

The Text of the *Philosophische Untersuchungen*

In his Preface, dated January 1945 (prior to the composition of the final draft of the *Investigations* in 1945–6), Wittgenstein wrote that the book consists of the precipitate of his work over the previous sixteen years. He had returned to Cambridge, and to philosophy, in January 1929. His first attempt to compose a book which would present his new thoughts was *The Big Typescript* (TS 213), a 768-page untitled typescript, with an eight-page annotated table of contents, dictated in 1933. This was based on his MSS Volumes I–X (MSS 105–114) written between 1929 and 1932. No sooner was the dictation completed than Wittgenstein started to amend it extensively, first by manuscript additions written on the typescript, and then by attempts at rewriting the material in fresh manuscripts. The first revision ('Umarbeitung') is in MSS Volumes X and XI (MSS 114 and 115) written in late 1933 and early 1934. This too was unsatisfactory, and Wittgenstein immediately embarked on a second revision (the 'Zweite Umarbeitung') in MS 140 (known as the 'Grosses Format'). However, after writing 39 pages of this, he abandoned it too. Thereafter, *The Big Typescript* was used primarily as a store from which remarks could be selected for use elsewhere.

The second attempt at composing a book took place in Norway in the autumn of 1936. In the academic year of 1934–5 in Cambridge, Wittgenstein had dictated the *Brown Book* to Alice Ambrose and Francis Skinner. In August 1936, he travelled to Norway with the intention of continuing his philosophical work in solitude in his small house in Skjolden. At the end of August, he began translating the English text of the *Brown Book* into German in MS 115 (Volume XI), pp. 118–292, under the title 'Philosophische Untersuchungen, Versuch einer Umarbeitung' ('Philosophical Investigations, Attempted Revision'), revising it as he was going along. But in early November he gave up,

writing on page 292 of the MS volume ‘This whole “attempted revision” from page 118 to here is WORTHLESS.’

He immediately began a new endeavour in MS 142 — the first, pre-war, version of the *Philosophical Investigations*, which corresponds roughly to §§1–189(a) of the published book. This is a 167-page manuscript, written as consecutive paragraphed prose, with the title *Philosophische Untersuchungen (Philosophical Investigations)*. It was compiled during two separate periods. Pages 1–76 were probably written between early November and early December 1936, after which Wittgenstein left Norway to spend Christmas with his family in Vienna. Pages 77–167 were presumably composed after his return to Skjolden between February and May 1937, when he left Skjolden for Britain. This manuscript material was typed in two instalments later in 1937, producing the 137-page typescript TS 220.

Wittgenstein returned to Skjolden in mid-August 1937 and began working on the continuation of TS 220. At this stage, the continuation of his reflections beyond §189 was intended to pursue questions in the philosophy of mathematics pertaining to inference, proof and calculation, and logical compulsion. So the initial discussion of following rules, which is common both to this Early Draft and to the final version of the *Investigations*, was designed to support an investigation into logical and mathematical necessity. The upshot of his work on the sequel to TS 220 was the dictation in 1938 of TS 221, a typescript that corresponds, in a different arrangement (see below), to Part I of the *Remarks on the Foundations of Mathematics*. It was with the conjunction of TS 220 and 221¹ that Wittgenstein approached the Syndics of Cambridge University Press in the late summer of 1938 with the intention of publishing it in a bilingual edition under the title ‘Philosophical Remarks’. However, by October 1938, Wittgenstein was already having qualms about publication and expressing hesitation about it to the Syndics.

Sometime between late 1939 and 1943, Wittgenstein revised the Early Draft. One of the typescripts of TS 220 was extensively revised by hand (TS 239).² TS 221 was reworked, cut up and re-arranged. The subsequently dictated typescript, TS 222, has been printed as Part I of the *Remarks on the Foundations of Mathematics*. It was with these revised

¹ The conjunction of the two typescripts has been published as the ‘Frühfassung’ ('Early Draft') in *Philosophische Untersuchungen, Kritisch-genetische Edition*, ed. Joachim Schulte (Suhrkamp, Frankfurt am Main, 2001).

² It has been published in the critical-genetic edition as the ‘Bearbeitete Frühfassung’ ('Reworked Early Draft').

typescripts that Wittgenstein again approached the Syndics of the Press in September 1943, proposing publication of a book with the title *Philosophical Investigations*, to be printed together with a new impression of the *Tractatus*. The idea of juxtaposing these two texts, as he explained later in the Preface to the *Investigations*, had occurred to him in the course of re-reading the *Tractatus* together with a friend (probably Nicholas Bachtin). For it seemed to him that his new philosophical ideas could be seen in the right light only by contrast with his old ones. The Syndics agreed to the proposal in January 1944, but by then Wittgenstein had already moved on to something else.

His next attempt was embodied in a 195-page typescript (which no longer exists as a separate typescript, but which has been reconstructed by G. H. von Wright) consisting of 300 (mis)numbered remarks (303 being the correct number) corresponding roughly to *Investigations* §§1–421. It was for this typescript that Wittgenstein wrote the Preface to the *Investigations* dated January 1945. This so called Intermediate Draft³ consists of the reworked draft of TS 220 (i.e. TS 239), corresponding to *Investigations* §§1–189(a), together with eight pages from TS 221, corresponding to §§189(b)–197, followed by new material, written in 1944, that corresponds roughly to half the remarks in *Investigations* §§198–421. It was at this stage that Wittgenstein apparently abandoned the idea of a logico-mathematical sequel to the early draft of §§1–189, resolving instead to continue the remarks on following rules with the discussion of a private language, thought, imagination, and so forth — in short, the material we are now familiar with from the final version. The mathematical project was, it seems, deferred for a second book, with the subsequently proposed tentative title of ‘Beginning Mathematics’ (see MS 169, 36v).

Still not satisfied with what he had done, Wittgenstein turned in mid-1945 to selecting further materials for this first volume,⁴ i.e. the *Investigations*, from his manuscript volumes MSS 115–119 and MSS 129–30, some from pre-war sources (MSS 115–17 and 119) and the rest from 1944–5 (the final part of MS 116 and MSS 129–30). From these he dictated a typescript he entitled ‘Bemerkungen I’ (MS 228), which consists of 698 numbered remarks, some 400 of which he then incorporated

³ Published in the critical-genetic edition as the ‘Zwischenfassung’ (‘Intermediate Draft’).

⁴ See letter to Rhees 13 June 1945 (letter no. 328 in B. F. McGuinness (ed.), *Wittgenstein in Cambridge — Letters and Documents 1911–51* (Blackwell, Oxford, 2008), p. 377).

into the final draft of the *Investigations*. The latter (TS 227) was probably dictated in the course of the academic year 1945–6. The Intermediate Draft had been 195 pages long; the final typescript is 324 pages long.

The final typescript contains no remarks the manuscript sources of which post-date June 1945. But Wittgenstein made minor handwritten alterations to the typescript over the next few years. He also added the slips that were cut from typescripts or scribbled on notes, which were probably meant to be taken into account in further revisions of the text. On some he indicated their intended location. These notes, mostly printed in previous editions at the bottom of a given page⁵ and referred to as *Randbemerkungen*, are printed in this edition in boxes placed, wherever possible, in their designated location.

The task of publishing the *Philosophical Investigations* fell to two of Wittgenstein's three literary executors, Elizabeth Anscombe and Rush Rhees. Three typescripts of the *Investigations* were found among Wittgenstein's papers after his death in April 1951. His manuscript modifications to one of the carbon copies were transcribed by various hands into the other two copies, and the original corrected copy was sent to the publisher Basil Blackwell, who produced the first edition from it in 1953. Unfortunately, sometime after publication, the original corrected copy was lost.

Among Wittgenstein's papers, the editors found a typescript based on manuscript MS 144. This was a collection of 372 unnumbered remarks selected mostly from manuscripts written between May 1946 and May 1949. Anscombe and Rhees decided that this typescript was part of the same book as the 693 numbered remarks which they called 'Part I'. Indeed, in the editorial note to their edition, they remarked that 'If Wittgenstein had published his work himself, he would have suppressed a good deal of what is in the last 30 pages or so of Part I and worked what is in Part II, with further material, into its place.' Accordingly, they published the typescript of MS 144 (TS 234) as Part II of the *Philosophical Investigations*. Unfortunately, that typescript, from which the text was printed, has been lost.

⁵ There are two exceptions. One is the boxed remark after §108, consisting of three paragraphs. In the Anscombe–Rhees editions these were incorporated in §108 as paragraphs (b)–(d). The other is the boxed remark after §133, previously printed as §133(d) without indicating that it is an added slip cut from TS 228, §140.

There is no written evidence in Wittgenstein's *Nachlass* or correspondence to suggest that MS 144 was intended to collect together materials that would be incorporated into the *Philosophical Investigations*. Nor is there any indication that he intended to suppress 'a good deal of what is in the last thirty pages or so of Part I'. One question that arises in this connection is the date when he might have made this remark to Anscombe and Rhees. G. H. von Wright, the third of Wittgenstein's literary executors, conjectured that it was probably when they visited Wittgenstein in Dublin in December 1948.⁶ At that time a major part of what was collected in MS 144 had been written in much more extensive manuscript volumes (MS 137 and MS 138). But neither MS 144 nor, of course, the subsequent typescript TS 234, had been compiled. It may well have been that at this stage Wittgenstein contemplated revising the last 30 pages of his book, and intended to use some of the large amount of material that he had written since 1946 in the process. But he never carried out any such intentions, and we do not know whether he continued to intend to change the book in this radical way. What we do know is that he compiled MS 144 and dictated it to, or had it typed by, a typist in late June and early July 1949. It may well be that this was done at least in part in order to show his friend Norman Malcolm his current work in philosophy of psychology when he visited Malcolm at Cornell in late July 1949. We also know that when he visited Malcolm he said that

if he had the money he thought he would have his book (TS 227, the typescript of the *Investigations*) mimeographed and distributed among his friends. He said that it was not in a completely finished state, but that he did not think that he could give the final polish to it in his lifetime. The plan would have the merit that he could put in parentheses after a remark, expressions of dissatisfaction, like 'This is not quite right' or 'This is fishy'. He would like to put his book into the hands of his friends, but to take it to a publisher right then was out of the question.⁷

This remark, made in the late summer of 1949, certainly does not suggest plans for the radical rewriting and extension of the last 30 pages (approximately 170 remarks) of the book.

⁶ See G. H. von Wright, 'The Troubled History of Part II of the *Investigations*', *Grazer Philosophische Studien* 42 (1992), p. 186. He added: 'For all I have been able to ascertain, Wittgenstein did not talk about his plans to the future editors of the *Investigations* after he had left Dublin in 1949' (p. 187).

⁷ N. Malcolm, *Ludwig Wittgenstein — A Memoir*, 2nd edn (Oxford University Press, Oxford, 1984), p. 75.

Whatever Wittgenstein's final intentions were, the fact is that the closest he ever came to completing the *Philosophical Investigations* is the current text consisting of §§1–693. It is, we believe, this text that should be known as Wittgenstein's *Philosophical Investigations*. What has hitherto been called 'Philosophical Investigations, Part II' was a rearranged set of remarks written between 1946 and 1949 dealing chiefly with questions in what Wittgenstein called 'philosophy of psychology'. We have named it *Philosophy of Psychology — A Fragment*. This is, in effect, a reconstruction of the lost typescript 234, based on MS 144 and the printed version in the previous editions of the *Investigations*.

Philosophische Untersuchungen

Philosophical Investigations

Überhaupt hat der Fortschritt das an sich, daß er viel größer ausschaut als er wirklich ist.

The trouble about progress is that it always looks much greater than it really is.

Nestroy

Preface

The thoughts that I publish in what follows are the precipitate of philosophical investigations which have occupied me for the last sixteen years. They concern many subjects: the concepts of meaning, of understanding, of a proposition and sentence, of logic, the foundations of mathematics, states of consciousness, and other things. I have written down all these thoughts as remarks, short paragraphs, sometimes in longer chains about the same subject, sometimes jumping, in a sudden change, from one area to another. — Originally it was my intention to bring all this together in a book whose form I thought of differently at different times. But it seemed to me essential that in the book the thoughts should proceed from one subject to another in a natural, smooth sequence.

After several unsuccessful attempts to weld my results together into such a whole, I realized that I should never succeed. The best that I could write would never be more than philosophical remarks; my thoughts soon grew feeble if I tried to force them along a single track against their natural inclination. — And this was, of course, connected with the very nature of the investigation. For it compels us to travel criss-cross in every direction over a wide field of thought. — The philosophical remarks in this book are, as it were, a number of sketches of landscapes which were made in the course of these long and meandering journeys.

The same or almost the same points were always being approached afresh from different directions, and new sketches made. Very many of these were badly drawn or lacking in character, marked by all the defects of a weak draughtsman. And when they were rejected, a number of half-way decent ones were left, which then had to be arranged and often

cut down, in order to give the viewer an idea of the landscape. So this book is really just an album.

Until recently I had really given up the idea of publishing my work in my lifetime. All the same, it was revived from time to time, mainly because I could not help noticing that the results of my work (which I had conveyed in lectures, typescripts and discussions), were in [x] circulation, frequently misunderstood and more or less watered down or mangled. This stung my vanity, and I had difficulty in quieting it.

Four years ago, however, I had occasion to reread my first book (the *Tractatus Logico-Philosophicus*) and to explain its ideas. Then it suddenly seemed to me that I should publish those old ideas and the new ones together: that the latter could be seen in the right light only by contrast with and against the background of my older way of thinking.

For since I began to occupy myself with philosophy again, sixteen years ago, I could not but recognize grave mistakes in what I set out in that first book. I was helped to realize these mistakes — to a degree which I myself am hardly able to estimate — by the criticism which my ideas encountered from Frank Ramsey, with whom I discussed them in innumerable conversations during the last two years of his life. — Even more than to this — always powerful and assured — criticism, I am indebted to that which a teacher of this university, Mr P. Sraffa, for many years unceasingly applied to my thoughts. It is to this stimulus that I owe the most fruitful ideas of this book.

For more than one reason, what I publish here will have points of contact with what other people are writing today. — If my remarks do not bear a stamp which marks them as mine, then I do not wish to lay any further claim to them as my property.

I make them public with misgivings. It is not impossible that it should fall to the lot of this work, in its poverty and in the darkness of this time, to bring light into one brain or another — but, of course, it is not likely.

I should not like my writing to spare other people the trouble of thinking. But if possible, to stimulate someone to thoughts of his own.

I should have liked to produce a good book. It has not turned out that way, but the time is past in which I could improve it.

Cambridge, January 1945.

1. Cum ipsi (majores homines) appellabant rem aliquam, et cum secundum eam vocem corpus ad aliquid movebant, videbam, et tenebam hoc ab eis vocari rem illam, quod sonabant, cum eam vellent ostendere. Hoc autem eos velle ex motu corporis aperiebatur: tamquam verbis naturalibus omnium gentium, quae fiunt vultu et nutu oculorum, ceterorumque membrorum actu, et sonitu vocis indicante affectionem animi in petendis, habendis, rejiciendis, fugiendisve rebus. Ita verba in variis sententiis locis suis posita, et crebro audita, quarum rerum signa essent, paulatim colligebam, measque jam voluntates, edomito in eis signis ore, per haec enuntiabam. (Augustine, *Confessions*, I. 8.)¹

These words, it seems to me, give us a particular picture of the essence of human language. It is this: the words in language name objects — sentences are combinations of such names. — In this picture of language we find the roots of the following idea: Every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands.

Augustine does not mention any difference between kinds of word. Someone who describes the learning of language in this way is, I believe, thinking primarily of nouns like “table”, “chair”, “bread”, and of people’s names, and only secondarily of the names of certain actions and properties; and of the remaining kinds of word as something that will take care of itself.

- * Now think of the following use of language: I send someone shopping. I give him a slip of paper marked “five red apples”. He takes the slip to [3] the shopkeeper, who opens the drawer marked “apples”; then

* ¹ When grown-ups named some object and at the same time turned towards it, I perceived this, and I grasped that the thing was signified by the sound they uttered, since they meant to point *it* out. This, however, I gathered from their gestures, the natural language of all peoples, the language that by means of facial expression and the play of eyes, of the movements of the limbs and the tone of voice, indicates the affections of the soul when it desires, or clings to, or rejects, or recoils from, something. In this way, little by little, I learnt to understand what things the words, which I heard uttered in their respective places in various sentences, signified. And once I got my tongue around these signs, I used them to express my wishes.

he looks up the word “red” in a chart and finds a colour sample next to it; then he says the series of elementary number-words — I assume that he knows them by heart — up to the word “five”, and for each number-word he takes an apple of the same colour as the sample out of the drawer. — It is in this and similar ways that one operates with words. — “But how does he know where and how he is to look up the word ‘red’ and what he is to do with the word ‘five’?” — Well, I assume that he *acts* as I have described. Explanations come to an end somewhere. — But what is the meaning of the word “five”? — No such thing was in question here, only how the word “five” is used.

2. That philosophical notion of meaning is at home in a primitive idea of the way language functions. But one might instead say that it is the idea of a language more primitive than ours.

Let us imagine a language for which the description given by Augustine is right: the language is meant to serve for communication between a builder A and an assistant B. A is building with building stones: there are blocks, pillars, slabs and beams. B has to pass him the stones and to do so in the order in which A needs them. For this purpose they make use of a language consisting of the words “block”, “pillar”, “slab”, “beam”. A calls them out; B brings the stone which he has learnt to bring at such-and-such a call. — Conceive of this as a complete primitive language.

3. Augustine, we might say, does describe a system of communication; only not everything that we call language is this system. And one has to say this in several cases where the question arises “Will that description do or not?” The answer is: “Yes, it will, but only for this narrowly circumscribed area, not for the whole of what you were purporting to describe.”

It is as if someone were to say, “Playing a game consists in moving objects about on a surface according to certain rules . . .” — and we replied: You seem to be thinking of board-games, but they are not all the games there are. You can rectify your explanation by expressly restricting it to those games.

4. Imagine a script in which letters were used for sounds, but also for signs of emphasis and punctuation. (A script can be conceived as a language for describing sound-patterns.) Now imagine someone construing that script as if there were just a |4| correspondence of letters to

sounds and as if the letters did not also have completely different functions. Augustine's conception of language is like such an over-simple conception of the script.

5. If one looks at the example in §1, one can perhaps get an idea of how much the general concept of the meaning of a word surrounds the working of language with a haze which makes clear vision impossible. — It disperses the fog if we study the phenomena of language in primitive kinds of use in which one can clearly survey the purpose and functioning of the words.

A child uses such primitive forms of language when he learns to talk. Here the teaching of language is not explaining, but training.

6. We could imagine that the language of §2 was the *whole* language of A and B, even the whole language of a tribe. The children are brought up to perform *these* actions, to use *these* words as they do so, and to react in *this* way to the words of others.

An important part of the training will consist in the teacher's pointing to the objects, directing the child's attention to them, and at the same time uttering a word; for instance, the word "slab" as he displays that shape. (I do not want to call this "ostensive explanation" or "definition", because the child cannot as yet *ask* what the name is. I'll call it "ostensive teaching of words". — I say that it will form an important part of the training, because it is so with human beings; not because it could not be imagined otherwise.) This ostensive teaching of words can be said to establish an associative connection between word and thing. But what does this mean? Well, it may mean various things; but one very likely thinks first of all that a picture of the object comes before the child's mind when it hears the word. But now, if this does happen — is it the purpose of the word? — Yes, it *may* be the purpose. — I can imagine such a use of words (of sequences of sounds). (Uttering a word is like striking a note on the keyboard of the imagination.) But in the language of §2 it is *not* the purpose of the words to evoke images. (It may, of course, be discovered that it helps to attain the actual purpose.)

But if this is the effect of the ostensive teaching, am I to say that it effects an understanding of the word? Doesn't someone who acts on the call "Slab!" in such-and-such a way understand it? — No doubt it

was the ostensive teaching that helped to bring this about; but only together with a particular [5] kind of instruction. With different instruction the same ostensive teaching of these words would have effected a quite different understanding.

“I set the brake up by connecting up rod and lever.” — Yes, given the whole of the rest of the mechanism. Only in conjunction with that is it a brake-lever, and separated from its support it is not even a lever; it may be anything, or nothing.

7. In the practice of the use of language (2) one party calls out the words, the other acts on them. However, in instruction in the language the following process will occur: the learner *names* the objects; that is, he utters the word when the teacher points at the stone. — Indeed, there will be an even simpler exercise: the pupil repeats the words after the teacher — both of these being speech-like processes.

We can also think of the whole process of using words in (2) as one of those games by means of which children learn their native language. I will call these games “*language-games*” and will sometimes speak of a primitive language as a language-game.

And the processes of naming the stones and of repeating words after someone might also be called language-games. Think of certain uses that are made of words in games like ring-a-ring-a-roses.

I shall also call the whole, consisting of language and the activities into which it is woven, a “language-game”.

8. Let us now look at an expansion of language (2). Besides the four words “block”, “pillar”, etc., let it contain a sequence of words used as the shopkeeper in (1) uses number-words (it may be the series of letters of the alphabet); further, let it contain two words which may as well be “there” and “this” (because that roughly indicates their purpose), which are used in connection with a pointing gesture; and finally a number of colour samples. A gives an order like “d-slab—there”. At the same time he shows the assistant a colour sample, and when he utters the word “there” he points to a place on the building site. From the stock of slabs, B takes one for each letter of the alphabet up to “d”, of the same colour as the sample, and brings them to the place A indicates. — On other occasions A gives the order “this-there”. At “this” he points at a building stone. And so on.

9. When a child learns this language, he has to learn the series of number-words a, b, c, . . . by heart. And he has to learn their use. — Will this training include ostensive teaching of the words? — Well, people [6] will, for example, point to slabs and count: “a, b, c slabs”. — Something more like the ostensive teaching of the words “block”, “pillar”, etc. would be the ostensive teaching of number-words that serve not to count but to signify groups of objects that can be taken in at a glance. Children do learn the use of the first five or six elementary number-words in this way.

Are “there” and “this” also taught ostensively? — Imagine how one might perhaps teach their use. One will point at places and things, but in this case the pointing occurs in the *use* of the words too and not merely in learning the use. —

10. Now what do the words of this language *signify*? — How is what they signify supposed to come out other than in the kind of use they have? And we have already described that. So the expression “This word signifies *that*” would have to become a part of our description. In other words, the description ought to take the form: “The word . . . signifies . . .”

Well, one can abbreviate the description of the use of the word “slab” by saying that this word signifies this object. This will be done if, for example, it is merely a matter of removing the misunderstanding that the word “slab” refers to the building stone that we in fact call “block” — but the kind of ‘referring’ this is, that is to say, the rest of the use of these words, is already known.

Equally one may say that the signs “a”, “b”, etc. signify numbers: when, for example, this removes the misunderstanding that “a”, “b”, “c” play the part actually played in the language by “block”, “slab”, “pillar”. And one may also say that “c” signifies this number and not that one; if, for example, this serves to explain that the letters are to be used in the order a, b, c, d, etc., and not in the order a, b, d, c.

But making the descriptions of the uses of these words similar in this way cannot make the uses themselves any more like one another! For, as we see, they are absolutely unlike.

11. Think of the tools in a toolbox: there is a hammer, pliers, a saw, a screwdriver, a rule, a glue-pot, glue, nails and screws. — The functions of words are as diverse as the functions of these objects. (And in both cases there are similarities.)

- * Of course, what confuses us is the uniform appearance of words when we hear them in speech, or see them written or in print. For their *use* is not that obvious. Especially when we are doing philosophy! [7]

12. It is like looking into the cabin of a locomotive. There are handles there, all looking more or less alike. (This stands to reason, since they are all supposed to be handled.) But one is the handle of a crank, which can be moved continuously (it regulates the opening of a valve); another is the handle of a switch, which has only two operative positions: it is either off or on; a third is the handle of a brake-lever, the harder one pulls on it, the harder the braking; a fourth, the handle of a pump: it has an effect only so long as it is moved to and fro.

13. If we say, “Every word in the language signifies something”, we have so far said nothing *whatever*; unless we explain exactly *what* distinction we wish to make. (It might be, of course, that we wanted to distinguish the words of language (8) from words ‘without meaning’ such as occur in Lewis Carroll’s poems, or words like “Tra-la-la” in a song.)

14. Suppose someone said, “*All* tools serve to modify something. So, a hammer modifies the position of a nail, a saw the shape of a board, and so on.” — And what is modified by a rule, a glue-pot and nails? — “Our knowledge of a thing’s length, the temperature of the glue, and the solidity of a box.” — Would anything be gained by this assimilation of expressions? —

15. The word “signify” is perhaps most straightforwardly applied when the name is actually a mark on the object signified. Suppose that the tools A uses in building bear certain marks. When A shows his assistant such a mark, the assistant brings the tool that has that mark on it.

In this way, and in more or less similar ways, a name signifies a thing, and is given to a thing. — When philosophizing, it will often prove useful to say to ourselves: naming something is rather like attaching a name tag to a thing.

16. What about the colour samples that A shows to B: are they part of the *language*? Well, it is as you please. They do not belong to

spoken language; yet when I say to someone, “Pronounce the word ‘the’”, you will also count the second “‘the’” as part of the sentence. Yet it has a role just like that of a colour sample in language-game (8); that is, it is a sample of what the other is meant to say.

It is most natural, and causes least confusion, if we count the samples as tools of the language.

- * ((Remark on the reflexive pronoun “*this proposition*”.)) |8|

17. We could say: In language (8) we have different *kinds of word*. For the functions of the word “slab” and the word “block” are more alike than those of “slab” and “d”. But how we group words into kinds will depend on the aim of the classification — and on our own inclination.

Think of the different points of view according to which one can classify tools into kinds of tools. Or chess pieces into kinds of chess pieces.

18. Don’t let it bother you that languages (2) and (8) consist only of orders. If you want to say that they are therefore incomplete, ask yourself whether our own language is complete — whether it was so before the symbolism of chemistry and the notation of the infinitesimal calculus were incorporated in to it; for these are, so to speak, suburbs of our language. (And how many houses or streets does it take before a town begins to be a town?) Our language can be regarded as an ancient city: a maze of little streets and squares, of old and new houses, of houses with extensions from various periods, and all this surrounded by a multitude of new suburbs with straight and regular streets and uniform houses.

- * 19. It is easy to imagine a language consisting only of orders and reports in battle. — Or a language consisting only of questions and expressions for answering Yes and No — and countless other things. — And to imagine a language means to imagine a form of life.

But what about this: is the call “Slab!” in example (2) a sentence or a word? — If a word, surely it has not the same meaning as the like-sounding word of our ordinary language, for in §2 it is a call. But if a sentence, it is surely not the elliptical sentence “Slab!” of our language. — As far as the first question goes, you can call “Slab!” a word and also a sentence; perhaps it could aptly be called a ‘degenerate sentence’ (as one speaks of a degenerate hyperbola); in fact it is our ‘elliptical’

sentence. — But that is surely only a shortened form of the sentence “Bring me a slab”, and there is no such sentence in example (2). — But why shouldn’t I conversely have called the sentence “Bring me a slab” a *lengthening* of the sentence “Slab!”? — Because anyone who calls out “Slab!” really means “Bring me a slab”. — But how do you do this: how do you *mean* that while *saying* “Slab!”? Do you say the unshortened sentence to yourself? And why should I translate the call “Slab!” into a different expression in order to say [9] what someone means by it? And if they mean the same thing, why shouldn’t I say, “When he says ‘Slab!’ he means ‘Slab!’”? Again, why shouldn’t you be able to mean “Slab!”, if you can mean “Bring me the slab!”? — But when I call out “Slab!”, then what I want is *that he should bring me a slab!* — Certainly, but does ‘wanting this’ consist in thinking in some form or other a different sentence from the one you utter? —

- * 20. But now it looks as if when someone says “Bring me a slab”, he could mean this expression as one long word corresponding indeed to the single word “Slab!” — Then can one mean it sometimes as one word, and sometimes as four? And how does one usually mean it? — I think we’ll be inclined to say: we mean the sentence as one consisting of *four* words when we use it in contrast to other sentences such as “Hand me a slab”, “Bring *him* a slab”, “Bring *two* slabs”, etc.; that is, in contrast with sentences containing the words of our command in other combinations. — But what does using one sentence in contrast to others consist in? Does one have the others in mind at the same time? *All* of them? And *while* one is saying the one sentence, or before, or afterwards? — No! Even if such an explanation rather tempts us, we need only think for a moment of what actually happens in order to see that we are on the wrong track here. We say that we use the command in contrast with other sentences because *our language* contains the possibility of those other sentences. Someone who did not understand our language, a foreigner, who had fairly often heard someone giving the order “Bring me a slab!”, might believe that this whole sequence of sounds was one word corresponding perhaps to the word for “building stone” in his language. If he himself had then given this order, perhaps he would have pronounced it differently, and we’d say: he pronounces it so oddly because he takes it for a single word. — But then is there not also something different going on in him when he pronounces it — something corresponding to the fact that he conceives the sentence as a single word? — The same thing may go on in him, or

something different. What goes on in you when you give such an order? Are you conscious of its consisting of four words *while* you are uttering it? Of course you *know* this language — which contains those other sentences as well — but is this knowing something that '*happens*' while you are uttering the sentence? — And I have conceded that the foreigner, who conceives the sentence differently, will probably also pronounce it differently; but what we call his wrong conception does not *have* to lie in anything that accompanies the utterance of the command. [10]

- * The sentence is ‘elliptical’, not because it leaves out something that we mean when we utter it, but because it is shortened — in comparison with a particular paradigm of our grammar. — Of course someone might object here: “You grant that the shortened and the unshortened sentence have the same sense. — What is this sense, then? Isn’t there a verbal expression for this sense?” — But doesn’t their having the same sense consist in their having the same *use*? — (In Russian one says “Stone red” instead of “The stone is red”. Does the sense they grasp lack the copula? Or do they add the copula *in thought*?)

21. Imagine a language-game in which A asks, and B reports, the number of slabs or blocks in a pile, or the colours and shapes of the building stones that are stacked in such-and-such a place. — Such a report might run: “Five slabs.” Now what is the difference between the report or assertion “Five slabs” and the order “Five slabs!”? — Well, it is the part which uttering these words plays in the language-game. But the tone of voice in which they are uttered is likely to be different too, as are the facial expression and some other things. But we could also imagine the tone’s being the same — for an order and a report can be spoken in a *variety* of tones of voice and with various facial expressions — the difference being only in the use that is made of these words. (Of course, we might also use the words “assertion” and “command” to signify a grammatical form of a sentence and a particular intonation; just as we would call the sentence “Isn’t the weather glorious to-day?” a question, although it is used as an assertion.) We could imagine a language in which *all* assertions had the form and tone of rhetorical questions; or every command had the form of the question “Would you like to . . . ?”. Perhaps it will then be said: “What he says has the form of a question but is really a command” — that is, has the function of a command in linguistic practice. (Similarly, one says “You will do this” not as a prophecy, but as a command. What makes it the one or the other?)

- * 22. Frege's opinion that every assertion contains an assumption, which is the thing that is asserted, really rests on the possibility, found in our language, of writing every assertoric sentence in the form "It is asserted that such-and-such is the case". — But "that such-and-such is the case" is *not* a sentence in our language — it is not yet a *move* in the language-game. And if I write, not "It is asserted that . . .", but "It is asserted: such-and-such is the case", the words "It is asserted" simply become superfluous.

We might very well also write every assertion in the form of a [11] question followed by an affirmative expression; for instance, "Is it raining? Yes!" Would this show that every assertion contained a question?

Of course, one has the right to use an assertion sign in contrast with a question-mark: for example, or if one wants to distinguish an assertion from a fiction or an assumption. It is a mistake only if one thinks that the assertion consists of two acts, entertaining and asserting (assigning a truth-value, or something of the kind), and that in performing these acts we follow the sentence sign by sign roughly as we sing from sheet music. Reading the written sentence loudly or softly is indeed comparable to singing from sheet music, but '*meaning*' (thinking) the sentence that is read is not.

- * The Fregean assertion sign marks the *beginning of a sentence*. So its function is like that of the full stop. It distinguishes the whole period from a clause *within* the period. If I hear someone say "it's raining", but do not know whether I have heard the beginning and end of the period, then so far this sentence fails to convey anything to me.

- * Imagine a picture representing a boxer in a particular fighting stance. Well, this picture can be used to tell someone how he should stand, should hold himself; or how he should not hold himself; or how a particular man did stand in such-and-such a place; and so on. One might (using the language of chemistry) call this picture a sentence-radical. Frege probably conceived of the "assumption" along these lines. [p. 11 n.]

- 23. But how many kinds of sentence are there? Say assertion, question and command? — There are *countless* kinds; countless different kinds of use of all the things we call "signs", "words", "sentences". And this diversity is not something fixed, given once for all; but new types of language, new language-games, as we may say, come into existence, and

others become obsolete and get forgotten. (We can get a *rough picture* of this from the changes in mathematics.)

The word “language-game” is used here to emphasize the fact that the *speaking* of language is part of an activity, or of a form of life.

Consider the variety of language-games in the following examples, and in others:

Giving orders, and acting on them —

Describing an object by its appearance, or by its measurements —

Constructing an object from a description (a drawing) —

Reporting an event —

Speculating about the event — [12]

Forming and testing a hypothesis —

Presenting the results of an experiment in tables and diagrams —

Making up a story; and reading one —

Acting in a play —

Singing rounds —

Guessing riddles —

Cracking a joke; telling one —

Solving a problem in applied arithmetic —

Translating from one language into another —

Requesting, thanking, cursing, greeting, praying.

— It is interesting to compare the diversity of the tools of language and of the ways they are used, the diversity of kinds of word and sentence, with what logicians have said about the structure of language. (This includes the author of the *Tractatus Logico-Philosophicus*.)

24. Someone who does not bear in mind the variety of language-games will perhaps be inclined to ask questions like: “What is a question?” — Is it a way of stating that I do not know such-and-such, or that I wish the other person would tell me . . . ? Or is it a description of my mental state of uncertainty? — And is the cry “Help!” such a description?

Remember how many different kinds of thing are called “description”: description of a body’s position by means of its co-ordinates,

description of a facial expression, description of a sensation of touch, of a mood.

Of course, it is possible to substitute for the usual form of a question the form of a statement or description: “I want to know whether . . .” or “I am in doubt whether . . .” — but this does not bring the different language-games any closer together.

The significance of such possibilities of transformation, for example, of turning all assertoric sentences into sentences beginning with the prefix “I think” or “I believe” (and thus, as it were, into descriptions of *my* inner life) will become clearer in another place. (Solipsism.)

* 25. It is sometimes said: animals do not talk because they lack the mental abilities. And this means: “They do not think, and that is why they do not talk.” But — they simply do not talk. Or better: they do not use language — if we disregard the most primitive forms of language. — Giving orders, asking questions, telling stories, having a chat, are as much a part of our natural history as walking, eating, drinking, playing.

26. One thinks that learning language consists in giving names to objects. For example, to human beings, to shapes, to colours, to pains, to [13] moods, to numbers, etc. To repeat — naming is something like attaching a name tag to a thing. One can call this a preparation for the use of a word. But *what* is it a preparation for?

27. “We name things and then we can talk about them: can refer to them in talk.” — As if what we did next were given with the mere act of naming. As if there were only one thing called “talking about things”. Whereas in fact we do the most various things with our sentences. Think just of exclamations, with their completely different functions.

Water!
Away!
Ow!
Help!
Splendid!
No!

Are you still inclined to call these words “names of objects”?

In languages (2) and (8), there was no such thing as asking something's name. This, with its correlate, ostensive explanation, is, we might say, a language-game in its own right. That is really to say: we are brought up, trained, to ask "What is that called?" — upon which the name is given. And there is also a language-game of inventing a name for something, that is, of saying "This is called . . ." and then using the new name. (So, for example, children give names to their dolls and then talk about them and to them. Consider in this connection how singular is the use of a person's name to *call* him!)

28. Now, one can ostensively define a person's name, the name of a colour, the name of a material, a number-word, the name of a point of the compass, and so on. The definition of the number two, "That is called 'two'" — pointing to two nuts — is perfectly exact. — But how can the number two be defined like that? The person one gives the definition to doesn't know *what* it is that one wants to call "two"; he will suppose that "two" is the name given to *this* group of nuts! — He *may* suppose this; but perhaps he does not. He might make the opposite mistake: when I want to assign a name to this group of nuts, he might take it to be the name of a number. And he might equally well take a person's name, which I explain ostensively, as that of a colour, of a race, or even of a point [14] of the compass. That is to say, an ostensive definition can be variously interpreted in *any* case.

- * Could one explain the word "red" by pointing to something that was *not red*? That would be as if one had to explain the word "modest" to someone whose English was poor, and one pointed to an arrogant man and said "That man is *not* modest". That it is ambiguous is no argument against such a form of explanation. Any explanation can be misunderstood.

But one might well ask: are we still to call this an "explanation"? — For, of course, it plays a different role in the calculus from what we ordinarily call an "ostensive explanation" of the word "red", even if it has the same practical consequences, the same *effect* on the learner. [p. 14 n.]

29. Perhaps someone will say, “two” can be ostensively defined only in *this* way: “This *number* is called ‘two’.” For the word “number” here shows what *place* in language, in grammar, we assign to the word. But this means that the word “number” must be explained before that ostensive definition can be understood. — The word “number” in the definition does indeed indicate this place — the post at which we station the word. And we can prevent misunderstandings by saying “This *colour* is called so-and-so”, “This *length* is called so-and-so”, and so on. That is to say, misunderstandings are sometimes averted in this way. But does one have to take the words “colour” and “length” in just *this* way? — Well, we’ll just have to explain them. Explain, then, by means of other words! And what about the last explanation in this chain? (Don’t say: “There isn’t a ‘last’ explanation.” That is just as if you were to say: “There isn’t a last house in this road; one can always build an additional one.”)

Whether the word “number” is necessary in an ostensive definition of “two” depends on whether without this word the other person takes the definition otherwise than I wish. And that will depend on the circumstances under which it is given, and on the person I give it to.

And how he ‘takes’ the explanation shows itself in how he uses the word explained.

30. So, one could say: an ostensive definition explains the use — the meaning — of a word if the role the word is supposed to play in the language is already clear. So if I know that someone means to explain a colour-word to me, the ostensive explanation “That is called ‘sepia’” will enable me to understand the word. — And one can say this, as long as [15] one does not forget that now all sorts of questions are tied up with the words “to know” or “to be clear”.

One has already to know (or be able to do) something before one can ask what something is called. But what does one have to know?

31. When one shows someone the king in chess and says “This is the king”, one does not thereby explain to him the use of this piece — unless he already knows the rules of the game except for this last point: the shape of the king. One can imagine his having learnt the rules of the game without ever having been shown an actual piece. The shape of the chess piece corresponds here to the sound or shape of a word.

However, one can also imagine someone’s having learnt the game without ever learning or formulating rules. He might have learnt quite

simple board-games first, by watching, and have progressed to more and more complicated ones. He too might be given the explanation “This is the king” — if, for instance, he were being shown chess pieces of a shape unfamiliar to him. This explanation again informs him of the use of the piece only because, as we might say, the place for it was already prepared. In other words, we’ll say that it informs him of the use only if the place is already prepared. And in that case it is so, not because the person to whom we give the explanation already knows rules, but because, in another sense, he has already mastered a game.

Consider this further case: I am explaining chess to someone; and I begin by pointing to a chess piece and saying “This is the king; it can move in this-and-this way”, and so on. — In this case we shall say: the words “This is the king” (or “This is called ‘the king’”) are an explanation of a word only if the learner already ‘knows what a piece in a game is’. That is, if, for example, he has already played other games, or has watched ‘with understanding’ how other people play — *and similar things*. Only then will he, while learning the game, be able to ask relevantly, “What is this called?” — that is, this chess piece.

We may say: it only makes sense for someone to ask what something is called if he already knows how to make use of the name.

We can, after all, imagine the person who is asked replying: “Decide what to call it yourself” — and now the one who asked would himself be answerable for everything.

32. Someone coming into a foreign country will sometimes learn the language of the inhabitants from ostensive explanations that they give him; and he will often have to *guess* how to interpret these explanations; and sometimes he will guess right, sometimes wrong.

And now, I think, we can say: Augustine describes the learning [16] of human language as if the child came into a foreign country and did not understand the language of the country; that is, as if he already had a language, only not this one. Or again, as if the child could already *think*, only not yet speak. And “think” would here mean something like “talk to himself”.

33. But what if someone objected: “It is not true that one must already be master of a language-game in order to understand an ostensive definition: rather, one need only — obviously — know (or guess) what the person giving the explanation is pointing at. That is, whether, for example, at the shape of the object, or its colour, or the number and so on.” — And what does ‘pointing at the shape’, ‘pointing at the colour’,

consist in? Point at a piece of paper. — And now point at its shape — now at its colour — now at its number (that sounds odd). — Well, how did you do it? — You'll say that you 'meant' something different each time you pointed. And if I ask how that is done, you'll say you concentrated your attention on the colour, the shape, and so on. But now I ask again: how is *that* done?

Suppose someone points to a vase and says "Look at that marvellous blue — forget about the shape". Or: "Look at the marvellous shape — the colour doesn't matter." No doubt you'll do something *different* in each case, when you do what he asks you. But do you always do the *same* thing when you direct your attention to the colour? Imagine various different cases! To indicate a few:

"Is this blue the same as the blue over there? Do you see any difference?" —

You are mixing paints and you say, "It's hard to get the blue of this sky".

"It's turning fine, you can already see blue sky again."

"Note how different these two blues look."

"Do you see the blue book over there? Bring it here."

"This blue light means . . ."

"What's this blue called? — Is it 'indigo'?"

One attends to the colour sometimes by blocking the contour from view with one's hand, or by not focusing on the contour of the thing, or by staring at the object and trying to remember where one saw that colour before.

One attends to the shape, sometimes by tracing it, sometimes by screwing up one's eyes so as not to see the colour clearly, and so forth. I want to say: this and similar things are what one does *while* one 'directs one's attention to this or that'. But it isn't only these things [17] that make us say that someone is attending to the shape, the colour, etc. Just as making a move in chess doesn't consist only in pushing a piece from here to there on the board — nor yet in the thoughts and feelings that accompany the move: but in the circumstances that we call "playing a game of chess", "solving a chess problem", and the like.

34. But suppose someone said: "I always do the same thing when I attend to a shape: I follow the contour with my eyes and feel . . ." And

suppose this person gives someone else the ostensive explanation “That is called a ‘circle’”, pointing to a circular object and having all these experiences — can’t his hearer still interpret the explanation differently, even though he sees the other’s eyes following the contour, and even though he feels what the other feels? That is to say, this ‘interpretation’ may also consist in how he now makes use of the explained word; in what he points at, for example, when told “Point to a circle!” — For neither the expression “to mean the explanation in such-and-such a way” nor the expression “to interpret the explanation in such-and-such a way” signifies a process which accompanies the giving and hearing of an explanation.

35. There are, indeed, what may be called “characteristic experiences” of pointing, say, to the shape. For example, following the contour with one’s finger or with one’s eyes as one points. — *This*, however, does not happen in all cases in which I ‘mean the shape’, and no more does any other one characteristic process occur in all these cases. — But even if something of the sort did recur in all cases, it would still depend on the circumstances — that is, on what happened before and after the pointing — whether we would say “He pointed at the shape and not at the colour”.

For the words “to point at the shape”, “to mean the shape”, and so on, are not used in the same way as *these*: “to point at this book” (not that one), “to point at the chair, not at the table”, and so on. — Just think how differently we *learn* the use of the words “to point at this thing”, “to point at that thing”, and on the other hand, “to point at the colour, not the shape”, “to mean the *colour*”, and so on.

To repeat: in certain cases, especially when one points ‘at the shape’ or ‘at the number’, there are characteristic experiences and ways of pointing — ‘characteristic’ because they recur often (not always) when shape or number are ‘meant’. But do you also know of an experience characteristic of pointing at a piece in a game as *a piece in a game?* [18] All the same, one can say: “I mean that this *piece* is called the ‘king’, not this particular bit of wood I am pointing at.” (Recognizing, wishing, remembering, and so on.)

* What is going on when one *means* the words “*That* is blue” at one time as a statement about the object one is pointing at — at another as an explanation of the word “blue”? Well, in the second case, one really means “*That* is called ‘blue’”. — Then can one at one time mean the word “is” as “is called” and the word “blue” as “‘blue’”, and another time mean “is” really as “is”?

It can also happen that from what was meant as a piece of information, someone derives an explanation of a word. [Here lurks a superstition of great consequence.]

Can I say “bububu” and mean “If it doesn’t rain, I shall go for a walk”? — It is only in a language that I can mean something by something. This shows clearly that the grammar of “to mean” does not resemble that of the expression “to imagine” and the like.
[p. 18 n.]

36. And we do here what we do in a host of similar cases: because we cannot specify any *one* bodily action which we call pointing at the shape (as opposed to the colour, for example), we say that a *mental, spiritual* activity corresponds to these words.

Where our language suggests a body and there is none: there, we should like to say, is a *spirit*.

37. What is the relation between name and thing named? — Well, what *is* it? Look at language-game (2) or at some other one: that’s where one can see what this relation may consist in. Among many other things, this relation may also consist in the fact that hearing a name calls before our mind the picture of what is named; and sometimes in the name’s being written on the thing named or in its being uttered when the thing named is pointed at.

* 38. But what, for example, does the word “this” name in language-game (8) or the word “that” in the ostensive explanation “*That* is called ...”? — If you don’t want to produce confusion, then it is best not to say that these words name anything. — Yet, strange to say, the word “this” has been called the *real* name; so that anything else we call a name was one only in an inexact, approximate sense.

This odd conception springs from a tendency to sublimate the logic of our language — as one might put it. The proper answer to it is: we

call *very different* things “names”; the word “name” serves to [19] characterize many different, variously related, kinds of use of a word — but the kind of use that the word “this” has is not among them.

It is quite true that in giving an ostensive definition, for instance, we often point to the object named and utter the name. And likewise, in giving an ostensive definition, we utter the word “this” while pointing to a thing. And also, the word “this” and a name often occupy the same position in the context of a sentence. But it is precisely characteristic of a name that it is explained by means of the demonstrative expression “That is N” (or “That is called ‘N’ ”). But do we also explain “That is called ‘this’ ”, or “This is called ‘this’ ”?

This is connected with the conception of naming as a process that is, so to speak, occult. Naming seems to be a *strange* connection of a word with an object. — And such a strange connection really obtains, particularly when a philosopher tries to fathom *the* relation between name and what is named by staring at an object in front of him and repeating a name, or even the word “this”, innumerable times. For philosophical problems arise when language *goes on holiday*. And *then* we may indeed imagine naming to be some remarkable mental act, as it were the baptism of an object. And we can also say the word “this” *to* the object, as it were *address* the object as “this” — a strange use of this word, which perhaps occurs only when philosophizing.

- * 39. But why does it occur to one to want to make precisely this word into a name, when it obviously is *not* a name? — That is just the reason. For one is tempted to make an objection against what is ordinarily called a name. It can be put like this: *a name ought really to signify a simple*. And one might perhaps give the following reasons for this: the word “Nothung”, say, is a proper name in the ordinary sense. The sword Nothung consists of parts combined in a particular way. If they are combined differently, Nothung does not exist. But it is clear that the sentence “Nothung has a sharp blade” has a *sense*, whether Nothung is still whole or has already been shattered. But if “Nothung” is the name of an object, this object no longer exists when Nothung is shattered into pieces; and as no object would then correspond to the name, it would have no meaning. But then the sentence “Nothung has a sharp blade” would contain a word that had no meaning, and hence

the sentence would be nonsense. But it does have a sense; so there must still be something corresponding to the words of which it consists. So the word “Nothung” must disappear when the sense is [20] analysed and its place be taken by words which name simples. It will be reasonable to call these words the real names.

40. Let us first discuss the following point in the argument: that a word has no meaning if nothing corresponds to it. — It is important to note that it is a solecism to use the word “meaning” to signify the thing that ‘corresponds’ to a word. That is to confound the meaning of a name with the *bearer* of the name. When Mr N.N. dies, one says that the bearer of the name dies, not that the meaning dies. And it would be nonsensical to say this, for if the name ceased to have meaning, it would make no sense to say “Mr N.N. is dead”.

41. In §15 we introduced proper names into language (8). Now suppose that the tool with the name “N” is broken. Not knowing this, A gives B the sign “N”. Has this sign a meaning now, or not? — What is B to do when he is given it? — We haven’t settled anything about this. One might ask: what *will* he do? Well, perhaps he will stand there at a loss, or show A the pieces. Here one *might* say: “N” has become meaningless; and this expression would mean that the sign “N” no longer had a use in our language-game (unless we gave it a new one). “N” might also become meaningless because, for whatever reason, the tool was given another name, and the sign “N” no longer used in the language-game. — But we could also imagine a convention whereby B has to shake his head in reply if A gives the sign for a tool that is broken. — In this way, the command “N” might be said to be admitted into the language-game even when the tool no longer exists, and the sign “N” to have meaning even when its bearer ceases to exist.

42. But have even names that have *never* been used for a tool got a meaning in that game? — Let’s assume that “X” is such a sign, and that A gives this sign to B — well, even such signs could be admitted into the language-game, and B might have to answer them with a shake of the head. (One could imagine this as a kind of amusement for them.)

43. For a *large* class of cases of the employment of the word “meaning” — though not for *all* — this word can be explained in this way: the meaning of a word is its use in the language. [21]

And the *meaning* of a name is sometimes explained by pointing to its *bearer*.

44. We said that the sentence “Nothung has a sharp blade” has a sense even when Nothung is already shattered. Well, this is so because in this language-game a name is also used in the absence of its bearer. But we can imagine a language-game with names (that is, with signs which we would certainly call “names”), in which they are used only in the presence of the bearer, and so could *always* be replaced by a demonstrative pronoun and a pointing gesture.

45. The demonstrative “this” can never be without a bearer. It might be said: “So long as there is a *this*, the word ‘this’ has a meaning too, whether *this* is simple or complex.” — But that does not make the word into a name. On the contrary: for a name is not used with, but only explained by means of, a pointing gesture.

46. What lies behind the idea that names really signify simples? —

* Socrates says in the *Theaetetus*: “If I am not mistaken, I have heard some people say this: there is no explanation of the *primary elements* — so to speak — out of which we and everything else are composed; for everything that exists in and of itself can be *signified* only by names; no other determination is possible, either that it *is* or that it *is not* . . . But what exists in and of itself has to be . . . named without any other determination. In consequence, it is impossible to give an explanatory account of any primary element, since for it, there is nothing other than mere naming; after all, its name is all it has. But just as what is composed of the primary elements is itself an interwoven structure, so the correspondingly interwoven names become explanatory language; for the essence of the latter is the interweaving of names.”

* Both Russell’s ‘individuals’ and my ‘objects’ (*Tractatus Logico-Philosophicus*) were likewise such primary elements.

47. But what are the simple constituent parts of which reality is composed? — What are the simple constituent parts of a chair? — The pieces

of wood from which it is assembled? Or the molecules, or the atoms? — “Simple” means: not composite. And here the point is: in what sense ‘composite’? It makes no sense at all to speak absolutely of the ‘simple parts of a chair’. [22]

* Again: Does my visual image of this tree, of this chair, consist of parts? And what are its simple constituent parts? Multi-colouredness is *one* kind of compositeness; another is, for example, that of an open curve composed of straight bits. And a continuous curve may be said to be composed of an ascending and a descending segment.

If I tell someone without any further explanation, “What I see before me now is composite”, he will legitimately ask, “What do you mean by ‘composite’? For there are all sorts of things it may mean!” — The question “Is what you see composite?” makes good sense if it is already established what kind of compositeness — that is, which particular use of this word — is in question. If it had been laid down that the visual image of a tree was to be called “composite” if one saw not just a trunk, but also branches, then the question “Is the visual image of this tree simple or composite?” and the question “What are its simple constituent parts?” would have a clear sense — a clear use. And of course the answer to the second question is not “The branches” (that would be an answer to the *grammatical* question: “What are here *called* ‘simple constituent parts’?”), but rather a description of the individual branches.

But isn’t a chessboard, for instance, obviously, and absolutely composite? — You’re probably thinking of its being composed of 32 white and 32 black squares. But couldn’t we also say, for instance, that it was composed of the colours black and white and the schema of squares? And if there are quite different ways of looking at it, do you still want to say that the chessboard is absolutely ‘composite’? — Asking “Is this object composite?” *outside* a particular game is like what a boy once did when he had to say whether the verbs in certain sentences were in the active or passive voice, and who racked his brains over the question whether the verb “to sleep”, for example, meant something active or passive.

We use the word “composite” (and therefore the word “simple”) in an enormous number of different and differently related ways. (Is the colour of a square on a chessboard simple, or does it consist of pure white and pure yellow? And is the white simple, or does it consist of

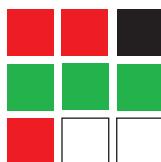
the colours of the rainbow? — Is this length of 2 cm simple, or does it consist of two parts, each 1 cm long? But why not of one bit 3 cm long, and one bit 1 cm long measured in the opposite direction?)

To the *philosophical* question “Is the visual image of this tree [23] composite, and what are its constituent parts?” the correct answer is: “That depends on what you understand by ‘composite’.” (And that, of course, is not an answer to, but a rejection of, the question.)

48. Let us apply the method of §2 to the account in the *Theaetetus*. Consider a language-game for which this account is really valid. The language serves to represent combinations of coloured squares on a surface. The squares form a chessboard-like complex. There are red, green, white and black squares. The words of the language are (correspondingly) “R”, “G”, “W”, “B”, and a sentence is a sequence of these words. Such sequences describe an arrangement of squares in the order

1	2	3
4	5	6
7	8	9

And so, for instance, the sentence “RRBGGRWW” describes an arrangement of this sort:



Here the sentence is a complex of names, to which a complex of elements corresponds. The primary elements are the coloured squares. “But are these simple?” — I wouldn’t know what I could more naturally call a ‘simple’ in this language-game. But under other circumstances, I’d call a monochrome square, consisting perhaps of two rectangles or of the elements colour and shape, “composite”. But the concept of compositeness might also be extended so that a smaller area was said to be

'composed' of a greater area and another one subtracted from it. Compare the 'composition' of [24] forces, the 'division' of a line by a point outside it; these expressions show that we are sometimes even inclined to conceive the smaller as the result of a composition of greater parts, and the greater as the result of a division of the smaller.

But I do not know whether to say that the figure described by our sentence consists of four or of nine elements! Well, does the sentence consist of four letters or of nine? — And which are its elements, the types of letter, or the letters? Does it matter which we say, so long as we avoid misunderstandings in any particular case?

49. But what does it mean to say that we cannot explain (that is, describe) these elements, but only name them? Well, it could mean, for instance, that when in a limiting case a complex consists of only *one* square, its description is simply the name of the coloured square.

* Here one might say — though this easily leads to all kinds of philosophical superstition — that a sign "R" or "B", etc., may sometimes be a word and sometimes a sentence. But whether it 'is a word or a sentence' depends on the situation in which it is uttered or written. For instance, if A has to describe complexes of coloured squares to B, and he uses the word "R" *by itself*, we'll be able to say that the word is a description — a sentence. But if he is memorizing the words and their meanings, or if he is teaching someone else the use of the words and uttering them in the course of ostensive teaching, we'll not say that they are sentences. In this situation the word "R", for instance, is not a description; one *names* an element with it — but that is why it would be strange to say here that an element can *only* be named! For naming and describing do not stand on the *same* level: naming is a preparation for describing. Naming is not yet a move in a language-game — any more than putting a piece in its place on the board is a move in chess. One may say: with the mere naming of a thing, nothing has yet been done. Nor *has* it a name except in a game. This was what Frege meant too when he said that a word has a meaning only in the context of a sentence.

50. What does it mean to say that we can attribute neither being nor non-being to the elements? — One might say: if everything that we call "being" and "non-being" consists in the obtaining and non-obtaining of connections between elements, it makes no sense to speak of the being (non-being) of an element; just as it makes no sense to speak of the

destruction of an element, if everything that we call “destruction” lies in the separation of elements. [25]

One would like to say, however, that being cannot be attributed to an element, for if it did not *exist*, one could not even name it, and so one could state nothing at all about it. — But let us consider an analogous case. There is *one* thing of which one can state neither that it is 1 metre long, nor that it is not 1 metre long, and that is the standard metre in Paris. — But this is, of course, not to ascribe any remarkable property to it, but only to mark its peculiar role in the game of measuring with a metre-rule. — Suppose that samples of colour were preserved in Paris like the standard metre. So we explain that “sepia” means the colour of the standard sepia which is kept there hermetically sealed. Then it will make no sense to state of this sample either that it is of this colour or that it is not.

We can put it like this: This sample is an instrument of the language, by means of which we make colour statements. In this game, it is not something that is represented, but is a means of representation. — And the same applies to an element in language-game (48) when we give it a name by uttering the word “R” — in so doing we have given that object a role in our language-game; it is now a *means* of representation. And to say “If it did not exist, it could have no name” is to say as much and as little as: if this thing did not exist, we could not use it in our language-game. — What looks as if it *had* to exist is part of the language. It is a paradigm in our game; something with which comparisons are made. And this may be an important observation; but it is none the less an observation about our language-game — our mode of representation.

51. In describing language-game (48), I said that the words “R”, “B”, etc. corresponded to the colours of the squares. But what does this correspondence consist in? In what sense can one say that certain colours of squares correspond to these signs? After all, the explanation in (48) merely set up a connection between those signs and certain words of our language (colour names). — Well, it was assumed that the use of the signs in the game would be taught in a different way — by pointing to paradigms. Very well; but what does it mean to say that in the *practice of the language* certain elements correspond to the signs? — Is it that the person who is describing the complexes of coloured squares always says “R” where there is a red square, “B” where there is a black one, and so on? But what if he goes wrong in the description and mistakenly says “R” where he sees a black square — what is the

criterion here for this being a *mistake*? — Or does “R”’s signifying a red square consist in this, that the [26] people who use the language always have a red square come before their mind when they use the sign “R”?

* In order to see more clearly, here as in countless similar cases, we must look at what really happens *in detail*, as it were from close up.

52. If I am inclined to suppose that a mouse comes into being by spontaneous generation out of grey rags and dust, it’s a good idea to examine those rags very closely to see how a mouse could have hidden in them, how it could have got there, and so on. But if I am convinced that a mouse cannot come into being from these things, then this investigation will perhaps be superfluous.

But what it is in philosophy that resists such an examination of details, we have yet to come to understand.

53. Our language-game (48) has *various* possibilities. There is a variety of cases in which we would say that a sign in the game was the name of a square of such-and-such a colour. We’d say so, for example, if we knew that the people who used the language were taught the use of the signs in such-and-such a way. Or if it were laid down somewhere, say in the form of a chart, that this element corresponded to this sign, and if the chart were used in teaching the language and were appealed to in deciding certain disputed cases.

We can, however, also imagine such a chart’s being a tool in the use of the language. Describing a complex is then done like this: the person who describes the complex has a chart with him and looks up each element of the complex in it and passes from the element to the sign (and the person to whom the description is given may also translate its words into a picture of coloured squares by the use of a chart). This chart might be said to take over here the role that memory and association play in other cases. (We don’t usually carry out the order “Bring me a red flower” by looking up the colour red in a colour chart and then bringing a flower of the colour that we find in the chart; but when it is a question of choosing or mixing a particular shade of red, we do sometimes make use of a sample or chart.)

If we call such a chart the expression of a rule of the language-game, it can be said that what we call a rule of a language-game may have very different roles in the game.

54. Just think of the kinds of case where we say that a game is played according to a particular rule. [27]

* The rule may be an aid in teaching the game. The learner is told it and given practice in applying it. — Or it is a tool of the game itself. — Or a rule is employed neither in the teaching nor in the game itself; nor is it set down in a list of rules. One learns the game by watching how others play it. But we say that it is played according to such-and-such rules because an observer can read these rules off from the way the game is played — like a natural law governing the play. — But how does the observer distinguish in this case between players' mistakes and correct play? — There are characteristic signs of it in the players' behaviour. Think of the behaviour characteristic of someone correcting a slip of the tongue. It would be possible to recognize that someone was doing so even without knowing his language.

55. "What the names in language signify must be indestructible; for it must be possible to describe the state of affairs in which everything destructible is destroyed. And this description will contain words; and what corresponds to these cannot in that case be destroyed, for otherwise the words would have no meaning." I must not saw off the branch on which I am sitting.

Now one might, of course, object at once that this description would have to exempt itself from the destruction. — But what corresponds to the words of the description, and so cannot be destroyed if it is true, is what gives the words their meaning — that without which they would have no meaning. — In a sense, however, this man is surely what corresponds to his name. But he is destructible, and his name does not lose its meaning when its bearer is destroyed. — A paradigm that is used in conjunction with a name in a language-game — that would be an example of something which corresponds to a name and without which it would have no meaning.

56. But what if no such sample is part of the language, and we *bear in mind* the colour (for instance) that a word signifies? — "And if we bear it in mind, then it comes before our mind's eye when we utter the word. So, if it is supposed to be possible for us to remember it

whenever we want, the colour in itself must be indestructible.” — But what do we regard as the criterion for remembering it right? — If we use a sample instead of our memory, there are circumstances in which we might say that the sample has changed colour, and we judge whether this is so by memory. But can’t we sometimes speak of a darkening (for example) of our memory-image? Aren’t we as much at the mercy of memory as of a sample? (For someone might feel like saying: “If we [28] had no memory, we would be at the mercy of a sample.”) — Or perhaps of some chemical reaction. Imagine that you were supposed to paint a particular colour “C”, which was the colour that appeared when the chemical substances X and Y combined. — Suppose that the colour struck you as brighter on one day than on another; would you perhaps not say: “I must be wrong, the colour is surely the same as yesterday”? This shows that we do not always resort to what memory tells us as the verdict of the highest court of appeal.

57. “Something red can be destroyed, but red cannot be destroyed, and that is why the meaning of the word ‘red’ is independent of the existence of a red thing.” — Certainly it makes no sense to say that the colour red (as opposed to the pigment) is torn up or pounded to bits. But don’t we say “The red is vanishing”? And don’t cling to the idea of our always being able to bring red before our mind’s eye even when there is nothing red any more! That is just as if you were to say that there would still always be a chemical reaction producing a red flame. — For what if you cannot remember the colour any more? — If we forget which colour this is the name of, the name loses its meaning for us; that is, we’re no longer able to play a particular language-game with it. And then the situation is comparable to that in which we’ve lost a paradigm which was an instrument of our language.

58. “I want to restrict the term ‘name’ to what cannot occur in the combination ‘X exists’. — And so one cannot say ‘Red exists’, because if there were no red, it could not be spoken of at all.” — More correctly: If “X exists” amounts to no more than “X” has a meaning — then it is not a sentence which treats of X, but a sentence about our use of language, that is, about the use of the word “X”.

It looks to us as if we were saying something about the nature of red in saying that the words “Red exists” do not make sense. Namely, that red exists ‘in and of itself’. The same idea — that this is a metaphysical statement about red — finds expression again when we say such a thing as that red is timeless, and perhaps still more strongly in the word “indestructible”.

But what we really *want* is simply to take “Red exists” as the statement: the word “red” has a meaning. Or, perhaps more correctly, “Red does not exist” as “‘Red’ has no meaning”. Only we do not want to say that that expression *says* this, but that *this* is what it would have to be saying *if* it made sense — that the expression actually contradicts itself in the attempt [29] to say that just because red exists ‘in and of itself’. Whereas the only contradiction lies in something like this: the sentence looks as if it were about the colour, while it is supposed to be saying something about the use of the word “red”. — In reality, however, we quite readily say that a particular colour exists, and that is as much as to say that something exists that has that colour. And the first expression is no less accurate than the second; particularly where ‘what has the colour’ is not a physical object.

59. “A *name* signifies only what is an *element* of reality — what cannot be destroyed, what remains the same in all changes.” — But what is that? — Even as we uttered the sentence, that’s what we already had in mind! We already gave expression to a quite specific idea, a particular picture that we wanted to use. For experience certainly does not show us these elements. We see *constituent parts* of something composite (a chair, for instance). We say that the back is part of the chair, but that it itself is composed of different pieces of wood; whereas a leg is a simple constituent part. We also see a whole which changes (is destroyed) while its constituent parts remain unchanged. These are the materials from which we construct that picture of reality.

60. When I say “My broom is in the corner”, is this really a statement about the broomstick and the brush? Well, it could at any rate be replaced by a statement giving the position of the stick and the position of the brush. And this statement is surely a further analysed form of the first one. — But why do I call it “further analysed”? — Well, if the broom is there, that surely means that the stick and brush must be there, and in a particular relation to one another; and previously this was, as it were, hidden in the sense of the first sentence, and is *articulated* in the analysed sentence. Then does someone who says that the broom is in

the corner really mean: the broomstick is there, and so is the brush, and the broomstick is fixed in the brush? — If we were to ask anyone if he meant this, he would probably say that he had not specially thought of either the broomstick or the brush. And that would be the *right* answer, for he did not mean to speak either of the stick or of the brush in particular. Suppose that, instead of telling someone “Bring me the broom!”, you said “Bring me the broomstick and the brush which is fitted on to it!” — Isn’t the answer: “Do you want the broom? Why do you put it so oddly?” — Is he going to understand the further analysed sentence better? — This sentence, one might say, comes to the same thing as the ordinary one, but in a more roundabout way. [30] Imagine a language-game in which someone is ordered to bring certain objects which are composed of several parts, to move them about, or something else of the kind. And two ways of playing it: in one (a) the composite objects (brooms, chairs, tables, etc.) have names, as in (15); in the other (b) only the parts are given names, and the wholes are described by means of them. — In what sense is an order in the second game an analysed form of an order in the first? Does the former lie concealed in the latter, and is it now brought out by analysis? — True, the broom is taken to pieces when one separates broomstick and brush; but does it follow that the order to bring the broom also consists of corresponding parts?

61. “But surely you won’t deny that a particular order in (a) says the same as one in (b); and what would you call the second one, if not an analysed form of the first?” — Certainly I too would say that an order in (a) had the same sense as one in (b), or, as I expressed it earlier, they come to the same thing. And this means that if I were shown an order in (a) and asked, “Which order in (b) has the same sense as this?”, or again, “Which orders in (b) does this contradict?”, I would give such-and-such an answer. But that is not to say that we have come to a *general* agreement about the use of the expression “to have the same sense” or “to come to the same thing”. For one may ask: in what cases do we say “These are merely two different forms of the same game”?

62. Suppose, for example, that the person who is given the orders in (a) and (b) has to look up a table co-ordinating names and pictures before bringing what is required. Does he do *the same* when he carries out an order in (a) and the corresponding one in (b)? — Yes and no. You may say: “The *point* of the two orders is the same.” I would say

so too. — But it is not clear everywhere what should be called the ‘point’ of an order. (Similarly, one may say of certain objects that they have this or that purpose. The essential thing is that this is a *lamp*, that it serves to give light — what is not essential is that it is an ornament to the room, fills an empty space, and so on. But there is not always a clear boundary between essential and inessential.)

63. To say, however, that a sentence in (b) is an ‘analysed’ form of one in (a) readily seduces us into thinking that the former is the more fundamental form, that it alone shows what is meant by the other, and so on. We may think: someone who has only the unanalysed form lacks the analysis; but he who knows the analysed form [31] has got it all. — But can’t I say that an aspect of the matter is lost to the latter no less than to the former?

64. Let’s imagine language-game (48) altered so that names signify not monochrome squares but rectangles each consisting of two such squares. Let such a rectangle which is half red, half green, be called “U”; a half green, half white one “V”; and so on. Could we not imagine people who had names for such combinations of colour, but not for the individual colours? Think of cases where we say, “This arrangement of colours (say the French tricolor) has a quite special character”.

In what way do the symbols of this language-game stand in need of analysis? How far is it even *possible* to replace this game by (48)? — It is just a *different* language-game; even though it is related to (48).

* 65. Here we come up against the great question that lies behind all these considerations. — For someone might object against me: “You make things easy for yourself! You talk about all sorts of language-games, but have nowhere said what is essential to a language-game, and so to language: what is common to all these activities, and makes them into language or parts of language. So you let yourself off the very part of the investigation that once gave you the most headache, the part about the *general form of the proposition* and of language.”

And this is true. — Instead of pointing out something common to all that we call language, I’m saying that these phenomena have no one thing in common in virtue of which we use the same word for all — but there are many different kinds of *affinity* between them. And on account of this affinity, or these affinities, we call them all “languages”. I’ll try to explain this.

- * 66. Consider, for example, the activities that we call “games”. I mean board-games, card-games, ball-games, athletic games, and so on. What is common to them all? — Don’t say: “They *must* have something in common, or they would not be called ‘games’” — but *look and see* whether there is anything common to all. — For if you look at them, you won’t see something that is common to *all*, but similarities, affinities, and a whole series of them at that. To repeat: don’t think, but look! — Look, for example, at board-games, with their various affinities. Now pass to card-games; here you find many correspondences with the first group, but many common [32] features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost. — Are they all ‘entertaining’? Compare chess with noughts and crosses. Or is there always winning and losing, or competition between players? Think of patience. In ball-games, there is winning and losing; but when a child throws his ball at the wall and catches it again, this feature has disappeared. Look at the parts played by skill and luck, and at the difference between skill in chess and skill in tennis. Think now of singing and dancing games; here we have the element of entertainment, but how many other characteristic features have disappeared! And we can go through the many, many other groups of games in the same way, can see how similarities crop up and disappear.

And the upshot of these considerations is: we see a complicated network of similarities overlapping and criss-crossing: similarities in the large and in the small.

- 67. I can think of no better expression to characterize these similarities than “family resemblances”; for the various resemblances between members of a family — build, features, colour of eyes, gait, temperament, and so on and so forth — overlap and criss-cross in the same way. — And I shall say: ‘games’ form a family.

And likewise the kinds of number, for example, form a family. Why do we call something a “number”? Well, perhaps because it has a — direct — affinity with several things that have hitherto been called “number”; and this can be said to give it an indirect affinity with other things that we also call “numbers”. And we extend our concept of number, as in spinning a thread we twist fibre on fibre. And the strength of the thread resides not in the fact that some one fibre runs through its whole length, but in the overlapping of many fibres.

But if someone wanted to say, “So there is something common to all these constructions — namely, the disjunction of all their common properties” — I’d reply: Now you are only playing with a word. One might as well say, “There is a Something that runs through the whole thread — namely, the continuous overlapping of these fibres”.

68. “Right; so in your view the concept of number is explained as the logical sum of those individual interrelated concepts: cardinal numbers, rational numbers, real numbers, and so forth; and in the same way, the concept of a game as the logical sum of corresponding sub-concepts.”

— This need not be so. For I *can* give the concept of number rigid boundaries [33] in this way, that is, use the word “number” for a rigidly bounded concept; but I can also use it so that the extension of the concept is *not* closed by a boundary. And this is how we do use the word “game”. For how is the concept of a game bounded? What still counts as a game, and what no longer does? Can you say where the boundaries are? No. You can *draw* some, for there aren’t any drawn yet. (But this never bothered you before when you used the word “game”).

“But then the use of the word is unregulated — the ‘game’ we play with it is unregulated.” — It is not everywhere bounded by rules; but no more are there any rules for how high one may throw the ball in tennis, or how hard, yet tennis is a game for all that, and has rules too.

69. How would we explain to someone what a game is? I think that we’d describe *games* to him, and we might add to the description: “This and similar things are called ‘games’.” And do we know any more ourselves? Is it just that we can’t tell others exactly what a game is? — But this is not ignorance. We don’t know the boundaries because none have been drawn. To repeat, we can draw a boundary — for a special purpose. Does it take this to make the concept usable? Not at all! Except perhaps for that special purpose. No more than it took the definition: 1 pace = 75 cm to make the measure of length ‘one pace’ usable. And if you want to say “But still, before that it wasn’t an exact measure of length”, then I reply: all right, so it was an inexact one. — Though you still owe me a definition of exactness.

70. “But if the concept ‘game’ is without boundaries in this way, you don’t really know what you mean by a ‘game’.” — When I give the

description “The ground was quite covered with plants”, do you want to say that I don’t know what I’m talking about until I can give a definition of a plant?

An explanation of what I meant would be, say, a drawing and the words “The ground looked roughly like this”. Perhaps I even say: “It looked *exactly* like this.” — Then were just *these* blades of grass and *these* leaves there, arranged just like this? No, that is not what it means. And I wouldn’t accept any picture as the exact one in *this* sense.
[34]

- * Someone says to me, “Show the children a game.” I teach them gambling with dice, and the other says, “I didn’t mean that sort of game”. In that case, must he have had the exclusion of the game with dice before his mind when he gave me the order? [p. 33 n.]

71. One can say that the concept of a game is a concept with blurred edges. — “But is a blurred concept a *concept* at all?” — Is a photograph that is not sharp a picture of a person at all? Is it even always an advantage to replace a picture that is not sharp by one that is? Isn’t one that isn’t sharp often just what we need?

- * Frege compares a concept to a region, and says that a region without clear boundaries can’t be called a region at all. This presumably means that we can’t do anything with it. — But is it senseless to say “Stay roughly here”? Imagine that I were standing with someone in a city square and said that. As I say it, I do not bother drawing any boundary, but just make a pointing gesture — as if I were indicating a particular spot. And this is just how one might explain what a game is. One gives examples and intends them to be taken in a particular way. — I do not mean by this expression, however, that he is supposed to see in those examples that common feature which I — for some reason — was unable to formulate, but that he is now to employ those examples in a particular way. Here giving examples is not an *indirect* way of explaining — in default of a better one. For any general explanation may be misunderstood too. *This*, after all, is how we play the game. (I mean the language-game with the word “game”.)

72. *Seeing what is in common*. Suppose I show someone various multi-coloured pictures, and say: “The colour you see in all these is called

'yellow ochre'." — This is an explanation that another person will come to understand by looking for, and seeing, what is common to the pictures. Then he can look at, can point to, the common feature.

Compare with this a case in which I show him figures of different shapes, all painted the same colour, and say: "What these have in common is called 'yellow ochre'."

And compare this case: I show him samples of different shades of blue, and say: "The colour that is common to all these is what I call 'blue'."

73. When someone explains the names of colours to me by pointing at samples and saying "This colour is called 'blue', this 'green' . . .", this case can be compared in many respects to handing me a chart with the words written under the colour samples. — Though this comparison may mislead in various ways. — One is now inclined to extend the comparison: to have understood the explanation means to have in one's mind an idea of the thing explained, and that is a sample or picture. So if I'm shown various leaves and told [35] "This is called a 'leaf'", I get an idea of the shape of a leaf, a picture of it in my mind. — But what does the picture of a leaf look like when it does not show us any particular shape, but rather 'what is common to all shapes of leaf'? What shade is the 'sample in my mind' of the colour green — the sample of what is common to all shades of green?

"But might there not be such 'general' samples? Say a schematic leaf, or a sample of *pure* green?" — Certainly! But for such a schema to be understood as a *schema*, and not as the shape of a particular leaf, and for a snippet of pure green to be understood as a sample of all that is greenish, and not as a sample of pure green — this in turn resides in the way the samples are applied.

Ask yourself, what *shape* must the sample of the colour green be? Should it be rectangular? Or would it then be the sample of green rectangles? — So should it be 'irregular' in shape? And what is then to prevent us from viewing it — that is, from using it — only as a sample of irregularity of shape?

74. Here also belongs the idea that someone who views this leaf as a sample of 'leaf shape in general' will *see* it differently from someone who views it as, say, a sample of this particular shape. Well, this might be so — though it is not so — for it would only amount to saying that, as a matter of experience, someone who *sees* the leaf in a particular

way will then use it in such-and-such a way or according to such-and-such rules. Of course, there is such a thing as seeing in *this* way or *that*; and there are also cases where whoever sees a sample like *this* will in general use it in this way, and whoever sees it otherwise in another way. For example, someone who sees the schematic drawing of a cube as a plane figure consisting of a square and two rhombi will perhaps carry out the order “Bring me something like this!” differently from someone who sees the picture three-dimensionally.

75. What does it mean to know what a game is? What does it mean to know it and not be able to say it? Is this knowledge somehow equivalent to an unformulated definition? So that if it were formulated, I’d be able to recognize it as the expression of my knowledge? Isn’t my knowledge, my concept of a game, completely expressed in the explanations that I could give? That is, in my describing examples of various kinds of game, showing how all sorts of other games can be constructed on the analogy of these, saying that I would hardly call this or that a game, and so on. [36]

76. If someone were to draw a sharp boundary, I couldn’t acknowledge it as the one that I too always wanted to draw, or had drawn in my mind. For I didn’t want to draw one at all. It can then be said: his concept is not the same as mine, but akin to it. The affinity is that of two pictures, one of which consists of colour patches with blurred boundaries and the other of patches similarly shaped and distributed but with sharp boundaries. The affinity is just as undeniable as the difference.

77. And if we carry this comparison a little further, it is clear that the degree to which the sharp picture *can* resemble the blurred one depends on the degree to which the latter lacks sharpness. For imagine having to draw a sharp picture ‘corresponding’ to a blurred one. In the latter there is a blurred red rectangle; you replace it with a sharp one. Of course — several such sharply delineated rectangles could be drawn to correspond to the blurred one. — But if the colours in the original shade into one another without a hint of any boundary, won’t it become a hopeless task to draw a sharp picture corresponding to the blurred one? Won’t you then have to say: “Here I might just as well draw a circle as a rectangle or a heart, for all the colours merge. Anything — and nothing — is right.” — And this is the position in which, for example, someone finds himself in ethics or aesthetics when he looks for definitions that correspond to our concepts.

In this sort of predicament, always ask yourself: How did we *learn* the meaning of this word ("good", for instance)? From what sort of examples? In what language-games? Then it will be easier for you to see that the word must have a family of meanings.

78. Compare *knowing* and *saying*:

how many metres high Mont Blanc is —
 how the word "game" is used —
 how a clarinet sounds.

Someone who is surprised that one can know something and not be able to say it is perhaps thinking of a case like the first. Certainly not of one like the third.

79. Consider this example: if one says "Moses did not exist", this may mean various things. It may mean: the Israelites did not have a single leader when they came out of Egypt — or: their leader was not called Moses — or: there wasn't anyone who accomplished all that the Bible relates of Moses — or: . . . — According to Russell, we may say: the name "Moses" can be defined by [37] means of various descriptions. For example, as "the man who led the Israelites through the wilderness", "the man who lived at that time and place and was then called 'Moses'", "the man who as a child was taken out of the Nile by Pharaoh's daughter", and so on. And according as we accept one definition or another, the sentence "Moses did exist" acquires a different sense, and so does every other sentence about Moses. — And if we are told "N did not exist", we do ask: "What do you mean? Do you want to say . . . or . . . and so on?"

* But if I make a statement about Moses, am I always ready to substitute some *one* of these descriptions for "Moses"? I shall perhaps say: By "Moses" I mean the man who did what the Bible relates of Moses, or at any rate much of it. But how much? Have I decided how much must turn out to be false for me to give up my proposition as false? So is my use of the name "Moses" fixed and determined for all possible cases? — Isn't it like this, that I have, so to speak, a whole series of props in readiness, and am ready to lean on one if another should be taken from under me, and vice versa? — Consider yet another case. If I say "N is dead", then something like the following may hold for

the meaning of the name “N”: I believe that a human being has lived, whom (1) I have seen in such-and-such places, who (2) looked like this (pictures), (3) has done such-and-such things, and (4) bore the name “N” in civic life. — Asked what I mean by “N”, I’d enumerate all or some of these points, and different ones on different occasions. So my definition of “N” would perhaps be “the man of whom all this is true”. — But if some point were now to turn out to be false? — Would I be prepared to declare the proposition “N is dead” false — even if what has turned out to be false is only something which strikes me as insignificant? But where are the boundaries of what is insignificant? — If I had given an explanation of the name in such a case, I’d now be ready to alter it.

And this can be expressed as follows: I use the name “N” without a *fixed* meaning. (But that impairs its use as little as the use of a table is impaired by the fact that it stands on four legs instead of three and so sometimes wobbles.)

Should it be said that I’m using a word whose meaning I don’t know, and so am talking nonsense? — Say what you please, so long as it does not prevent you from seeing how things are. (And when you see that, there will be some things that you won’t say.)

(The fluctuation of scientific definitions: what today counts as an [38] observed concomitant of phenomenon A will tomorrow be used to define “A”.)

80. I say, “There is a chair over there”. What if I go to fetch it, and it suddenly disappears from sight? — “So it wasn’t a chair, but some kind of illusion.” — But a few seconds later, we see it again and are able to touch it, and so on. — “So the chair was there after all, and its disappearance was some kind of illusion.” — But suppose that after a time it disappears again — or seems to disappear. What are we to say now? Have you rules ready for such cases — rules saying whether such a thing is still to be called a “chair”? But do we miss them when we use the word “chair”? And are we to say that we do not really attach any meaning to this word, because we are not equipped with rules for every possible application of it?

* 81. F. P. Ramsey once emphasized in conversation with me that logic was a ‘normative science’. I do not know exactly what idea he had in mind, but it was doubtless closely related to one that dawned on me only later: namely, that in philosophy we often *compare* the use of words

with games, calculi with fixed rules, but cannot say that someone who is using language *must* be playing such a game. — But if someone says that our languages only *approximate* to such calculi, he is standing on the very brink of a misunderstanding. For then it may look as if what we were talking about in logic were an *ideal* language. As if our logic were, so to speak, a logic for a vacuum. — Whereas logic does not treat of language — or of thought — in the sense in which a natural science treats of a natural phenomenon, and the most that can be said is that we *construct* ideal languages. But here the word “ideal” is liable to mislead, for it sounds as if these languages were better, more perfect, than our everyday language; and as if it took a logician to show people at last what a proper sentence looks like.

All this, however, can appear in the right light only when one has attained greater clarity about the concepts of understanding, meaning something, and thinking. For it will then also become clear what may mislead us (and did mislead me) into thinking that if anyone utters a sentence and *means* or *understands* it, he is thereby operating a calculus according to definite rules.

- * 82. What do I call ‘the rule according to which he proceeds’? — The hypothesis that satisfactorily describes his use of words, which we observe; or the rule which he looks up when he uses signs; or the one which he [39] gives us in reply if we ask him what his rule is? — But what if observation does not clearly reveal any rule, and the question brings none to light? — For he did indeed give me an explanation when I asked him what he meant by “N”, but he was prepared to withdraw this explanation and alter it. — So how am I to determine the rule according to which he is playing? He does not know it himself. — Or, more correctly, what is left for the expression “the rule according to which he proceeds” to say?

- 83. Doesn’t the analogy between language and games throw light here? We can easily imagine people amusing themselves in a field by playing with a ball like this: starting various existing games, but playing several without finishing them, and in between throwing the ball aimlessly into the air, chasing one another with the ball, throwing it at one another for a joke, and so on. And now someone says: The whole time they are playing a ball-game and therefore are following definite rules at every throw.

And is there not also the case where we play, and make up the rules as we go along? And even where we alter them — as we go along.

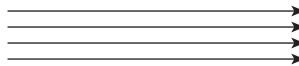
84. Speaking of the application of a word, I said that it is not everywhere bounded by rules. But what does a game look like that is everywhere bounded by rules? whose rules never let a doubt creep in, but stop up all the gaps where it might? — Can't we imagine a rule regulating the application of a rule; and a doubt which *it* removes — and so on?

But that is not to say that we are in doubt because it is possible for us to *imagine* a doubt. I can easily imagine someone always doubting before he opened his front door whether an abyss did not yawn behind it, and making sure about it before he went through the door (and he might on some occasion prove to be right) — but for all that, I do not doubt in such a case.

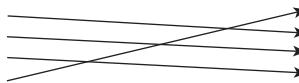
* 85. A rule stands there like a signpost. — Does the signpost leave no doubt about the way I have to go? Does it show which direction I am to take when I have passed it, whether along the road or the footpath or cross-country? But where does it say which way I am to follow it; whether in the direction of its finger or (for example) in the opposite one? — And if there were not a single signpost, but a sequence of signposts or chalk marks on the ground — is there only *one* way of interpreting them? — So I can say that the signpost does after all [40] leave room for doubt. Or rather, it sometimes leaves room for doubt, and sometimes not. And now this is no longer a philosophical proposition, but an empirical one.

86. Imagine a language-game like (2) played with the help of a chart. The signs A gives to B are now written ones. B has a chart; in the first column are the signs used in the game, in the second, pictures of different shapes of building stones. A shows B such a written sign; B looks it up in the chart, looks at the picture opposite, and so on. So the chart is a rule which he follows in carrying out orders. — One learns to look up the picture in the chart by being trained, and part of this training may well consist in the pupil's learning to pass with his finger horizontally from left to right; and so, as it were, to draw a series of horizontal lines on the chart.

Suppose different ways of reading a chart were now introduced; one time, as above, according to the schema:



another time according to this schema:



or some other one. — Such a schema is added to the chart as a rule for its use.

- * Can we not now imagine further rules to explain *this* one? And, on the other hand, was that first chart incomplete without the schema of arrows? And are the other charts incomplete without their schemata?

87. Suppose I give this explanation: “I take ‘Moses’ to mean the man, if there was such a man, who led the Israelites out of Egypt, whatever he was called then and whatever he may or may not have done besides.” — But similar doubts to those about the name “Moses” are possible about the words of this explanation (what are you calling “Egypt”, whom the “Israelites”, and so forth?). These questions would not even come to an end when we got down to words like “red”, “dark”, “sweet”. — “But then how does an explanation help me to understand, [41] if, after all, it is not the final one? In that case the explanation is never completed; so I still don’t understand what he means, and never shall!” — As though an explanation, as it were, hung in the air unless supported by another one. Whereas an explanation may indeed rest on another one that has been given, but none stands in need of another — unless *we* require it to avoid a misunderstanding. One might say: an explanation serves to remove or to prevent a misunderstanding — one, that is, that would arise if not for the explanation, but not every misunderstanding that I can imagine.

It may easily look as if every doubt merely *revealed* a gap in the foundations; so that secure understanding is possible only if we first doubt everything that *can* be doubted, and then remove all these doubts.

The signpost is in order — if, under normal circumstances, it fulfills its purpose.

88. If I tell someone “Stay roughly here” — may this explanation not work perfectly? And may not any other one fail too?

* “But still, isn’t it an inexact explanation?” — Yes, why shouldn’t one call it “inexact”? Only let’s understand what “inexact” means! For it does not mean “unusable”. And let’s consider what we call an “exact” explanation in contrast to this one. Perhaps like drawing a boundary-line around a region with chalk? Here it strikes us at once that the line has breadth. So a colour edge would be more exact. But has this exactness still got a function here: isn’t it running idle? Moreover, we haven’t yet laid down what is to count as overstepping this sharp boundary; how, with what instruments, it is to be ascertained. And so on.

We understand what it means to set a pocket-watch to the exact time, or to regulate it to be exact. But what if it were asked: Is this exactness ideal exactness? Or: How nearly does it approach the ideal? — Of course we can speak of measurements of time in which there is a different, and as we should say a greater, exactness than in the measurement of time by a pocket-watch; in which the words “to set the clock to the exact time” have a different, though related, meaning and ‘to tell the time’ is a different process, and so on. — Now, if I tell someone: “You should come to dinner more punctually; you know it begins at one o’clock exactly” — is there really no question of *exactness* here? After all, one can say: “Think of the determination of time in the laboratory or the observatory; *there* you see what ‘exactness’ means.” [42]

“Inexact” is really a reproach, and “exact” is praise. And that is to say that what is inexact attains its goal less perfectly than does what is more exact. So it all depends on what we call “the goal”. Is it inexact when I don’t give our distance from the sun to the nearest metre, or tell a joiner the width of a table to the nearest thousandth of a millimetre?

No single ideal of exactness has been envisaged; we do not know what we are to make of this idea — unless you yourself stipulate what is to be so called. But you’ll find it difficult to make such a stipulation — one that satisfies you.

* 89. With these considerations we find ourselves facing the problem: In what way is logic something sublime?

* For logic seemed to have a peculiar depth — a universal significance. Logic lay, it seemed, at the foundation of all the sciences. — For logical

investigation explores the essence of all things. It seeks to see to the foundation of things, and shouldn't concern itself whether things actually happen in this or that way. — It arises neither from an interest in the facts of nature, nor from a need to grasp causal connections, but from an urge to understand the foundations, or essence, of everything empirical. Not, however, as if to this end we had to hunt out new facts; it is, rather, essential to our investigation that we do not seek to learn anything *new* by it. We want to *understand* something that is already in plain view. For *this* is what we seem in some sense not to understand.

- * Augustine says in *Confessions* XI. 14, “quid est ergo tempus? si nemo ex me quaerat scio; si querenti explicare velim, nescio”. — This could not be said about a question of natural science (“What is the specific gravity of hydrogen?”, for instance). Something that one knows when nobody asks one, but no longer knows when one is asked to explain it, is something that has to be *called to mind*. (And it is obviously something which, for some reason, it is difficult to call to mind.)
- * 90. We feel as if we had to *see right into* phenomena: yet our investigation is directed not towards *phenomena*, but rather, as one might say, towards the ‘*possibilities*’ of phenomena. What that means is that we call to mind the *kinds of statement* that we make about phenomena. So too, Augustine calls to mind the different statements that are made about the duration of events, about their being past, present or future. (These are, of course, not *philosophical* statements about time, the past, the present and the future.) [43]

Our inquiry is therefore a grammatical one. And this inquiry sheds light on our problem by clearing misunderstandings away. Misunderstandings concerning the use of words, brought about, among other things, by certain analogies between the forms of expression in different regions of our language. — Some of them can be removed by substituting one form of expression for another; this may be called ‘analysing’ our forms of expression, for sometimes this procedure resembles taking a thing apart.

91. But now it may come to look as if there were something like a final analysis of our linguistic expressions, and so a single completely analysed form of every expression. That is, as if our usual forms of expression were, essentially, still unanalysed; as if there were something hidden in them that had to be brought to light. As if, when this is done, the expression is completely clarified and our task accomplished.

It may also be put like this: we eliminate misunderstandings by making our expressions more exact; but now it may look as if we were aiming at a particular state, a state of complete exactness, and as if this were the real goal of our investigation.

- * 92. This finds expression in the question of the *essence* of language, of propositions, of thought. — For although we, in our investigations, are trying to understand the nature of language — its function, its structure — yet *this* is not what that question has in view. For it sees the essence of things not as something that already lies open to view, and that becomes *surveyable* through a process of ordering, but as something that lies *beneath* the surface. Something that lies within, which we perceive when we see *right into* the thing, and which an analysis is supposed to unearth.
- * ‘*The essence is hidden from us*’: this is the form our problem now assumes. We ask: “*What is language?*”, “*What is a proposition?*” And the answer to these questions is to be given once for all, and independently of any future experience.

93. One person might say, “A proposition is the most ordinary thing in the world”, and another, “A proposition — that’s something very remarkable!” — And the latter is unable simply to look and see how propositions work. For the forms of the expressions we use in talking about propositions and thought stand in his way.

Why do we say that a proposition is something remarkable? On the one hand, because of the enormous importance attaching to it. (And that is correct.) On the other hand, this importance, together with a misunderstanding [44] of the logic of language, seduces us into thinking that something extraordinary, even unique, must be achieved by propositions. — A *misunderstanding* makes it look to us as if a proposition *did* something strange.

- * 94. ‘Remarkable things, propositions!’ Here we already have the sublimation of our whole account of logic. The tendency to assume a pure intermediary between the propositional *sign* and the facts. Or even to try to purify, to sublimate, the sign itself. — For our forms of expression, which send us in pursuit of chimeras, prevent us in all sorts of ways from seeing that nothing extraordinary is involved.
- * 95. “Thinking must be something unique.” When we say, *mean*, that such-and-such is the case, then, with what we mean, we do not

stop anywhere short of the fact, but mean: *such-and-such — is — thus-and-so*. — But this paradox (which indeed has the form of a truism) can also be expressed in this way: one can *think* what is not the case.

96. Other illusions come from various quarters to join the particular one spoken of here. Thought, language, now appear to us as the unique correlate, picture, of the world. These concepts: proposition, language, thought, world, stand in line one behind the other, each equivalent to each. (But what are these words to be used for now? The language-game in which they are to be applied is missing.)

- * 97. Thinking is surrounded by a nimbus. — Its essence, logic, presents an order: namely, the a priori order of the world; that is, the order of *possibilities*, which the world and thinking must have in common. But this order, it seems, must be *utterly simple*. It is *prior* to all experience, must run through all experience; no empirical cloudiness or uncertainty may attach to it. — It must rather be of the purest crystal. But this crystal does not appear as an abstraction, but as something concrete, indeed, as the most concrete, as it were the *hardest* thing there is (*Tractatus Logico-Philosophicus* 5.5563).

We are under the illusion that what is peculiar, profound and essential to us in our investigation resides in its trying to grasp the incomparable essence of language. That is, the order existing between the concepts of proposition, word, inference, truth, experience, and so forth. This order is a *super-order* between — so to speak — *super-concepts*. Whereas, in fact, if the words “language”, “experience”, “world” have a use, it must be as humble a one as that of the words “table”, “lamp”, “door”. |45|

- * 98. On the one hand, it is clear that every sentence in our language ‘is in order as it is’. That is to say, we are not *striving after* an ideal, as if our ordinary vague sentences had not yet got a quite unexceptionable sense, and a perfect language still had to be constructed by us. — On the other hand, it seems clear that where there is sense, there must be perfect order. — So there must be perfect order even in the vaguest sentence.

99. The sense of a sentence — one would like to say — may, of course, leave this or that open, but the sentence must nevertheless have a determinate sense. An indeterminate sense — that would really not be a sense

at all. — This is similar to: a boundary which is not sharply defined is not really a boundary at all. Here one thinks something like this: if I say “I have locked the man up in the room — there is only one door left open” — then I simply haven’t locked him up at all; his being locked up is a sham. One would be inclined to say here: “So you haven’t accomplished anything at all.” An enclosure with a hole in it is as good as *none*. — But is that really true?

- * 100. “Still, it isn’t a game at all, if there is some vagueness *in the rules*.” But is it really not a game, then? — “Well, perhaps you’ll call it a game, but at any rate it isn’t a perfect game.” This means: then it has been contaminated, and what I am interested in now is what it was that was contaminated. — But I want to say: we misunderstand the role played by the ideal in our language. That is to say: we too would call it a game, only we are dazzled by the ideal, and therefore fail to see the actual application of the word “game” clearly.

101. We want to say that there can’t be any vagueness in logic. The idea now absorbs us that the ideal ‘*must*’ occur in reality. At the same time, one doesn’t as yet see *how* it occurs there, and doesn’t understand the nature of this “*must*”. We think the ideal must be in reality; for we think we already see it there.

102. The strict and clear rules for the logical construction of a proposition appear to us as something in the background — hidden in the medium of understanding. I already see them (even though through a medium), for I do understand the sign, I mean something by it.

103. The ideal, as we conceive of it, is unshakable. You can’t step outside it. You must always turn back. There is no outside; outside you cannot breathe. — How come? The idea is like a pair of glasses on our nose through which we see whatever we look at. It never occurs to us to take them off. |46|

104. One predicates of the thing what lies in the mode of representation. We take the possibility of comparison, which impresses us, as the perception of a highly general state of affairs.

- * Faraday in *The Chemical History of a Candle*: “Water is one individual thing — it never changes.” |p. 46 n.|

105. When we believe that we have to find that order, the ideal, in our actual language, we become dissatisfied with what are ordinarily called “sentences”, “words”, “signs”.

The sentence and the word that logic deals with are supposed to be something pure and clear-cut. And now we rack our brains over the nature of the *real* sign. — Is it perhaps the *idea* of the sign? Or the idea at the present moment?

106. Here it is difficult to keep our heads above water, as it were, to see that we must stick to matters of everyday thought, and not to get on the wrong track where it seems that we have to describe extreme subtleties, which again we are quite unable to describe with the means at our disposal. We feel as if we had to repair a torn spider’s web with our fingers.

107. The more closely we examine actual language, the greater becomes the conflict between it and our requirement. (For the crystalline purity of logic was, of course, not something I had *discovered*: it was a requirement.) The conflict becomes intolerable; the requirement is now in danger of becoming vacuous. — We have got on to slippery ice where there is no friction, and so, in a certain sense, the conditions are ideal; but also, just because of that, we are unable to walk. We want to walk: so we need *friction*. Back to the rough ground!

108. We see that what we call “proposition”, “language”, has not the formal unity that I imagined, but is a family of structures more or less akin to one another. — But what becomes of logic now? Its rigour seems to be giving way here. — But in that case doesn’t logic altogether disappear? — For how can logic lose its rigour? Of course not by our bargaining any of its rigour out of it. — The *preconception* of crystalline purity can only be removed by turning our whole inquiry around. (One might say: the inquiry must be turned around, but on the pivot of our real need. |47|

- * The sense in which philosophy of logic speaks of sentences and words is no different from that in which we speak of them in ordinary life when we say, for example, “What is written here is a Chinese sentence”, or “No, that only looks like writing; it’s actually just ornamental”, and so on.

We’re talking about the spatial and temporal phenomenon of language, not about some non-spatial, atemporal non-entity. [Only it is possible to be interested in a phenomenon in a variety of ways]. But we talk about it as we do about the pieces in chess when we are stating the rules for their moves, not describing their physical properties.

The question “What is a word really?” is analogous to “What is a piece in chess?” |§108(b)–(d)|

- * 109. It was correct that our considerations must not be scientific ones. The feeling ‘that it is possible, contrary to our preconceived ideas, to think this or that’ — whatever that may mean — could be of no interest to us. (The pneumatic conception of thinking.) And we may not advance any kind of theory. There must not be anything hypothetical in our considerations. All *explanation* must disappear, and description alone must take its place. And this description gets its light — that is to say, its purpose — from the philosophical problems. These are, of course, not empirical problems; but they are solved through an insight into the workings of our language, and that in such a way that these workings are recognized — *despite* an urge to misunderstand them. The problems are solved, not by coming up with new discoveries, but by assembling what we have long been familiar with. Philosophy is a struggle against the bewitchment of our understanding by the resources of our language.

110. “Language (or thinking) is something unique” — this proves to be a superstition (not a mistake!), itself produced by grammatical illusions.

And now the impressiveness retreats to these illusions, to the problems.

111. The problems arising through a misinterpretation of our forms of language have the character of *depth*. They are deep disquietudes; they

are as deeply rooted in us as the forms of our language, and their significance is as great as the importance of our language. — Let's ask ourselves: why do we feel a grammatical joke to be *deep*? (And that is what the depth of philosophy is.)

112. A simile that has been absorbed into the forms of our language produces a false appearance which disquiets us. “But *this* isn't how it is!” — we say. “Yet *this* is how it *has to be!*” [48]

113. “But *this* is how it is — — —”, I say to myself over and over again. I feel as though, if only I could fix my gaze *absolutely sharply* on this fact and get it into focus, I could not but grasp the essence of the matter.

114. *Tractatus Logico-Philosophicus* (4.5): “The general form of propositions is: This is how things are.” — That is the kind of proposition one repeats to oneself countless times. One thinks that one is tracing nature over and over again, and one is merely tracing round the frame through which we look at it.

115. A *picture* held us captive. And we couldn't get outside it, for it lay in our language, and language seemed only to repeat it to us inexorably.

116. When philosophers use a word — “knowledge”, “being”, “object”, “I”, “proposition/sentence”, “name” — and try to grasp the *essence* of the thing, one must always ask oneself: is the word ever actually used in this way in the language in which it is at home? —

What *we* do is to bring words back from their metaphysical to their everyday use.

117. I am told: “You understand this expression, don't you? Well then — I'm using it with the meaning you're familiar with.” As if the meaning were an aura the word brings along with it and retains in every kind of use.

(If, for example, someone says that the sentence “This is here” (saying which he points to an object in front of him) makes sense to him, then he should ask himself in what special circumstances this sentence is actually used. There it does make sense.)

118. Where does this investigation get its importance from, given that it seems only to destroy everything interesting; that is, all that is great and important? (As it were, all the buildings, leaving behind only bits of stone and rubble.) But what we are destroying are only houses of cards, and we are clearing up the ground of language on which they stood.

119. The results of philosophy are the discovery of some piece of plain nonsense and the bumps that the understanding has got by running up against the limits of language. They — these bumps — make us see the value of that discovery.

120. When I talk about language (word, sentence, etc.), I must speak the language of every day. So is this language too coarse, too material, for what we want to say? *Well then, how is another one to be [49] constructed?* — And how extraordinary that we should be able to do anything at all with the one we have!

In giving explanations, I already have to use language full-blown (not some sort of preparatory, provisional one); this is enough to show that I can come up only with externalities about language.

Yes, but then how can these observations satisfy us? — Well, your very questions were framed in this language; they had to be expressed in this language, if there was anything to ask!

And your scruples are misunderstandings.

Your questions refer to words; so I have to talk about words.

People say: it's not the word that counts, but its meaning, thinking of the meaning as a thing of the same kind as the word, even though different from the word. Here the word, there the meaning. The money, and the cow one can buy with it. (On the other hand, however: money, and what can be done with it.)

121. One might think: if philosophy speaks of the use of the word “philosophy”, there must be a second-order philosophy. But that's not the way it is; it is, rather, like the case of orthography, which deals with the word “orthography” among others without then being second-order.

* 122. A main source of our failure to understand is that we don't have *an overview* of the use of our words. — Our grammar is deficient in surveyability. A surveyable representation produces precisely that kind of understanding which consists in ‘seeing connections’. Hence the importance of finding and inventing *intermediate links*.

The concept of a surveyable representation is of fundamental significance for us. It characterizes the way we represent things, how we look at matters. (Is this a ‘Weltanschauung’?)

123. A philosophical problem has the form: “I don’t know my way about.”

124. Philosophy must not interfere in any way with the actual use of language, so it can in the end only describe it.

For it cannot justify it either.

It leaves everything as it is.

* It also leaves mathematics as it is, and no mathematical discovery can advance it. A “leading problem of mathematical logic” is for us a problem of mathematics like any other. |50|

125. It is not the business of philosophy to resolve a contradiction by means of a mathematical or logico-mathematical discovery, but to render surveyable the state of mathematics that troubles us — the state of affairs *before* the contradiction is resolved. (And in doing this one is not sidestepping a difficulty.)

Here the fundamental fact is that we lay down rules, a technique, for playing a game, and that then, when we follow the rules, things don’t turn out as we had assumed. So that we are, as it were, entangled in our own rules.

This entanglement in our rules is what we want to understand: that is, to survey.

It throws light on our concept of meaning something. For in those cases, things turn out otherwise than we had meant, foreseen. That is just what we say when, for example, a contradiction appears: “That’s not the way I meant it.”

The civic status of a contradiction, or its status in civic life — that is the philosophical problem.

126. Philosophy just puts everything before us, and neither explains nor deduces anything. — Since everything lies open to view, there is nothing to explain. For whatever may be hidden is of no interest to us.

The name “philosophy” might also be given to what is possible *before* all new discoveries and inventions.

* 127. The work of the philosopher consists in marshalling recollections for a particular purpose.

128. If someone were to advance *theses* in philosophy, it would never be possible to debate them, because everyone would agree to them.

129. The aspects of things that are most important for us are hidden because of their simplicity and familiarity. (One is unable to notice something — because it is always before one's eyes.) The real foundations of their inquiry do not strike people at all. Unless *that* fact has at some time struck them. — And this means: we fail to be struck by what, once seen, is most striking and most powerful.

130. Our clear and simple language-games are not preliminary studies for a future regimentation of language — as it were, first approximations, ignoring friction and air resistance. Rather, the language-games stand there as *objects of comparison* which, through similarities and dissimilarities, are meant to throw light on features of our language. [51]

131. For we can avoid unfairness or vacuity in our assertions only by presenting the model as what it is, as an object of comparison — as a sort of yardstick; not as a preconception to which reality *must* correspond. (The dogmatism into which we fall so easily in doing philosophy.)

132. We want to establish an order in our knowledge of the use of language: an order for a particular purpose, one out of many possible orders, not *the* order. For this purpose we shall again and again *emphasize* distinctions which our ordinary forms of language easily make us overlook. This may make it appear as if we saw it as our task to reform language.

Such a reform for particular practical purposes, an improvement in our terminology designed to prevent misunderstandings in practice, may well be possible. But these are not the cases we are dealing with. The confusions which occupy us arise when language is, as it were, idling, not when it is doing work.

133. We don't want to refine or complete the system of rules for the use of our words in unheard-of ways.

For the clarity that we are aiming at is indeed *complete* clarity. But this simply means that the philosophical problems should *completely* disappear.

The real discovery is the one that enables me to break off philosophizing when I want to. — The one that gives philosophy peace, so that it is no longer tormented by questions which bring *itself* in question. — Instead, a method is now demonstrated by examples, and the series of examples can be broken off. — Problems are solved (difficulties eliminated), not a *single* problem.

- * There is not a single philosophical method, though there are indeed methods, different therapies, as it were. |§133d|
- * 134. Let's examine the sentence "This is how things are". — How can I say that this is the general form of propositions? — It is first and foremost *itself* a sentence, an English sentence, for it has a subject and a predicate. But how is this sentence applied — that is, in our everyday language? For I got it from *there*, and nowhere else.
We say, for example, "He explained his position to me, said that this was how things were, and that therefore he needed an advance". So far, then, one can say that this sentence stands for some statement or other. It is employed as a propositional *schema*, but *only* because it has the |52| construction of an English sentence. One could easily say instead "such-and-such is the case", "things are thus-and-so", and so on. One could also simply use a letter, a variable, as in symbolic logic. But surely no one is going to call the letter "p" the general form of propositions. To repeat: "This is how things are" had that role only because it is itself what one calls an English sentence. But though it is a sentence, still it gets used as a propositional variable. To say that it agrees (or does not agree) with reality would be obvious nonsense, and so it illustrates the fact that one feature of our concept of a proposition is *sounding* like one.
- 135. But haven't we got a concept of what a proposition is, of what we understand by "proposition"? — Indeed, we do; just as we also have a concept of what we understand by "game". Asked what a proposition is — whether it is another person or ourselves that we have to answer — we'll give examples, and these will include what one may call an inductive series of propositions. So, it is in *this* way that we have a concept of a proposition. (Compare the concept of a proposition with the concept of number.)

136. At bottom, giving “This is how things are” as the general form of propositions is the same as giving the explanation: a proposition is whatever can be true or false. For instead of “This is how things are”, I could just as well have said “Such-and-such is true”. (Or again, “Such-and-such is false”.) But

$$\begin{aligned}\text{‘p’ is true} &= p \\ \text{‘p’ is false} &= \text{not-}p.\end{aligned}$$

And to say that a proposition is whatever can be true or false amounts to saying: we call something a proposition if *in our language* we apply the calculus of truth functions to it.

Now it looks as if the explanation — a proposition is whatever can be true or false — determined what a proposition was, by saying: what fits the concept ‘true’, or what the concept ‘true’ fits, is a proposition. So it is as if we had a concept of true and false, which we could use to ascertain what is, and what is not, a proposition. What *engages* with the concept of truth (as with a cog-wheel) is a proposition.

But this is a bad picture. It is as if one were to say “The chess king is *the* piece that one puts in check”. But this can mean no more than that in our game of chess only the king is put in check. Just as the proposition that only a *proposition* can be true can say no more than [53] that we predicate “true” and “false” only of what we call a proposition. And what a proposition is, is in *one* sense determined by the rules of sentence formation (in English, for example), and in another sense by the use of the sign in the language-game. And the use of the words “true” and “false” may also be a constituent part of this game; and we treat it as *belonging* to our concept ‘proposition’, but it doesn’t ‘fit’ it. As we might also say, check *belongs* to our concept of the chess king (as, so to speak, a constituent part of it). To say that check did not *fit* our concept of the pawns would mean that a game in which pawns were checked, in which, say, the player who lost his pawns lost the game, would be uninteresting or stupid or too complicated or something of the kind.

137. What about learning to determine the subject of a sentence by means of the question “Who or what . . . ?” — Here, surely, there is such a thing as the subject’s ‘fitting’ this question; for otherwise how should we find out what the subject was by means of the question? We find it

out much as we find out which letter of the alphabet comes after ‘K’ by saying the alphabet up to ‘K’ to ourselves. Now in what sense does ‘L’ fit this series of letters? — In *that* sense “true” and “false” could be said to fit propositions; and a child might be taught to distinguish propositions from other expressions by being told “Ask yourself if you can say ‘is true’ after it. If these words fit, it’s a proposition”. (And in the same way one might have said: Ask yourself if you can put the words “*This* is how things are:” in front of it.)

138. But can’t the meaning of a word that I understand fit the sense of a sentence that I understand? Or the meaning of one word fit the meaning of another? — Of course, if the meaning is the *use* we make of the word, it makes no sense to speak of such fitting. But we *understand* the meaning of a word when we hear or say it; we grasp the meaning at a stroke, and what we grasp in this way is surely something different from the ‘use’ which is extended in time! |54|

* Must I *know* whether I understand a word? Don’t I also sometimes *think* I understand a word (as I may think I understand a method of calculation) and then realize that I did not understand it? (“I thought I knew what ‘relative’ and ‘absolute’ motion meant, but I see that I don’t know.”) |p. 53 n.|

139. When someone says the word “cube” to me, for example, I know what it means. But can the whole *use* of the word come before my mind when I *understand* it in this way?

Yes; but on the other hand, isn’t the meaning of the word also determined by this use? And can these ways of determining meaning conflict? Can what we grasp *at a stroke* agree with a use, fit or fail to fit it? And how can what is present to us in an instant, what comes before our mind in an instant, fit a *use*?

What really comes before our mind when we *understand* a word? — Isn’t it something like a picture? Can’t it *be* a picture?

Well, suppose that a picture does come before your mind when you hear the word “cube”, say the drawing of a cube. In what way can this

picture fit or fail to fit a use of the word “cube”? — Perhaps you say: “It’s quite simple; if that picture occurs to me and I point to a triangular prism for instance, and say it is a cube, then this use of the word doesn’t fit the picture.” — But doesn’t it fit? I have purposely so chosen the example that it is quite easy to imagine *a method of projection* according to which the picture does fit after all.

The picture of the cube did indeed *suggest* a certain use to us, but it was also possible for me to use it differently. [55]

- * (a) “I believe the right word in this case is. . . .” Doesn’t this show that the meaning of a word is a Something that we have in our mind and which is, as it were, the exact picture we want to use here? Suppose I were choosing between the words “stately”, “dignified”, “proud”, “imposing”; isn’t it as though I were choosing between drawings in a portfolio? — No; the fact that one speaks of the *apt word* does not *show* the existence of a Something that . . . One is inclined, rather, to speak of this picture-like Something because one can find a word *apt*; because one often chooses between words as between similar but not identical pictures; because pictures are often used instead of words, or to illustrate words, and so on.
- (b) I see a picture; it represents an old man walking up a steep path leaning on a stick. — How? Might it not have looked just the same if he had been sliding downhill in that position? Perhaps a Martian would describe the picture so. I don’t need to explain why *we* don’t describe it so. [p. 54 n.]

140. Then what was the nature of my mistake — the mistake one would like to express by saying “I thought the picture forced a particular use on me?” How could I think that? What *did* I think? Is there a picture, or something like a picture, that forces a particular application on us; so that my mistake amounted to a confusion? — For we might also be inclined to express ourselves like this: we’re at most under a psychological, not a logical, compulsion. And now, indeed, it looks as if we knew of two kinds of case.

What was the effect of my argument? It called our attention to (reminded us of) the fact that there are other processes, besides the one we originally thought of, which we should sometimes be prepared to call “applying the picture of a cube”. So our ‘belief that the picture forced a particular application upon us’ consisted in the fact that only the one case and no other occurred to us. “There is another solution as well” means: there is something else that I’m also prepared to call a “solution”, to which I’m prepared to apply such-and-such a picture, such-and-such an analogy, and so on.

What is essential now is to see that the same thing may be in our minds when we hear the word and yet the application still be different. Has it the *same* meaning both times? I think we would deny that.

141. But what if not just the picture of the cube, but also the method of projection, comes before our mind? — How am I to imagine this? — Perhaps I see before me a schema showing the method of projection: say, a picture of two cubes connected by lines of projection. — But does this really get me any further? Can’t I now imagine different applications of this schema too? — Well, yes, but can’t an *application come before my mind*? — It can: only we need to become clearer about our application of *this* expression. Suppose I explain various methods of projection to someone, so that he may go on to apply them; let’s ask ourselves in what case we’d say that the method I mean comes before his mind.

Now evidently we accept two different kinds of criteria for this: on the one hand, the picture (of whatever kind) that he visualizes at some time or other; on the other, the application which — in the course of time — he makes of this image. (And isn’t it obvious here that it is absolutely inessential that this picture be in his imagination, rather than in front of him as a drawing or model; or again, as something that he himself constructs as a model?) |56|

Can there be a clash between picture and application? Well, they can clash in so far as the picture makes us expect a different use; because people in general apply *this* picture like *this*.

I want to say: we have here a *normal* case and abnormal cases.

142. It is only in normal cases that the use of a word is clearly laid out in advance for us; we know, are in no doubt, what we have to say in this or that case. The more abnormal the case, the more doubtful it

becomes what we are to say. And if things were quite different from what they actually are — if there were, for instance, no characteristic expression of pain, of fear, of joy; if rule became exception, and exception rule; or if both became phenomena of roughly equal frequency — our normal language-games would thereby lose their point. — The procedure of putting a lump of cheese on a balance and fixing the price by the turn of the scale would lose its point if it frequently happened that such lumps suddenly grew or shrank with no obvious cause. This remark will become clearer when we discuss such things as the relation of expression to feeling, and similar topics.

- * What we have to mention in order to explain the significance, I mean the importance, of a concept are often extremely general facts of nature: such facts as are hardly ever mentioned because of their great generality. [p. 56 n.]

143. Let's now examine the following kind of language-game: when A gives an order, B has to write down series of signs according to a certain formation rule.

Let the first of these series be that of the natural numbers in the decimal system. — How does he come to understand this system? First of all, series of numbers are written down for him, and he is required to copy them. (Don't balk at the expression "series of numbers"; it is not being used wrongly here.) And here already there is a normal and an abnormal learner's reaction. — At first, perhaps, we guide his hand in writing out the series 0 to 9; but then the *possibility of communication* will depend on his going on to write it down by himself. — And here we may imagine, for example, that he does copy the figures by himself, but not in the right order: he writes sometimes one, sometimes another, at random. And at *that* point communication stops. — Or again, he makes '*mistakes*' [57] in the order. — The difference between this and the first case will of course be one of frequency. — Or he makes a *systematic* mistake; for example, he copies every other number, or he copies the series 0, 1, 2, 3, 4, 5, . . . like this: 1, 0, 3, 2, 5, 4, . . . Here we shall almost be tempted to say that he has understood us *wrongly*.

Notice, however, that there is no sharp distinction between a random and a systematic mistake. That is, between what you are inclined to call a "random" and what a "systematic" one.

Perhaps it is possible to wean him from the systematic mistake (as from a bad habit). Or perhaps one accepts his way of copying and tries to teach him the normal one as an offshoot, a variant of his. — And here too, our pupil's ability to learn may come to an end.

- * 144. What do I mean when I say "the pupil's ability to learn *may* come to an end here"? Do I report this from my own experience? Of course not. (Even if I have had such experience.) Then what am I doing with that remark? After all, I'd like you to say: "Yes, it's true, one could imagine that too, that might happen too!" — But was I trying to draw someone's attention to the fact that he is able to imagine that? — I wanted to put that picture before him, and his *acceptance* of the picture consists in his now being inclined to regard a given case differently: that is, to compare it with *this* sequence of pictures. I have changed his *way of looking at things*. (Indian mathematicians: "Look at this!")

145. Suppose the pupil now writes the series 0 to 9 to our satisfaction. — And this will be the case only if he is *often* successful, not if he does it right once in a hundred attempts. Now I continue to guide him through the series and draw his attention to the recurrence of the first series in the units; and then to its recurrence in the tens. (Which means only that I use particular emphases, underline figures, write them one under another in such-and-such ways, and similar things.) — And now at some point he continues the series by himself — or he does not. — But why do you say that? *That* much is obvious! — Of course; I only wished to say: the effect of any further *explanation* depends on his *reaction*.

Now, however, let us suppose that after some efforts on the teacher's part he continues the series correctly, that is, as we do it. So now we can say that he has mastered the system. — But how far does he have to continue [58] the series correctly for us to be able rightly to say that? Clearly, you cannot state a limit here.

146. Suppose I now ask: "Has he understood the system if he continues the series to the hundredth place?" Or, if I shouldn't speak of 'understanding' in our primitive language-game: has he got the system if he continues the series correctly up to *this* point? — Perhaps you will say here: to have got the system (or again, to understand it) can't consist in continuing the series up to *this* or *that* number: *that* is only applying one's understanding. Understanding itself is a state which is the *source* of the correct use.

What is one really thinking of here? Isn't one thinking of the derivation of a series from its algebraic formula? Or at least of something analogous? — But this is where we were before. We can indeed think of more than *one* application of an algebraic formula; and while every mode of application can in turn be formulated algebraically, this, of course, does not get us any further. — The application is still a criterion of understanding.

147. "But how can it be? When *I* say I understand the rule of a series, I'm surely not saying so on the basis of the *experience* of having applied the algebraic formula in such-and-such a way! In my own case at any rate, I surely know that I mean such-and-such a series, no matter how far I've actually developed it." —

So you mean that you know the application of the rule of the series quite apart from remembering actual applications to particular numbers. And you'll perhaps say: "Of course! For the series is infinite, and the bit of it that I could develop finite."

148. But what does this knowledge consist in? Let me ask: *When* do you know that application? Always? Day and night? Or only while you are actually thinking of the rule of the series? Do you know it, that is, in the same way as you know the alphabet and the multiplication table? Or is what you call 'knowledge' a state of consciousness or a process — say a thinking-of-something, or the like?

149. If one says that knowing the ABC is a state of the mind, one is thinking of a state of an apparatus of the mind (perhaps a state of the brain) by means of which we explain the *manifestations* of that knowledge. Such a state is called a disposition. But it is not unobjectionable to speak [59] of a state of the mind here, inasmuch as there would then have to be two different criteria for this: finding out the structure of the apparatus, as distinct from its effects. (Nothing would be more confusing here than to use the words "conscious" and "unconscious" for the contrast between a state of consciousness and a disposition. For this pair of terms covers up a grammatical difference.)

- * (a) “Understanding a word”: a state. But a *mental* state? — We call dejection, excitement, pain, mental states. Carry out a grammatical investigation as follows: we say

“He felt dejected the whole day”

“He was in great excitement the whole day”

“He has been in pain uninterruptedly since yesterday”. —

We also say, “Since yesterday I have understood this word.” ‘Uninterruptedly’, though? — To be sure, one can speak of an interruption of understanding. But in what cases? Compare: “When did your pains get less?” and “When did you stop understanding that word?”

(b) What if one asked: When *can* you play chess? All the time? Or just while you are making a move? And the whole of chess during each move? — And how odd that being able to play chess should take such a short time, and a game so much longer! [p. 59 n.]

150. The grammar of the word “know” is evidently closely related to the grammar of the words “can”, “is able to”. But also closely related to that of the word “understand”. (To have ‘mastered’ a technique.)

151. But there is also *this* use of the word “know”: we say “Now I know!” — and similarly, “Now I can do it!” and “Now I understand!”

Let us imagine the following example: A writes down series of numbers; B watches him and tries to find a rule for the number series. If he succeeds, he exclaims: “Now I can go on!” — So this ability, this understanding, is something that occurs in a moment. So let us have a look: what is it that occurs here? — A has written down the numbers 1, 5, 11, 19, 29; at this point B says he knows how to go on. What happened here? Various things may have happened; for example, while A was slowly writing down one number after another, B was busy trying out various algebraic formulae on the numbers which had been written down. After A had written the number 19, B tried the formula $a_n = n^2 + n - 1$; and the next number confirmed his supposition. [60]

Or again, B does not think of formulae. He watches, with a certain feeling of tension, how A writes his numbers down, while all sorts of vague thoughts float through his head. Finally he asks himself, “What is the series of differences?” He finds: 4, 6, 8, 10, and says: “Now I can go on.”

Or he watches and says, "Yes, I know *that* series" — and continues it, just as he would have done if A had written down the series 1, 3, 5, 7, 9. — Or he says nothing at all and simply continues the series. Perhaps he had what may be called the feeling "That's easy!" (Such a feeling is, for example, that of a light quick intake of breath, as when one is slightly startled.)

152. But are the processes which I've described here *understanding*?

"B understands the system behind the series" surely doesn't mean simply: the formula " $a_n = \dots$ " occurs to B. For it is perfectly conceivable that the formula should occur to him and that he should nevertheless not understand. "He understands" must have more to it than: the formula occurs to him. And equally, more than any of those more or less characteristic *concomitant processes* or manifestations of understanding.

153. Now we try to get hold of the mental process of understanding which seems to be hidden behind those coarser, and therefore more readily visible, concomitant phenomena. But it doesn't work; or, more correctly, it does not get as far as a real attempt. For even supposing I had found something that happened in all those cases of understanding, why should *that* be the understanding? Indeed, how can the process of understanding have been hidden, given that I said "Now I understand" because I *did* understand? And if I say it is hidden — then how do I know what I have to look for? I am in a muddle.

154. But wait! — if "Now I understand the system" does not mean the same as "The formula . . . occurs to me" (or "I utter the formula", "I write it down", etc.) — does it follow from this that I employ the sentence "Now I understand" or "Now I can go on" as a description of a process occurring behind or side by side that of uttering the formula?

If something has to stand 'behind the utterance of the formula', it is *particular circumstances*, which warrant my saying that I can go on — if the formula occurs to me. [61]

Just for once, don't think of understanding as a 'mental process' at all! — For *that* is the way of talking which confuses you. Instead, ask yourself: in what sort of case, in what kind of circumstances, do we say "Now I know how to go on"? I mean, if the formula has occurred to me. —

In the sense in which there are processes (including mental processes) which are characteristic of understanding, understanding is not a mental process.

(A pain's increasing or decreasing, listening to a tune or a sentence — mental processes.)

155. So, what I wanted to say was: if he suddenly knew how to go on, if he understood the system, then he may have had a distinctive experience — and if he is asked: "What was it? What took place when you suddenly grasped the system?", perhaps he will describe it much as we described it above — but for us it is the *circumstances* under which he had such an experience that warrant him saying in such a case that he understands, that he knows how to go on.

156. This will become clearer if we interpolate an examination of another word: namely, "*reading*". First I must note that I'm not counting the understanding of what is read as part of 'reading' for purposes of this examination: reading is here the activity of rendering out loud what is written or printed; but also of writing from dictation, copying something printed, playing from sheet music, and so on.

The use of this word in the circumstances of our ordinary life is of course extremely familiar to us. But the part the word plays in our life, and so too the language-game in which we employ it, would be difficult to describe even in rough outline. A person, let's say an Englishman, has received at school or at home one of the kinds of instruction usual among us, and in the course of it has learned to read his native language. Later he reads books, letters, newspapers, and so forth.

Now what goes on when, say, he reads a newspaper? — His eye passes — as we say — along the printed words; he says them out loud — or only to himself; that is, he reads certain words by taking in their printed shapes as wholes, others when his eye has taken in the first syllables; others again he reads syllable by syllable, and an occasional one perhaps letter by letter. — We would also say that he had read a sentence if he spoke neither aloud nor to himself during the reading, but was afterwards able to repeat the sentence word for word or nearly so. — He may attend to what he reads, or again — as we [62] might put it — function as a mere reading-machine: I mean, read aloud and correctly without attending to what he is reading; perhaps with his attention on something quite different (so that he is unable to say what he has been reading if he is asked about it immediately afterwards).

Now compare a beginner with this reader. The beginner reads the words by laboriously spelling them out. — Some words, however, he guesses from the context, or perhaps he already partly knows the passage by heart. Then his teacher says that he is not really *reading* the words (and in certain cases that he is only pretending to read them).

If we think of *this* sort of reading, the reading of a beginner, and ask ourselves what *reading* consists in, we'll be inclined to say: it is a distinctive conscious mental activity.

We also say of the pupil: "Of course, only he knows if he is really reading or merely saying the words off by heart." (We've yet to discuss these propositions: "Only *he* knows . . .")

But I want to say: we have to admit that — as far as concerns uttering any one of the printed words — the same thing may take place in the mind of the pupil who is 'pretending' to read as in that of a practised reader who is 'reading' it. The word "read" is applied *differently* when we are speaking of the beginner and of the practised reader. — Now we would, of course, like to say: What goes on in the practised reader and in the beginner when they utter the word *can't* be the same. And if there is no difference in what they are currently conscious of, there must be one in the unconscious workings of their minds, or, again, in the brain. — So we'd like to say: There are, at any rate, two different mechanisms here! And what goes on in them must distinguish reading from not reading. — But these mechanisms are only hypotheses, models to explain, to sum up, what you observe.

157. Consider the following case: we use human beings, or creatures of some other kind, as reading-machines. They are trained for this purpose. The trainer says of some that they can already read, of others that they cannot yet do so. Take the case of a pupil who has so far not participated in the training: if he is shown a written word, he will sometimes produce random sounds, and now and again the sounds will 'accidentally' come out roughly right. A third person hears this pupil on such an occasion and says, "He is reading". But the teacher says, "No, he isn't reading; that was just an accident". — But let's suppose that this pupil continues to react correctly to further words [63] that are put before him. After a while, the teacher says, "Now he can read!" — But what of that first word? Is the teacher to say, "I was wrong, he *did* read it after all" — or, "He only began really to read later on"? — When did he begin to read? Which was the first word that he *read*? This

question makes no sense here. Unless, indeed, we stipulate: "The first word that a person 'reads' is the first word of the first series of 50 words that he reads correctly" (or something of the sort).

If, on the other hand, we use "reading" to stand for a certain experience of transition from marks to spoken sounds, then it certainly makes sense to speak of the *first* word that he really read. He can then say, for example, "At this word, for the first time, I had the feeling: 'now I am reading'."

Or again, in the different case of a reading-machine which translated marks into sounds, perhaps as a pianola does, it would be possible to say: "The machine *read* only after such-and-such had happened to it — after such-and-such parts had been connected by wires; the first word that it read was . . ."

But in the case of the live reading-machine, "reading" meant: reacting to written signs in such-and-such ways. So this concept was quite independent of that of a mental or other mechanism. — Nor can the teacher here say of the trainee, "Perhaps he was already reading when he said that word". For there is no doubt about what he did. — The change when the pupil began to read was a change in his *behaviour*; and it makes no sense here to speak of 'a first word in his new state'.

158. But isn't that only because of our too slight acquaintance with what goes on in the brain and the nervous system? If we had a more accurate knowledge of these things, we would see what connections were established by the training, and then when we looked into his brain, we would be able to say: "Now he has *read* this word, now the reading connection has been set up." — And it presumably *must* be like that — for otherwise how could we be so sure that there was such a connection? That it is so is presumably a priori — or is it only probable? And how probable is it? Now, ask yourself: what do you *know* about these things? — But if it is a priori, that means that it is a form of representation which is very appealing to us.

159. But when we think the matter over, we're tempted to say: the one real criterion for anybody's *reading* is the conscious act of reading, the act of reading the sounds off from the letters. "A man [64] surely knows whether he is reading or only pretending to read!" — Suppose A wants to make B believe that he can read Cyrillic script. He learns a Russian sentence by heart and utters it while looking at the printed words as if he were reading them. Here we'll surely say that A knows he is not

reading, and has a sense of just this while pretending to read. For there are, of course, many feelings more or less characteristic of reading a printed sentence; it is not difficult to recall such feelings: think of feelings of hesitating, of looking more closely, of misreading, of words following on one another in a more or less familiar fashion, and so on. And equally, there are feelings characteristic of reciting something one has learnt by heart. In our example, A will have none of the feelings that are characteristic of reading, and will perhaps have various feelings characteristic of cheating.

160. But imagine the following case: we give someone who can read fluently a text that he has never seen before. He reads it to us — but with the feeling of saying something he has learnt by heart (this might be the effect of some drug). Would we say in such a case that he was not really reading the passage? That is, would we here allow his feelings to count as a criterion for his reading or not reading?

Or again, suppose that a man who is under the influence of a certain drug is presented with a series of written signs (which need not belong to any existing alphabet). He utters words corresponding to the number of the signs, as if they were letters, and does so with all the outward characteristics and feelings of reading. (We have experiences like this in dreams; after waking up in such a case, one says perhaps: "It seemed to me as if I were reading signs, though they weren't really signs at all.") In such a case, some people would be inclined to say the man was *reading* those signs. Others, that he was not. — Suppose he has in this way read (or interpreted) a set of five signs as A B O V E — and now we show him the same signs in the reverse order and he reads E V O B A; and in further tests he always retains the same interpretation of the signs: here we may well be inclined to say that he was making up an alphabet for himself *ad hoc* and then reading accordingly.

161. Remember too that there is a continuous series of transitional cases between that in which a person repeats from memory what he is supposed to be reading and that in which he spells out every word without being helped at all by guessing from the context or knowing by heart. [65]

Try this experiment: say the numbers from 1 to 12. Now look at the dial of your watch and *read* them. — What was it that you called "reading" in the latter case? That is to say, what did you do, to make it into *reading*?

162. Let us try the following explanation: someone is reading if he *derives* the reproduction from the original. And what I call the ‘original’ is the text which he reads or copies, the dictation from which he writes, the score from which he plays, and so on. — Now suppose, for example, that we have taught someone the Cyrillic alphabet and how to pronounce each letter. Next we put a passage before him and he reads it, pronouncing every letter as we have taught him. In this case, we’ll probably say that he derives the sound of a word from the written pattern by the rule that we have given him. And this too is a clear case of *reading*. (We might say that we had taught him the ‘rule of the alphabet’.)

But why do we say that he has *derived* the spoken from the printed words? Do we know anything more than that we taught him how each letter should be pronounced, and that he then read the words out loud? Perhaps our reply will be: the pupil shows that he is using the rule we have given him to take the step from the printed to the spoken words. — How this can be *shown* becomes clearer if we change our example to one in which the pupil has to copy out the text instead of reading it out, has to go from print to handwriting. For in this case, we can give him the rule in the form of a table with printed letters in one column and cursive letters in the other. And that he is deriving his writing from print is shown by his consulting the table.

163. But suppose that when he did this, he always wrote b for A, c for B, d for C, and so on, and a for Z? — Surely we’d call this too a derivation by means of the table. — He is using it now, we might say, according to the second schema in §86 instead of the first.

It would still be a case of derivation according to the table, even if it were represented by a schema of arrows without any simple regularity.

Suppose, however, that he does not stick to a single way of transcribing, but alters it according to a simple rule: if he has once written n for A, then he writes o for the next A, p for the next, and so on. — But where is the boundary between this procedure and a random one? |66|

But does this mean that the word “derive” really has no meaning, since the meaning seems to dissolve into nothing when we follow it through?

164. In case (162) the meaning of the word “derive” stood out clearly. But we told ourselves that this was only a quite special case of deriving:

deriving in quite special clothing, which had to be stripped from it if we wanted to see the essence of deriving. So we stripped off those particular coverings; but then deriving itself disappeared. In order to find the real artichoke, we divested it of its leaves. For (162) was, to be sure, a special case of deriving; what is essential to deriving, however, was not hidden here beneath the exterior, but this ‘exterior’ was one case out of the family of cases of deriving.

And in the same way, we also use the word “read” for a family of cases. And in different circumstances we apply different criteria for a person’s reading.

165. But surely — we’d like to say — reading is a quite particular process! Read a page of print, and you can see that; there is something special going on, something highly characteristic. — Well, what does go on when I read the page? I see printed words, and I utter words. But, of course, that is not all, for I might see printed words and utter words, and still not be reading. Even if the words which I utter are those which, according to an existing alphabet, are *supposed* to be read off from the printed ones. — And if you say that reading is a particular experience, then it becomes quite unimportant whether or not you read according to some generally recognized alphabetical rule. — So what does the characteristic thing about the experience of reading consist in? — Here I’d like to say: “The words that I utter *come* in a distinctive way.” That is, they do not come as they would if I were, for example, making them up. — They come of themselves. — But even that is not enough; for the sounds of words may *occur* to me while I am looking at printed words, but that does not mean that I have read them. — In addition, I might say here, neither do the spoken words occur to me as if, say, something reminded me of them. I should, for example, not wish to say: the printed word “nothing” always reminds me of the sound “nothing”. Rather, the spoken words, as it were, slip in as one [67] reads. Indeed, I can’t even look at a printed English word without that peculiar process occurring of inwardly hearing the sound of the word.

* The grammar of the expression “a quite particular” (atmosphere). One says “This face has a quite *particular* expression,” and perhaps looks for words to characterize it. [p. 66 n.]

166. I said that when one reads, the spoken words come ‘in a distinctive way’: but in what way? Isn’t this a fiction? Let’s look at individual letters and attend to the way the sound of the letter comes. Read the letter A. — Now, how did the sound come? — We have no idea what to say about it. — Now write a small Roman a! — How did the movement of the hand come as you wrote? Differently from the way the sound came when you tried previously? — I looked at the printed letter and wrote the cursive letter; that’s all I know. — Now look at the sign , and let a sound occur to you as you do so; then utter it. The sound ‘U’ occurred to me; but I could not claim that there was any essential difference in the kind of way that sound *came*. The difference lay in the somewhat different situation. I told myself previously that I was to think of a sound; there was a certain tension present before the sound came. And I did not say ‘U’ automatically as I do when I look at the letter U. Further, that mark was not *familiar* to me in the way the letters of the alphabet are. I looked at it, as it were, expectantly, with a certain interest in its shape; as I looked, I thought of a reversed sigma. — Imagine having to use this mark regularly as a letter; so that you get used to uttering a particular sound at the sight of it, say the sound “sh”. Can we say anything but that, after a while, this sound comes automatically when we look at the sign? That is to say, I no longer ask myself on seeing it, “What sort of letter is that?” — nor, of course, do I tell myself, “At this sign I’ll utter the sound ‘sh’”, nor yet “This sign somehow reminds me of the sound ‘sh’”.

(Compare with this the idea that memory-images are distinguished from other mental images by some special characteristic.)

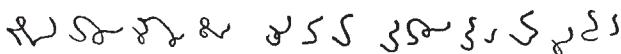
167. Now what is there in the claim that reading is ‘a quite particular process’? It presumably means that whenever we read, *one* particular process takes place, which we recognize. — But suppose that I at one time read a sentence from print and at another write it from Morse code — is the mental process really the same? — On the other hand, there is surely some uniformity in the experience of reading a page of print. For the process is a uniform one. And it is quite easy to understand that there is a difference between this process and one of, say, coming up with words at the sight of arbitrary signs. — For the mere look of a printed line is itself extremely [68] characteristic — it presents, that is, a quite special appearance, the letters all roughly the same size, akin in shape too, and always recurring; most of the words constantly

repeated and immensely familiar to us, like well-known faces. — Think of the uneasiness we feel when the spelling of a word is changed. (And of the still deeper feelings that questions about the spelling of words have aroused.) Of course, not every kind of sign has made a *deep* impression on us. A sign in the algebra of logic, for instance, can be replaced by any other one without exciting deep feelings in us. —

Remember that the look of a word is familiar to us in much the same way as its sound.

168. Again, our eye passes over printed lines differently from the way it passes over arbitrary pothooks and squiggles. (But I am not speaking here of what can be found out by observing the movement of the eyes of a reader.) The glance slides, one would like to say, entirely unimpeded, without becoming snagged, and yet it doesn't *skid*. And at the same time involuntary speech goes on in the imagination. That is how it is when I read English and other languages, printed or written, and in various letterings. — But what in all this is essential to reading as such? Not any one feature that occurs in all cases of reading. (Compare what goes on while reading ordinary print with reading words which are printed entirely in capital letters, as solutions of puzzles sometimes are. How different it is! — Or reading our script from right to left.)

- * 169. But when we read, don't we feel the look of the words somehow causing our utterance? — Read a sentence. — And now look along the following sequence



and utter a sentence as you do so. Can't one feel that in the first case the utterance was *connected* with seeing the signs and in the second went on side by side with the seeing without any connection?

But why do you say that we felt a causing? Causation is surely something established by experiments, by observing a regular concurrence of events, for example. So how could I say that I *feel* something which is found out in this way by experiment? (It is indeed true that observation of regular concurrence is not the only way we establish causation.) One might rather say, I feel that the letters are the *reason* why I read such-and-such. For if someone asks me, "Why [69] do you read it *this* way?" — I justify it by the letters which are there.

But what is it supposed to mean: to *feel* the justification that I uttered or thought? I'd like to say: when I read, I feel a certain *influence* of the letters on me — but I feel no influence on what I say from that series of arbitrary squiggles. — Let's once more compare an individual letter with such a squiggle. Would I also say I feel the influence of "i" when I read it? It does of course make a difference whether I say "i" when I see "i" or when I see "". The difference is, roughly, that when I see the letter, it's automatic for me inwardly to hear the sound "i", even against my will, and that I pronounce the letter with less effort when I read it than when I am looking at "". That is to say: this is how it is when I *try*; but of course it is not so if I happen to be looking at the mark "" and at the same time pronounce a word in which the sound "i" occurs.

170. We'd never have hit on the idea that we *felt the influence* of the letters on us when reading had we not compared the case of letters with that of arbitrary marks. And here we do indeed notice a *difference*. And we interpret it as the difference between influence and absence of influence.

And we're especially inclined towards this interpretation when we make a point of reading slowly — perhaps in order to see what does happen when we read. When we, so to speak, more or less deliberately let ourselves be *guided* by the letters. But this 'letting myself be guided' in turn consists only in my looking carefully at the letters — and perhaps excluding certain other thoughts.

We imagine that a feeling enables us to perceive, as it were, a connecting mechanism between the look of the word and the sound that we utter. For when I speak of the experiences of being influenced, of causation, of being guided, that is really supposed to mean that I, so to say, feel the movement of the levers which connect the appearance of the letters with speaking.

171. I might have used various words to hit off the experience I have when I read a word. So I might say that the written word *intimates* the sound to me. — Or again, that when one reads, letter and sound form a *unity* — as it were an alloy. (A similar fusion occurs, for example, between the faces of famous men and the sound of their names. [70] It seems to us that this name is the only right one for this face.) Once I feel this unity, I might say that I see or hear the sound in the written word. —

But now, just read a few sentences in print as you usually do when you are not thinking about the concept of reading, and ask yourself whether you had such experiences of unity, of being influenced, and so on, as you read. — Don't say you had them unconsciously! Nor should we be misled by the picture of these phenomena coming forth 'on closer inspection'. If I'm supposed to describe how an object looks from far off, I don't make the description more accurate by saying what can be noticed about the object on closer inspection.

172. Let's consider the experience of being guided, and ask ourselves: what does this experience consist in when, for example, our steps are guided? — Imagine the following cases:

You're in a playground with your eyes blindfolded, and someone leads you by the hand, sometimes left, sometimes right; you have constantly to be ready for the tug of his hand, and must also take care not to stumble when he gives an unexpected tug.

Or again, someone leads you by the hand where you are unwilling to go, by force.

Or you're guided by a partner in a dance; you make yourself as receptive as possible, in order to guess his intention and obey the slightest pressure.

Or someone leads you along a footpath; you're having a conversation; you go wherever he does.

Or you walk along a track in a field, letting yourself be guided by it.

All these situations are similar to one another; but what is common to all the experiences?

173. "But being guided is surely a particular experience!" — The answer to this is: you're now *thinking* of a particular experience of being guided.

If I want to picture to myself the experience of the person in one of the earlier examples, whose writing is guided by the printed text and the table, I imagine his 'conscientious' looking-up, and so on. As I do this, I even assume a particular facial expression (say, that of a conscientious bookkeeper). *Carefulness* is a most essential part of this picture; in another, the exclusion of every volition of one's own would be essential. (But take something that normal people do with all the signs of carelessness, and imagine someone accompanying it with the expression — and why not the [71] feelings? — of great carefulness. — Is he then careful? Imagine a servant dropping the tea-tray and everything

on it with all the outward signs of carefulness.) If I picture to myself such a particular experience, it seems to me to be *the* experience of being guided (or of reading). But now I ask myself: what are you doing? — You look at every letter, you make this face, you write the letters deliberately (and so on). — So that is the experience of being guided? — Here I should like to say: “No, it isn’t that; it is something more inward, more essential.” — It is as if at first all these more or less inessential processes were shrouded in a particular atmosphere, which dissipates when I look closely.

174. Ask yourself how you ‘*deliberately*’ draw a line parallel to a given one — and another time, deliberately, one at an angle to it. What is the experience of doing something *deliberately*? Here a particular look, a gesture, at once occur to you — and then you would like to say: “And it just is a *particular* inner experience.” (And by this, of course, you say nothing at all.)

(There is here a connection with the inquiry into the nature of intention, of the will.)

175. Make some arbitrary doodle on a bit of paper. — And now make a copy next to it, let yourself be guided by it. — I’d like to say: “Sure enough, I let myself be guided here. But what was characteristic in what happened? — If I say what happened, it no longer seems to me to be characteristic.”

But now notice this: *while* I let myself be guided, everything is quite simple, I notice nothing *special*; but afterwards, when I ask myself what it was that happened, it seems to have been something indescribable. *Afterwards* no description satisfies me. It’s as if I couldn’t believe that I merely looked, made such-and-such a face, and drew a line. But do I *remember* anything else? No; and yet I feel as if there must have been something else; in particular when I say “*guidance*”, “*influence*”, and other such words to myself. “For surely”, I tell myself, “I was being *guided*.” — Only then does the idea of that ethereal, intangible influence arise.

176. When I look back on the experience, I have the feeling that what is essential about it is an ‘experience of being influenced’, of connection — as opposed to any mere simultaneity of phenomena: but at the same time, I’d not be willing to call any experience of a phenomenon the “experience of being influenced”. |72| (Hence the idea that the will

is not a *phenomenon*.) I'd like to say that I had experienced the '*because*', and yet I don't want to call any phenomenon an "experience of the because".

177. I'd like to say, "I experience the because". Not because I remember such an experience, but because when I reflect on what I experience in such a case, I look at it through the medium of the concept 'because' (or 'influence' or 'cause' or 'connection'). — For it is, of course, correct to say that I drew the line under the influence of the original: this, however, does not consist simply in my feelings as I drew the line — rather, under certain circumstances, it may consist in my drawing it parallel to the other — even though this in turn is not in general essential to being guided. —

178. We also say, "You can *see* that I let myself be guided by it" — and what does someone who sees this see?

When I say to myself, "Surely I *am* guided", I make, say, a movement with my hand that expresses guidance . — Make such a movement of the hand as if you were guiding someone along, and then ask yourself what the *guiding* character of this movement consists in. For you were not guiding anyone. But you still want to call the movement one of 'guiding'. So this movement, and feeling, did not contain the essence of guiding, and yet you were impelled to use this word. It is precisely through its being *one form* of guidance that the expression forces itself on us.

179. Let us return to our case (151). It is clear that we wouldn't say that B had a right to say the words "Now I know how to go on" just because the formula occurred to him — unless experience showed that there was a connection between the formula's occurring to him (his saying it, writing it down) and his actually continuing the series. And obviously such a connection does exist. — And now one might think that the sentence "I can go on" meant "I have an experience which is empirically known to lead to continuing the series". But does B mean that when he says he can continue? Does that sentence come to his mind, or is he ready to produce it in explanation of what he means?

No. The words "Now I know how to go on" were correctly used when the formula occurred to him: namely, under certain circumstances. For example, if he had learnt algebra, had used such formulae before. — But that does not mean that his statement is only short for a description of all the circumstances which set the stage for our language-game.

— Think how we learn to use the expressions “Now I know how to go [73] on”, “Now I can go on”, and others; in what family of language-games we learn their use.

We can also imagine the case where nothing at all occurred in B's mind except that he suddenly said “Now I know how to go on” — perhaps with a feeling of relief; and that he did in fact go on working out the series without using the formula. And in this case too we should say — in certain circumstances — that he did know how to go on.

180. *This is how these words are used.* It would be quite misleading, in this last case, for instance, to call the words a “description of a mental state”. Rather, one could here call them a “signal”; and we judge whether it was rightly applied by what he goes on to do.

181. In order to understand this, we need also to consider the following: suppose B says he knows how to go on — but when he wants to go on, he hesitates and can't do it. Are we then to say that it was wrong of him to say he could go on; or rather, that he was able to go on then, only now is not? — Clearly, we shall say different things in different cases. (Consider both kinds of case.)

182. The grammar of “to fit”, “to be able” and “to understand”. Exercises: (1) When is a cylinder C said to fit into a hollow cylinder H? Only as long as C is inside H? (2) Sometimes one says that: C has ceased to fit into H at such-and-such a time. What criteria are used in such a case for its having happened at that time? (3) What does one regard as criteria for a body's having changed its weight at a particular time, if it was not actually on the balance at that time? (4) Yesterday I knew the poem by heart; today I no longer know it. In what kind of case does it make sense to ask, “When did I stop knowing it by heart?” (5) Someone asks me, “Can you lift this weight?” I answer, “Yes”. Now he says, “Do it!” — and I can't. In what kind of circumstances would one accept the excuse “When I answered ‘yes’ I *could* do it, only now I can't”?

The criteria which we accept for ‘fitting’, ‘being able to’, ‘understanding’, are much more complicated than might appear at first sight. That is, the game with these words, their use in the linguistic intercourse that is carried on by their means, is more involved — the role of these words in our language is other than we are tempted to think.

(This role is what we need to understand in order to resolve philosophical paradoxes. And that's why definitions usually aren't enough to [74] resolve them; and even less so the statement that a word is 'indefinable'.)

183. Now then, did the sentence "Now I can go on" in case (151) mean the same as "Now the formula has occurred to me", or something different? We may say that in these circumstances the one sentence has the same sense (comes to the same thing) as the other. But also that *in general*, these two sentences do not have the same sense. We do say, "Now I can go on, I mean I know the formula," as we say "I can walk, I mean I have time"; but also "I can walk, I mean I am already strong enough"; or "I can walk, as far as the state of my leg is concerned", that is, when we are contrasting *this* condition for walking with others. But here we must be on our guard against thinking that there is some *totality* of conditions corresponding to the nature of each case (for example, for a person's walking) so that, as it were, he *could not but* walk if they were all fulfilled.

184. I want to remember a tune, and it escapes me; suddenly I say, "Now I know it", and I sing it. What was it like suddenly to know it? Surely it can't have occurred to me *in its entirety* in that moment! — Perhaps you will say: "It's a particular feeling, as if it were now *there*" — but *is* it now there? Suppose I then begin to sing it and get stuck? — But may I not have been *certain* at that moment that I knew it? So in some sense or other it was *there* after all! — But in what sense? Perhaps you would say that the tune was there if, for example, someone sang it through, or rehearsed it in his imagination from beginning to end. I am not, of course, denying that the statement that the tune is there can also be given a quite different sense — for example, that I have a bit of paper on which it is written. — And what does his being 'certain' he knows it consist in? — Of course, one can say: if someone says with conviction that now he knows the tune, then it is (somehow) present to his mind in its entirety at that moment — and this is an explanation of the words "the tune is present to his mind in its entirety".

185. Let us return to our example (143). Now, judged by the usual criteria, the pupil has mastered the series of natural numbers. Next we teach him to write down other series of cardinal numbers and get him to the point of writing down, say, series of the form

0, n, 2n, 3n, etc.

at an order of the form “+n”; so at the order “+1” he writes [75] down the series of natural numbers. — Let’s suppose we have done exercises, and tested his understanding up to 1000.

Then we get the pupil to continue one series (say “+2”) beyond 1000 — and he writes 1000, 1004, 1008, 1012.

We say to him, “Look what you’re doing!” — He doesn’t understand. We say, “You should have added *two*: look how you began the series!” — He answers, “Yes, isn’t it right? I thought that was how I *had* to do it.” — Or suppose he pointed to the series and said, “But I did go on in the same way”. — It would now be no use to say, “But can’t you see . . . ?” — and go over the old explanations and examples for him again. In such a case, we might perhaps say: this person finds it natural, once given our explanations, to understand our order as *we* would understand the order “Add 2 up to 1000, 4 up to 2000, 6 up to 3000, and so on”.

This case would have similarities to that in which it comes naturally to a person to react to the gesture of pointing with the hand by looking in the direction from fingertip to wrist, rather than from wrist to fingertip.

186. “What you are saying, then, comes to this: a new insight — intuition — is needed at every step to carry out the order ‘+n’ correctly.” — To carry it out correctly! How is it decided what is the right step to take at any particular point? — “The right step is the one that is in accordance with the order — as it was *meant*.” — So when you gave the order “+2”, you meant that he was to write 1002 after 1000 — and did you then also mean that he should write 1868 after 1866, and 100036 after 100034, and so on — an infinite number of such sentences? — “No; what I meant was, that he should write the next but one number after *every* number that he wrote; and from this, stage by stage, all those sentences follow.” — But that is just what is in question: what, at any stage, does follow from that sentence. Or, again, what at any stage we are to call “being in accordance” with it (and with how you then *meant* it — whatever your meaning it may have consisted in). It would almost be more correct to say, not that an intuition was needed at every point, but that a new decision was needed at every point.

187. “But I already knew, at the time when I gave the order, that he should write 1002 after 1000.” — Certainly; and you may even say you

meant it then; only you shouldn't let yourself be misled by the grammar of the words "know" and "mean". For you don't [76] mean that you thought of the step from 1000 to 1002 at that time — and even if you did think of this step, still, you didn't think of other ones. Your "I already knew at the time . . ." amounts to something like: "If I had then been asked what number he should write after 1000, I would have replied '1002'." And that I don't doubt. This is an assumption of much the same sort as "If he had fallen into the water then, I would have jumped in after him". — Now, what was wrong with your idea?

188. Here I'd like to say first of all: your idea was that this *meaning the order* had in its own way already taken all those steps: that in meaning it, your mind, as it were, flew ahead and took all the steps before you physically arrived at this or that one.

So you were inclined to use such expressions as "The steps are *really* already taken, even before I take them in writing or in speech or in thought". And it seemed as if they were in some *unique* way predetermined, anticipated — in the way that only meaning something could anticipate reality.

189. "But are the steps then *not* determined by the algebraic formula?"
— The question contains a mistake.

We use the expression "The steps are determined by the formula . . .". *How* is the expression used? — We may perhaps mention that people are brought by their education (training) so to use the formula $y = x^2$, that they all work out the same number for y when they substitute the same number for x . Or we may say: "These people are so trained that they all take the same step at the same point when they receive the order '+3'." We might express this by saying "For these people the order '+3' completely determines every step from one number to the next". (By contrast with other people who do not know what they are to do on receiving this order, or who react to it with perfect certainty, but each one in a different way.)

On the other hand, we may contrast different kinds of formula, and the different kinds of use (different kinds of training) appropriate to them. Then we *call* formulae of a particular kind (with the appropriate method of use) "formulae which determine a number y for a given value of x ", and formulae of another kind, ones which "do not determine the number y for a given value of x ". ($y = x^2$ would be of the first kind, $y \neq x^2$ of the second.) The sentence "The formula . . .

determines a number y ” will then be a statement about [77] the form of the formula — and now a sentence such as “The formula which I have written down determines y ”, or “Here is a formula which determines y ”, is to be distinguished from a sentence of the following kind: “The formula $y = x^2$ determines the number y for a given value of x . ” The question “Is the formula written down there one that determines y ? ” will then mean the same as “Is what is there a formula of this kind or that? ” — but it is not clear offhand what we are to make of the question “Is $y = x^2$ a formula which determines y for a given x ? ” One might address this question to a pupil in order to test whether he understands the use of the word “to determine”; or it might be a mathematical problem to prove in a particular system that x has only one square.

190. One may then say: “How the formula is meant determines which steps are to be taken.” What is the criterion for how the formula is meant? It is, for example, the kind of way we always use it, were taught to use it.

We say, for instance, to someone who uses a sign unknown to us: “If by ‘ $x!2$ ’ you mean x^2 , then you get *this* value for y , if you mean $2x$, *that* one.” — Now ask yourself: how does one do it — *mean* the one thing or the other by “ $x!2$ ”?

In *this* way, then, meaning something can determine the steps in advance.

191. “It is as if we could grasp the whole use of the word at a stroke.” Like *what*, for example? — *Can't* the use — in a certain sense — be grasped at a stroke? And in *what* sense can't it? — It is indeed as if we could ‘grasp it at a stroke’ in a much more direct sense. — But have you a model for this? No. It is just that this mode of expression suggests itself to us. As a result of the crossing of different pictures.

192. You have no model of this inordinate fact, but you are seduced into using a super-expression. (It might be called a philosophical superlative.)

193. A machine as a symbol of its mode of operation. The machine, I might say for a start, seems already to contain its own mode of operation. What does that mean? — If we know the machine, everything else — that is the movements it will make — seem to be already completely determined.

We talk as if these parts could only move in this way, as if they could not do anything else. Is this how it is? Do we forget the possibility of their bending, breaking off, melting, and so on? Yes; in many cases [78] we don't think of that at all. We use a machine, or a picture of a machine, as a symbol of a particular mode of operation. For instance, we give someone such a picture and assume that he will derive the successive movements of the parts from it. (Just as we can give someone a number by telling him that it is the twenty-fifth in the series 1, 4, 9, 16, . . .)

"The machine seems already to contain its own mode of operation" means: we are inclined to compare the future movements of the machine in their definiteness to objects which have been lying in a drawer and which we now take out. — But we don't say this kind of thing when it is a matter of predicting the actual behaviour of a machine. Then we do not in general forget the possibility of a distortion of the parts and so on. — We *do* talk like that, however, when we are wondering at the way we can use a machine as a symbol of some way of moving — since it can, after all, also move quite differently.

We might say that a machine, or a picture of it, is the first of a series of pictures which we have learnt to derive from this one.

But when we reflect that the machine could also have moved differently, it may now look as if the way it moves must be contained in the machine *qua* symbol still more determinately than in the actual machine. As if it were not enough for the movements in question to be empirically predetermined, but they had to be really — in a mysterious sense — already *present*. And it is quite true: the movement of the machine *qua* symbol is predetermined in a different way from how the movement of any given actual machine is.

194. When does one have the thought that a machine already contains its possible movements in some mysterious way? — Well, when one is doing philosophy. And what lures us into thinking that? The kind of way in which we talk about the machine. We say, for example, that the machine *has* (possesses) such-and-such possibilities of movement; we speak of an ideally rigid machine which *can* move only thus-and-so. — The *possibility* of movement — what is it? It is not the *movement*, but it does not seem to be a mere physical condition for moving either — such as there being play between socket and pin, the pin's not fitting too tight in the socket. For while this is empirically a condition for movement, one could also imagine things to be otherwise. The possibility of a movement is supposed, rather, to be like a shadow of the movement

itself. But do you know of any such shadow? And by a shadow I do not mean some picture of the movement — for such a [79] picture would not have to be a picture of just *this* movement. But the possibility of this movement must be the possibility of just this movement. (See how high the seas of language run here!)

The waves subside as soon as we ask ourselves: how do we use the phrase “possibility of movement” when we are talking about a given machine? — But then where did these strange ideas come from? Well, I show you the possibility of a movement, say by means of a *picture* of the movement, ‘So possibility is something which is similar to reality’. We say, “It isn’t moving yet, but it already has the possibility of moving” — ‘so possibility is something very near reality’. Though we may doubt whether such-and-such a physical condition makes this movement possible, we never discuss whether *this* is the possibility of this or of that movement: ‘so the possibility of the movement stands in a unique relation to the movement itself; closer than that of a picture to its subject’; for it can be doubted whether a picture is the picture of this or that subject. We say, “Experience will show whether this gives the pin this possibility of movement”, but we do not say, “Experience will show whether this is the possibility of this movement”; ‘so it is not a matter of experience that this possibility is the possibility of just this movement’.

Though we do pay attention to the way we talk about these matters, we don’t understand it, but misinterpret it. When we do philosophy, we are like savages, primitive people, who hear the way in which civilized people talk, put a false interpretation on it, and then draw the oddest conclusions from this.

195. “But I don’t mean that what I do now (in grasping the whole use of a word) determines the future use *causally* and as a matter of experience, but that, in a *strange* way, the use itself is in some sense present.” — But of course it is, ‘in *some* sense’! Really, the only thing wrong with what you say is the expression “in an odd way”. The rest is right; and the sentence seems odd only when one imagines it to belong to a different language-game from the one in which we actually use it. (Someone once told me that as a child he had been amazed that a tailor could ‘sew a dress’ — he thought this meant that a dress was produced by sewing alone, by sewing one thread on to another.)

196. In misunderstanding the use of the word, one takes it to signify an odd *process*. (As one thinks of time as a strange medium, of the mind as an odd kind of being.) |80|

197. "It's as if we could grasp the whole use of a word at a stroke." — Well, that is just what we say we do. That is, we sometimes describe what we do in these words. But there is nothing astonishing, nothing strange, about what happens. It becomes strange when we are led to think that the future development must in some way already be present in the act of grasping the use and yet isn't present. — For we say that there isn't any doubt that we understand the word, and on the other hand that its meaning lies in its use. There is no doubt that I now want to play chess, but chess is the game it is in virtue of all its rules (and so on). Don't I know, then, which game I want to play until I *have* played it? Or is it, rather, that all the rules are contained in my act of intending? Is it experience that tells me that this sort of game usually follows such an act of intending? So can't I actually be sure what I intended to do? And if that is nonsense — what kind of super-rigid connection obtains between the act of intending and the thing intended? — Where is the connection effected between the sense of the words "Let's play a game of chess" and all the rules of the game? — Well, in the list of rules of the game, in the teaching of it, in the everyday practice of playing.

198. "But how can a rule teach me what I have to do at *this* point? After all, whatever I do can, on some interpretation, be made compatible with the rule." — No, that's not what one should say. Rather, this: every interpretation hangs in the air together with what it interprets, and cannot give it any support. Interpretations by themselves do not determine meaning.

"So is whatever I do compatible with the rule?" — Let me ask this: what has the expression of a rule — say a signpost — got to do with my actions? What sort of connection obtains here? — Well, this one, for example: I have been trained to react in a particular way to this sign, and now I do so react to it.

But with this you have pointed out only a causal connection; only explained how it has come about that we now go by the signpost; not what this following-the-sign really consists in. Not so; I have further indicated that a person goes by a signpost only in so far as there is an established usage, a custom.

199. Is what we call “following a rule” something that it would be possible for only *one* person, only *once* in a lifetime, to do? — And this is, of course, a gloss on the *grammar* of the expression “to follow a rule”. [81]

It is not possible that there should have been only one occasion on which only one person followed a rule. It is not possible that there should have been only one occasion on which a report was made, an order given or understood, and so on. — To follow a rule, to make a report, to give an order, to play a game of chess, are *customs* (usages, institutions).

To understand a sentence means to understand a language. To understand a language means to have mastered a technique.

200. It is, of course, imaginable that two people belonging to a tribe unacquainted with games should sit at a chessboard and go through the moves of a game of chess; and even with all the mental accompaniments. And if *we* were to see it, we'd say that they were playing chess. But now imagine a game of chess translated according to certain rules into a series of actions which we do not ordinarily associate with a *game* — say into yells and stamping of feet. And now suppose those two people to yell and stamp instead of playing the form of chess that we are used to; and this in such a way that what goes on is translatable by suitable rules into a game of chess. Would we still be inclined to say that they were playing a game? And with what right could one say so?

201. This was our paradox: no course of action could be determined by a rule, because every course of action can be brought into accord with the rule. The answer was: if every course of action can be brought into accord with the rule, then it can also be brought into conflict with it. And so there would be neither accord nor conflict here.

That there is a misunderstanding here is shown by the mere fact that in this chain of reasoning we place one interpretation behind another, as if each one contented us at least for a moment, until we thought of yet another lying behind it. For what we thereby show is that there is a way of grasping a rule which is *not* an interpretation, but which, from case to case of application, is exhibited in what we call “following the rule” and “going against it”.

That's why there is an inclination to say: every action according to a rule is an interpretation. But one should speak of interpretation only when one expression of a rule is substituted for another.

202. That's why ‘following a rule’ is a practice. And to *think* one is following a rule is not to follow a rule. And that's why it's not possible

to follow a rule ‘privately’; otherwise, thinking one was following a rule would be the same thing as following it. [82]

203. Language is a labyrinth of paths. You approach from *one* side and know your way about; you approach the same place from another side and no longer know your way about.

204. As things are, I can, for example, invent a game that is never played by anyone. — But would the following be possible too: mankind has never played any games; once though, someone invented a game — which, however, was never played?

205. “But that is just what is remarkable about *intention*, about the mental process, that the existence of a custom, of a technique, is not necessary to it. That, for example, it is imaginable that two people should play a game of chess, or even only the beginning of a game of chess, in a world in which otherwise no games existed — and then be interrupted.”

But isn’t chess defined by its rules? And how are these rules present in the mind of someone who intends to play chess?

206. Following a rule is analogous to obeying an order. One is trained to do so, and one reacts to an order in a particular way. But what if one person reacts to the order and training *thus*, and another *otherwise*? Who is right, then?

Suppose you came as an explorer to an unknown country with a language quite unknown to you. In what circumstances would you say that the people there gave orders, understood them, obeyed them, rebelled against them, and so on?

Shared human behaviour is the system of reference by means of which we interpret an unknown language.

207. Let’s imagine that the people in that country carried on usual human activities and in the course of them employed, apparently, an articulate language. If we watch their activities, we find them intelligible, they seem ‘logical’. But when we try to learn their language, we find it impossible to do so. For there is no regular connection between what they say, the sounds they make, and their activities; but still these sounds are not superfluous, for if, for example, we gag one of these people, this has the same consequences as with us: without those sounds their actions fall into confusion — as I feel like putting it.

Are we to say that these people have a language: orders, reports, and so on?

There is not enough regularity for us to call it “language”.

208. Then am I explaining what “order” and “rule” mean in terms of “regularity”? — How do I explain the meaning of “regular”, “uniform”, [83] “same” to anyone? — I’ll explain these words to someone who, say, speaks only French by means of the corresponding French words. But if a person has not yet got the *concepts*, I’ll teach him to use the words by means of *examples* and by *exercises*. — And when I do this, I do not communicate less to him than I know myself.

In the course of this teaching, I’ll show him the same colours, the same lengths, the same shapes; I’ll make him find them and produce them; and so on. For example, I’ll teach him to continue an ornamental pattern ‘uniformly’ when told to do so. — And also to continue progressions. That is, for example, when given: to go on:

• • • • •

I do it, he does it after me; and I influence him by expressions of agreement, rejection, expectation, encouragement. I let him go his way, or hold him back; and so on.

Imagine witnessing such teaching. None of the words would be explained by means of itself; there would be no logical circle.

The expressions “and so on”, “and so on *ad infinitum*”, are also explained in this teaching. A gesture, among other things, might serve this purpose. The gesture that means “go on like this” or “and so on” has a function comparable to that of pointing to an object or a place.

A distinction is to be drawn between the “and so on” which is and the “and so on” which *is not* an abbreviated notation. “And so on *ad inf.*” is *not* such an abbreviation. The fact that we cannot write down all the digits of π is not a human shortcoming, as mathematicians sometimes think.

Teaching which is not meant to apply to anything but the examples given is different from that which ‘points beyond’ them.

209. “But then doesn’t our understanding reach beyond all examples?” — A very curious expression, and a quite natural one! —

But is that *all*? Isn’t there a deeper explanation; or at least, mustn’t the *understanding* of the explanation be deeper? — Well, have I myself a deeper understanding? Have I *got* more than I give in the explanation? — But then, whence the feeling that I have more?

Is it like the case where I interpret what is not limited as a length that reaches beyond every length?

210. "But do you really explain to the other person what you yourself understand? Don't you leave it to him to *guess* the essential thing? You give him examples — but he has to guess their drift, to guess your [84] intention." — Every explanation which I can give myself I give to him too. — "He guesses what I mean" would amount to: "various interpretations of my explanation come to his mind, and he picks one of them". So in this case he could ask; and I could and would answer him.

211. "No matter how you instruct him in continuing the ornamental pattern, how can he *know* how he is to continue it by himself?" — Well, how do *I* know? — If that means "Have I reasons?", the answer is: my reasons will soon give out. And then I shall act, without reasons.

212. When someone of whom I am afraid orders me to continue a series, I act quickly, with perfect assurance, and the lack of reasons does not trouble me.

213. "But this initial segment of a series could obviously be variously interpreted (for example, by means of algebraic expressions), so you must first have chosen *one* such interpretation." — Not at all! A doubt was possible in certain circumstances. But that is not to say that I did doubt, or even could doubt. (What is to be said about the psychological 'atmosphere' of a process is connected with that.)

Only intuition could have removed this doubt? — If intuition is an inner voice — how do I know *how* I am to follow it? And how do I know that it doesn't mislead me? For if it can guide me right, it can also guide me wrong.

((Intuition an unnecessary evasion.))

214. If an intuition is necessary for continuing the series 1 2 3 4 . . . , then also for continuing the series 2 2 2 2 . . .

215. But isn't at least the same *the same*?

For identity we seem to have an infallible paradigm: namely, in the identity of a thing with itself. I feel like saying: "Here at any rate there can't be different interpretations. If someone sees a thing, he sees identity too."

Then are two things the same when they are what *one* thing is? And how am I to apply what the one thing shows me to the case of two things?

216. “A thing is identical with itself.” — There is no finer example of a useless sentence, which nevertheless is connected with a certain play of the imagination. It is as if in our imagination we put a thing into its own shape and saw that it fitted. |85|

We might also say: “Every thing fits into itself.” — Or again: “Every thing fits into its own shape.” While saying this, one looks at a thing and imagines that there was a space left for it and that now it fits into it exactly.

Does this spot  ‘fit’ into its white surrounding? — *But that is just how it would look* if there had at first been a hole in its place and it then fitted into the hole. So when we say “it fits”, we are describing not simply this picture, not simply this *situation*.

“Every coloured patch fits exactly into its surrounding” is a somewhat specialized form of the law of identity.

217. “How am I able to follow a rule?” — If this is not a question about causes, then it is about the justification for my acting in *this* way in complying with the rule.

Once I have exhausted the justifications, I have reached bedrock, and my spade is turned. Then I am inclined to say: “This is simply what I do.”

(Remember that we sometimes demand explanations for the sake not of their content, but of their form. Our requirement is an architectural one; the explanation a kind of sham corbel that supports nothing.)

218. Whence the idea that the beginning of a series is a visible section of rails invisibly laid to infinity? Well, we might imagine rails instead of a rule. And infinitely long rails correspond to the unlimited application of a rule.

219. “All the steps are really already taken” means: I no longer have any choice. The rule, once stamped with a particular meaning, traces the lines along which it is to be followed through the whole of space. — But if something of this sort really were the case, how would it help me?

No; my description made sense only if it was to be understood symbolically. — I should say: *This is how it strikes me*.

When I follow the rule, I do not choose.
I follow the rule *blindly*.

220. But what is the purpose of that symbolical sentence? It was supposed to highlight a difference between causal and logical dependence.

221. My symbolical expression was really a mythological description of the use of a rule. [86]

222. “The line intimates to me the way I am to go.” — But that is, of course, only a picture. And if I judged that it intimated this or that, as it were, irresponsibly, I wouldn’t say that I was following it like a rule.

223. One does not feel that one has always got to wait upon the nod (the prompt) of the rule. On the contrary, we are not on tenterhooks about what it will tell us next, but it always tells us the same, and we do what it tells us.

One might say to the person one was training: “Look, I always do the same thing: I . . .”

224. The word “accord” and the word “rule” are *related* to one another; they are cousins. If I teach anyone the use of the one word, he learns the use of the other with it.

225. The use of the word “rule” and the use of the word “same” are interwoven. (As are the use of “proposition” and the use of “true”.)

* 226. Suppose someone continues the sequence 1, 3, 5, 7, . . . in expanding the series $2x - 1$. And now he asks himself, “But am I always doing the same thing, or something different every time?”

If, from one day to the next, someone promises: “Tomorrow I’ll come to see you” — is he saying the same thing every day, or every day something different?

227. Would it make sense to say: “If he did something *different* every time, we wouldn’t say he was following a rule”? That makes *no* sense.

* 228. “A series presents us with *one* face!” — All right, but which one? Well, surely, the algebraic one, with a segment of the expansion. Or does it have yet another face? — “But surely everything is already contained in this one!” — But that is not an observation about the segment

of the series, or about anything that we notice in it; it gives expression to the fact that all we do is read the lips of the rule and *act*, without appealing to anything else for guidance.

229. I believe that I faintly perceive a pattern in the segment of the series, a characteristic feature, which needs only an “and so on” in order to reach to infinity.

230. “The line intimates to me the way I’m to go” is only a paraphrase of: it is my *final* court of appeal for the way I’m to go.

231. “But, surely you can see . . . !” That’s precisely the characteristic exclamation of someone who is compelled by a rule. |87|

232. Suppose that a rule intimates to me how I’m to follow it; that is, as my eye travels along the line, an inner voice tells me “Draw *this* way!” — What’s the difference between this process of following a kind of inspiration and that of following a rule? For they surely aren’t the same. In the case of inspiration, I *await* direction. I won’t be able to teach anyone else my ‘technique’ of following the line. Unless, indeed, I teach him some way of listening, some kind of receptivity. But then, of course, I can’t expect him to follow the line in the same way as I do.

These aren’t the experiences I have gained from acting from inspiration and from acting according to a rule; they’re grammatical remarks.

233. One might also imagine such instruction in a certain kind of arithmetic. Children could then calculate, each in their own way — as long as they listened to their inner voice and followed it. Calculating in this way would resemble a sort of composing.

234. Wouldn’t it be possible for us, however, to calculate as we actually do (all agreeing, and so on), and still at every step to have a feeling of being guided by the rules as by a spell, astonished perhaps at the fact that we agreed? (Perhaps giving thanks to the Deity for this agreement.)

235. From this you can see how much there is to the physiognomy of what we call “following a rule” in everyday life.

236. Calculating prodigies who arrive at the correct result but can’t say how. Are we to say that they do not calculate? (A family of cases.)

237. Imagine someone following a line that serves him as a rule in this way: he holds a pair of compasses, and guides one of its points along the line that is the ‘rule’, while the other one draws the line that follows the rule. And while he moves along the rule, he alters the opening of the compasses, apparently with great precision, looking at the rule the whole time as if it determined what he did. And watching him, we see no regularity of any kind in this opening and shutting of the compasses. We can’t learn his way of following the line from him. Here perhaps we really would say: “The original seems to *intimate* to him how he has to go. But it is not a rule.”

238. The rule can only seem to me to produce all its consequences in advance if I draw them as *a matter of course*. As much as it is a matter [88] of course for me to call this colour “blue”. (Criteria for ‘its being a matter of course’ for me.)

239. How is he to know what colour he is to pick out when he hears “red”? — Quite simple: he is to take the colour whose image occurs to him when he hears the word. — But how is he to know which colour it is ‘whose image occurs to him’? Is a further criterion needed for that? (There is indeed such a procedure as choosing the colour which occurs to one when one hears the word “...”.)

“‘Red’ means the colour that occurs to me when I hear the word ‘red’” — would be a *definition*. Not an explanation of what signifying something by a word *essentially* is.

240. Disputes do not break out (among mathematicians, say) over the question of whether or not a rule has been followed. People don’t come to blows over it, for example. This belongs to the scaffolding from which our language operates (for example, yields descriptions).

241. “So you are saying that human agreement decides what is true and what is false?” — What is true or false is what human beings *say*; and it is in their *language* that human beings agree. This is agreement not in opinions, but rather in form of life.

242. It is not only agreement in definitions, but also (odd as it may sound) agreement in judgements that is required for communication by means of language. This seems to abolish logic, but does not do so. — It is one thing to describe methods of measurement, and another to obtain

and state results of measurement. But what we call “measuring” is in part determined by a certain constancy in results of measurement.

243. A human being can encourage himself, give himself orders, obey, blame and punish himself; he can ask himself a question and answer it. So one could imagine human beings who spoke only in monologue, who accompanied their activities by talking to themselves. — An explorer who watched them and listened to their talk might succeed in translating their language into ours. (This would enable him to predict these people’s actions correctly, for he also hears them making resolutions and decisions.)

But is it also conceivable that there be a language in which a person could write down or give voice to his inner experiences — his feelings, moods, and so on — for his own use? — Well, can’t we do so in our ordinary language? — But that is not what I mean. The [89] words of this language are to refer to what only the speaker can know — to his immediate private sensations. So another person cannot understand the language.

244. How do words *refer* to sensations? — There doesn’t seem to be any problem here; don’t we talk about sensations every day, and name them? But how is the connection between the name and the thing named set up? This question is the same as: How does a human being learn the meaning of names of sensations? For example, of the word “pain”. Here is one possibility: words are connected with the primitive, natural, expressions of sensation and used in their place. A child has hurt himself and he cries; then adults talk to him and teach him exclamations and, later, sentences. They teach the child new pain-behaviour.

“So you are saying that the word ‘pain’ really means crying?” — On the contrary: the verbal expression of pain replaces crying, it does not describe it.

245. How can I even attempt to interpose language between the expression of pain and the pain?

246. In what sense are my sensations *private*? — Well, only I can know whether I am really in pain; another person can only surmise it. — In one way this is false, and in another nonsense. If we are using the word “know” as it is normally used (and how else are we to use it?), then other people very often know if I’m in pain. — Yes, but all the same,

not with the certainty with which I know it myself! — It can't be said of me at all (except perhaps as a joke) that I *know* I'm in pain. What is it supposed to mean — except perhaps that I *am* in pain?

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.

This much is true: it makes sense to say about other people that they doubt whether I am in pain; but not to say it about myself.

247. “Only you can know if you had that intention.” One might tell someone this when explaining the meaning of the word “intention” to him. For then it means: *that* is how we use it.

(And here “know” means that the expression of uncertainty is senseless.) |90|

248. The sentence “Sensations are private” is comparable to “One plays patience by oneself”.

249. Are we perhaps over-hasty in our assumption that the smile of a baby is not pretence? — And on what experience is our assumption based?

(Lying is a language-game that needs to be learned like any other one.)

250. Why can't a dog simulate pain? Is it too honest? Could one teach a dog to simulate pain? Perhaps it is possible to teach it to howl on particular occasions as if it were in pain, even when it isn't. But the right surroundings for this behaviour to be real simulation would still be missing.

251. What does it mean when we say, “I can't imagine the opposite of this” or “What would it be like if it were otherwise?” — For example, when someone has said that my mental images are private; or that only I myself can know whether I am feeling pain; and so forth.

Of course, here “I can't imagine the opposite” doesn't mean: my powers of imagination are unequal to the task. We use these words to fend off something whose form produces the illusion of being an empirical proposition, but which is really a grammatical one.

But why do I say: “I can't imagine the opposite”? Why not: “I can't imagine what you say”?

Example: "Every rod has a length." That means something like: we call something (or *this*) "the length of a rod" — but nothing "the length of a sphere". Now can I imagine 'every rod having a length'? Well, I just imagine a rod; and that is all. Only this picture, in connection with this proposition, has a quite different role from one used in connection with the proposition "This table has the same length as the one over there". For here I understand what it means to have a picture of the opposite (and it doesn't have to be a mental picture either).

But the picture that goes together with the grammatical proposition could only show, say, what is called "the length of a rod". And what should the opposite picture be?

((Remark about the negation of an a priori proposition.))

252. "This body has extension." To these words we could respond by saying: "Nonsense!" — but are inclined to reply "Of course!" — Why? |91|

253. "Another person can't have my pains." — My pains — what pains are they? What counts as a criterion of identity here? Consider what makes it possible in the case of physical objects to speak of "two exactly the same": for example, to say, "This chair is not the one you saw here yesterday, but is exactly the same as it".

In so far as it makes *sense* to say that my pain is the same as his, it is also possible for us both to have the same pain. (And it would also be conceivable that two people feel pain in the same — not just the corresponding — place. That might be the case with Siamese twins, for instance.)

I have seen a person in a discussion on this subject strike himself on the breast and say: "But surely another person can't have THIS pain!" — The answer to this is that one does not define a criterion of identity by emphatically enunciating the word "this". Rather, the emphasis merely creates the illusion of a case in which we are conversant with such a criterion of identity, but have to be reminded of it.

254. The substitution of "identical" for "the same" (for example) is another typical expedient in philosophy. As if we were talking about shades of meaning, and all that were in question were to find words to hit on the correct nuance. And that is in question in philosophy only where we have to give a psychologically accurate account of the temptation to use a particular mode of expression. What we are 'tempted

to say' in such a case is, of course, not philosophy; but it is its raw material. So, for example, what a mathematician is inclined to say about the objectivity and reality of mathematical facts is not a philosophy of mathematics, but something for philosophical *treatment*.

255. The philosopher treats a question; like an illness.

256. Now, what about the language which describes my inner experiences and which only I myself can understand? *How* do I use words to signify my sensations? — As we ordinarily do? Then are my words for sensations tied up with my natural expressions of sensation? In that case my language is not a 'private' one. Someone else might understand it as well as I. — But suppose I didn't have any natural expression of sensation, but only had sensations? And now I simply *associate* names with sensations, and use these names in descriptions. — |92|

257. "What would it be like if human beings did not manifest their pains (did not groan, grimace, etc.)? Then it would be impossible to teach a child the use of the word 'toothache'." — Well, let's assume that the child is a genius and invents a name for the sensation by himself! — But then, of course, he couldn't make himself understood when he used the word. — So does he understand the name, without being able to explain its meaning to anyone? — But what does it mean to say that he has 'named his pain'? — How has he managed this naming of pain? And whatever he did, what was its purpose? — When one says "He gave a name to his sensation", one forgets that much must be prepared in the language for mere naming to make sense. And if we speak of someone's giving a name to a pain, the grammar of the word "pain" is what has been prepared here; it indicates the post where the new word is stationed.

258. Let's imagine the following case. I want to keep a diary about the recurrence of a certain sensation. To this end I associate it with the sign "S" and write this sign in a calendar for every day on which I have the sensation. — I first want to observe that a definition of the sign cannot be formulated. — But all the same, I can give one to myself as a kind of ostensive definition! — How? Can I point to the sensation? — Not in the ordinary sense. But I speak, or write the sign down, and at the same time I concentrate my attention on the sensation — and so, as it were, point to it inwardly. — But what is this ceremony for? For that

is all it seems to be! A definition serves to lay down the meaning of a sign, doesn't it? — Well, that is done precisely by concentrating my attention; for in this way I commit to memory the connection between the sign and the sensation. — But "I commit it to memory" can only mean: this process brings it about that I remember the connection *correctly* in the future. But in the present case, I have no criterion of correctness. One would like to say: whatever is going to seem correct to me is correct. And that only means that here we can't talk about 'correct'.

259. Are the rules of the private language *impressions* of rules? — The balance on which impressions are weighed is not the *impression* of a balance.

260. "Well, I *believe* that this is the sensation S again." — Perhaps you *believe* that you believe it!

Then did the man who made the entry in the calendar make a note [93] of *nothing whatever*? — Don't consider it a matter of course that a person is making a note of something when he makes a mark — say in a calendar. For a note has a function, and this "S" so far has none.

(One can talk to oneself. — Is everyone who speaks when no one else is present talking to himself?)

261. What reason have we for calling "S" the sign for a *sensation*? For "sensation" is a word of our common language, which is not a language intelligible only to me. So the use of this word stands in need of a justification which everybody understands. — And it would not help either to say that it need not be a *sensation*; that when he writes "S" he has *Something* — and that is all that can be said. But "has" and "something" also belong to our common language. — So in the end, when one is doing philosophy, one gets to the point where one would like just to emit an inarticulate sound. — But such a sound is an expression only in a particular language-game, which now has to be described.

262. One might say: someone who has given himself a private explanation of a word must inwardly *resolve* to use the word in such-and-such a way. And how does he resolve that? Should I assume that he invents the technique of applying the word; or that he found it ready-made?

263. "Surely I can (inwardly) resolve to call THIS 'pain' in the future." — "But is it certain that you have resolved this? Are you sure that it was enough for this purpose to concentrate your attention on your feeling?" — An odd question. —

264. "Once you know *what* the word signifies, you understand it, you know its whole application."

265. Let us imagine a table, something like a dictionary, that exists only in our imagination. A dictionary can be used to justify the translation of a word X by a word Y. But are we also to call it a justification if such a table is to be looked up only in the imagination? — "Well, yes; then it is a subjective justification." — But justification consists in appealing to an independent authority — "But surely I can appeal from one memory to another. For example, I don't know if I have remembered the time of departure of a train correctly, and to check it I call to mind how a page of the timetable looked. Isn't this the same sort of case?" No; for this procedure must now actually call forth [94] the *correct* memory. If the mental image of the timetable could not itself be tested for correctness, how could it confirm the correctness of the first memory? (As if someone were to buy several copies of today's morning paper to assure himself that what it said was true.)

Looking up a table in the imagination is no more looking up a table than the image of the result of an imagined experiment is the result of an experiment.

266. I can look at a clock to see what time it is. But I can also look at the dial of a clock in order to *guess* what time it is; or for the same purpose move the hands of a clock till their position strikes me as right. So the look of a clock may serve to determine the time in more than one way. (Looking at a clock in one's imagination.)

267. Suppose I wanted to justify the choice of dimensions for a bridge which I imagine being built, by first imagining making loading tests on the material of the bridge. This would, of course, be to imagine what is called justifying the choice of dimensions for a bridge. But would we also call it justifying an imagined choice of dimensions?

268. Why can't my right hand give my left hand money? — My right hand can put it into my left hand. My right hand can write a deed of gift, and my left hand a receipt. — But the further practical consequences would not be those of a gift. When the left hand has taken the money from the right, and so forth, one will ask, "Well, and now what?" And the same could be asked if a person had given himself a private explanation of a word; I mean, if he has said the word to himself and at the same time has directed his attention to a sensation.

269. Let us remember that there are certain criteria in a man's behaviour for his not understanding a word: that it means nothing to him, that he can do nothing with it. And criteria for his 'thinking he understands', attaching some meaning to the word, but not the right one. And lastly, criteria for his understanding the word correctly. In the second case, one might speak of a subjective understanding. And sounds which no one else understands but which I '*appear to understand*' might be called a "private language".

270. Let us now imagine a use for the entry of the sign "S" in my diary. I find out the following from experience: whenever I have a particular sensation, a manometer [95] shows that my blood pressure is rising. This puts me in a position to report that my blood pressure is rising without using any apparatus. This is a useful result. And now it seems quite indifferent whether I've recognized the sensation *correctly* or not. Suppose that I regularly make a mistake in identifying it, this does not make any difference at all. And this alone shows that the superposition of this mistake was merely sham. (We, as it were, turned a knob which looked as if it could be used to adjust something in the machine; but it was a mere ornament not connected with the mechanism at all.)

And what reason do we have here for calling "S" the name of a sensation? Perhaps the kind of way this sign is employed in this language-game. — And why a "particular sensation": that is, the same one every time? Well, we're supposing, aren't we, that we write "S" every time.

271. "Imagine a person who could not remember *what* the word 'pain' meant — so that he constantly called different things by that name — but nevertheless used it in accordance with the usual symptoms and presuppositions of pain" — in short, he uses it as we all do. Here I'd like to say: a wheel that can be turned though nothing else moves with it is not part of the mechanism.

- * 272. The essential thing about private experience is really not that each person possesses his own specimen, but that nobody knows whether other people also have *this* or something else. The assumption would thus be possible — though unverifiable — that one section of mankind had one visual impression of red, and another section another.
- * 273. What about the word “red”? — Am I to say that it signifies something ‘confronting us all’, and that everyone should really have another word, besides this one, to signify his *own* impression of red? Or is it like this: the word “red” signifies something known to us all; and in addition, for each person, it signifies something known only to him? (Or perhaps, rather: it *refers* to something known only to him.)
- * 274. Of course, saying that the word “red” “*refers to*” rather than “signifies” something private does not help us in the least to grasp its function; but it is the more psychologically apt expression for a particular experience in doing philosophy. It is as if, when I uttered the word, I cast a sidelong glance at my own colour impression, as it were, in order to say to myself: I know all right what I mean by the word. [96]

275. Look at the blue of the sky and say to yourself, “How blue the sky is!” — When you do it spontaneously — without philosophical purposes — the idea never crosses your mind that this impression of colour belongs only to *you*. And you have no qualms about proclaiming thus to another. And if you point at anything as you say the words, it is at the sky. I mean: you don’t have the pointing-into-yourself feeling that often accompanies ‘naming sensations’ when one is thinking about the ‘private language’. Nor do you think that really you ought to point at the colour not with your hand, but with your attention. (Consider what “to point at something with one’s attention” means.)

276. “But don’t we at least *mean* something quite definite when we look at a colour and name our colour impression?” It is virtually as if we detached the colour *impression* from the object, like a membrane. (This ought to arouse our suspicions.)

277. But how is it even possible for one to be tempted to think that one uses a word to *mean* at one time the colour known to everyone — and at another time the ‘visual impression’ which *I* am getting *now*? How can there be so much as a temptation here? — I don’t turn the

same kind of attention on the colour in the two cases. When I mean the colour impression that (as I should like to say) belongs to me alone, I immerse myself in the colour — rather like when I ‘can’t get my fill of a colour’. That’s why it is easier to produce this experience when one is looking at a bright colour, or at a colour scheme which sticks in our memory.

278. “I know how the colour green looks to *me*” — surely that makes sense! — Certainly; what use of the sentence are you thinking of?

279. Imagine someone saying, “But I know how tall I am!” and laying his hand on top of his head to indicate it!

280. Someone paints a picture in order to show, for example, how he imagines a stage set. And now I say: “This picture has a double function: it informs others, as pictures or words do — but for the informant it is in addition a representation (or piece of information?) of another kind: for him it is the picture of his image, as it can’t be for anyone else. His private impression of the picture tells him what he imagined, in a sense in which the picture can’t do this for others.” — And what right have I to speak in this second [97] case of a representation or piece of information — if these words were correctly used in the *first* case?

281. “But doesn’t what you say amount to this: that there is no pain, for example, without *pain-behaviour*? ” — It amounts to this: that only of a living human being and what resembles (behaves like) a living human being can one say: it has sensations; it sees; is blind; hears; is deaf; is conscious or unconscious.

282. “But in a fairy tale a pot too can see and hear!” (Certainly; but it *can* also talk.)

“But a fairy tale only invents what is not the case; it does not talk *nonsense*, does it? ” — It’s not as simple as that. Is it untrue or nonsensical to say that a pot talks? Does one have a clear idea of the circumstances in which we’d say of a pot that it talked? (Even a nonsense poem is not nonsense in the same way as the babble of a baby.)

We do indeed say of an inanimate thing that it is in pain: when playing with dolls, for example. But this use of the concept of pain is a secondary one. Imagine a case in which people said *only* of inanimate things

that they are in pain; pitied *only* dolls! (When children play trains, their game is connected with their acquaintance with trains. It would nevertheless be possible for the children of a tribe unacquainted with trains to learn this game from others, and to play it without knowing that it was imitating anything. One could say that the game did not make the same kind of *sense* to them as to us.)

283. What gives us *so much as the idea* that beings, things, can feel?

Is it that my education has led me to it by drawing my attention to feelings in myself, and now I transfer the idea to objects outside myself? That I recognize that there is something there (in me) which I can call "pain" without getting into conflict with other people's usage? — I do not transfer my idea to stones, plants, and so on.

Couldn't I imagine having frightful pains and, while they were going on, turning to stone. Indeed, how do I know, if I shut my eyes, whether I have not turned into a stone? — And if that has happened, in what sense will *the stone* have pains? In what sense will they be ascribable to a stone? Why indeed should the pain here have a bearer at all?!

And can one say of the stone that it has a mind, and *that* is what has the pain? What has a mind, what have pains, to do with a stone?
[98]

Only of what behaves like a human being can one say that it *has* pains.

For one has to say it of a body, or, if you like, of a mind which some body *has*. And how can a body *have* a mind?

284. Look at a stone and imagine it having sensations. — One says to oneself: How could one so much as get the idea of ascribing a *sensation* to a *thing*? One might as well ascribe it to a number! — And now look at a wriggling fly, and at once these difficulties vanish, and pain seems able to get a *foothold* here, where before everything was, so to speak, too *smooth* for it.

And so, too, a corpse seems to us quite inaccessible to pain. — Our attitude to what is alive and to what is dead is not the same. All our reactions are different. — If someone says, "That cannot simply come from the fact that living beings move in such-and-such ways and dead ones don't", then I want to suggest to him that this is a case of the transition 'from quantity to quality'.

285. Think of the recognition of *facial expressions*. Or of the description of facial expressions — which does not consist in giving the measurements of the face! Think, too, how one can imitate a man's face without seeing one's own in a mirror.

286. But isn't it absurd to say of a *body* that it has pain? — And why does one feel an absurdity in that? In what sense does my hand not feel pain, but I in my hand?

What sort of issue is this: Is it the *body* that feels pain? — How is it to be decided? How does it become clear that it is *not* the body? — Well, something like this: if someone has a pain in his hand, then the *hand* does not say so (unless it writes it), and one does not comfort the hand, but the sufferer: one looks into his eyes.

287. How am I filled with pity *for this human being*? How does it come out what the object of my pity is? (Pity, one may say, is one form of being convinced that someone else is in pain.)

288. I turn to stone, and my pain goes on. — What if I were mistaken, and it was no longer *pain*? — But surely I can't be mistaken here; it means nothing to doubt whether I am in pain! — That is, if someone said “I don't know if what I have is a pain or something else”, we would think, perhaps, that he does not know what the [99] English word “pain” means; and we'd explain it to him. — How? Perhaps by means of gestures, or by pricking him with a pin and saying, “See, that's pain!” This explanation of a word, like any other, he might understand rightly, wrongly, or not at all. And he will show which by his use of the word, in this as in other cases.

If he now said, for example, “Oh, I know what ‘pain’ means; what I don't know is whether *this*, that I have now, is pain” — we'd merely shake our heads and have to regard his words as a strange reaction which we can't make anything of. (It would be rather as if we heard someone say seriously, “I distinctly remember that sometime before I was born I believed . . .”)

That expression of doubt has no place in the language-game; but if expressions of sensation — human behaviour — are excluded, it looks as if I might then *legitimately* begin to doubt. My temptation to say that one might take a sensation for something other than what it is arises from this: if I assume the abrogation of the normal language-game with the expression of a sensation, I need a criterion of identity for the sensation; and then the possibility of error also exists.

289. "When I say 'I am in pain', I am at any rate justified *before myself*." — What does that mean? Does it mean: "If someone else could know what I am calling 'pain', he would admit that I was using the word correctly"?

To use a word without a justification does not mean to use it wrongfully.

290. It is not, of course, that I identify my sensation by means of criteria; it is, rather, that I use the same expression. But it is not as if the language-game *ends* with this; it begins with it.

But doesn't it begin with the sensation — which I describe? — Perhaps this word "describe" tricks us here. I say "I describe my state of mind" and "I describe my room". One needs to call to mind the differences between the language-games.

291. What we call "*descriptions*" are instruments for particular uses. Think of a machine-drawing, a cross-section, an elevation with measurements, which an engineer has before him. Thinking of a description as a word-picture of the facts has something misleading about it: one tends to think only of such pictures as hang on our walls, which seem simply to depict how a thing looks, what it is like. (These pictures are, as it were, idle.) [100]

292. Don't always think that you read off what you say from the facts; that you depict these in words according to rules! For you would still have to apply the rule in the particular case without guidance.

293. If I say of myself that it is only from my own case that I know what the word "pain" means — must I not say *that* of other people too? And how can I generalize the *one* case so irresponsibly?

Well, everyone tells me that he knows what pain is only from his own case! — Suppose that everyone had a box with something in it which we call a "beetle". No one can ever look into anyone else's box, and everyone says he knows what a beetle is only by looking at *his* beetle. — Here it would be quite possible for everyone to have something different in his box. One might even imagine such a thing constantly changing. — But what if these people's word "beetle" had a use nonetheless? — If so, it would not be as the name of a thing. The thing in the box doesn't belong to the language-game at all; not even as a *Something*: for the box might even be empty. — No, one can 'divide through' by the thing in the box; it cancels out, whatever it is.

That is to say, if we construe the grammar of the expression of sensation on the model of ‘object and name’, the object drops out of consideration as irrelevant.

294. If you say that he sees a private picture before him, which he is describing, you have at any rate made an assumption about what he has before him. And this means that you can describe it or do describe it more closely. If you admit that you have no idea what kind of thing it might be that he has before him — then what seduces you into saying, in spite of that, that he has something before him? Isn’t it as if I were to say of someone: “He *has* something. But I don’t know whether it is money, or debts, or an empty till.”

295. “I know . . . only from my *own* case” — what kind of proposition is this meant to be? An empirical one? No. — A grammatical one?

So this is what I imagine: everyone says of himself that he knows what pain is only from his own pain. — Not that people really say that, or are even prepared to say it. But *if* everybody said it — it might be a kind of exclamation. And even if it gives no information, still, it is a picture; and why should we not want to call such a picture before our mind? Imagine an allegorical painting instead of the words.

Indeed, when we look into ourselves as we do philosophy, we often get to [101] see just such a picture. Virtually a pictorial representation of our grammar. Not facts; but, as it were, illustrated turns of speech.

296. “Right; but there is a Something there all the same, which accompanies my cry of pain! And it is on account of this that I utter it. And this Something is what is important — and frightful.” — Only to whom are we telling this? And on what occasion?

297. Of course, if water boils in a pot, steam comes out of the pot, and also a picture of steam comes out of a picture of the pot. But what if one insisted on saying that there must also be something boiling in the picture of the pot?

298. The very fact that we’d so much like to say “*This* is the important thing” — while we point for ourselves to the sensation — is enough to show how much we are inclined to say something which is not informative.

299. Being unable — when we indulge in philosophical thought — to help saying something or other, being irresistibly inclined to say it — does not mean being forced into an *assumption*, or having an immediate insight into, or knowledge of, a state of affairs.

300. It is, one would like to say, not merely the picture of the behaviour that belongs to the language-game with the words “he is in pain”, but also the picture of the pain. Or, not merely the paradigm of the behaviour, but also that of the pain. — It is a misunderstanding to say “The picture of pain enters into the language-game with the word ‘pain’”. Pain in the imagination is not a picture, and *it* is not replaceable in the language-game by anything that we’d call a picture. — Imagined pain certainly enters into the language-game in a sense; only not as a picture.

301. What is in the imagination is not a picture, but a picture can correspond to it.

302. If one has to imagine someone else’s pain on the model of one’s own, this is none too easy a thing to do: for I have to imagine pain which I *don’t feel* on the model of pain which I *do feel*. That is, what I have to do is not simply to make a transition in the imagination from pain in one place to pain in another. As from pain in the hand to pain in the arm. For it is not as if I had to imagine that I feel pain in some part of his body. (Which would also be possible.)

Pain-behaviour can indicate a painful place — but the person who is suffering is the person who manifests pain. [102]

303. “I can only *believe* that someone else is in pain, but I *know* it if I am.” — Yes: one can resolve to say “I believe he is in pain” instead of “He is in pain”. But that’s all. — What looks like an explanation here, or like a statement about a mental process, in truth just exchanges one way of talking for another which, while we are doing philosophy, seems to us the more apt.

Just try — in a real case — to doubt someone else’s fear or pain!

304. “But you will surely admit that there is a difference between pain-behaviour with pain and pain-behaviour without pain.” — Admit it? What greater difference could there be? — “And yet you again and again reach the conclusion that the sensation itself is a Nothing.” — Not at

all. It's not a Something, but not a Nothing either! The conclusion was only that a Nothing would render the same service as a Something about which nothing could be said. We've only rejected the grammar which tends to force itself on us here.

The paradox disappears only if we make a radical break with the idea that language always functions in one way, always serves the same purpose: to convey thoughts — which may be about houses, pains, good and evil, or whatever.

305. "But you surely can't deny that, for example, in remembering, an inner process takes place." — What gives the impression that we want to deny anything? When one says, "Still, an inner process does take place here" — one wants to go on: "After all, you *see* it." And it is this inner process that one means by the word "remembering". — The impression that we wanted to deny something arises from our setting our face against the picture of an 'inner process'. What we deny is that the picture of an inner process gives us the correct idea of the use of the word "remember". Indeed, we're saying that this picture, with its ramifications, stands in the way of our seeing the use of the word as it is.

306. Why ever should I deny that there is a mental process? It is only that "There has just taken place in me the mental process of remembering . . ." means nothing more than "I have just remembered . . ." To deny the mental process would mean to deny the remembering; to deny that anyone ever remembers anything.

307. "Aren't you nevertheless a behaviourist in disguise? Aren't you nevertheless basically saying that everything except human behaviour is [103] a fiction?" — If I speak of a fiction, then it is of a *grammatical* fiction.

308. How does the philosophical problem about mental processes and states and about behaviourism arise? — The first step is the one that altogether escapes notice. We talk of processes and states, and leave their nature undecided. Sometime perhaps we'll know more about them — we think. But that's just what commits us to a particular way of looking at the matter. For we have a certain conception of what it means to learn to know a process better. (The decisive movement in the conjuring trick has been made, and it was the very one that seemed to us quite innocent.) — And now the analogy which was to make us understand our thoughts falls to pieces. So we have to deny the yet

uncomprehended process in the yet unexplored medium. And now it looks as if we had denied mental processes. And naturally we don't want to deny them.

309. What is your aim in philosophy? — To show the fly the way out of the fly-bottle.

310. I tell someone I'm in pain. His attitude to me will then be that of belief, disbelief, suspicion, and so on.

Let's suppose he says, "It's not so bad". — Doesn't that prove that he believes in something behind my utterance of pain? — His attitude is proof of his attitude. Imagine not merely the words "I'm in pain", but also the reply "It's not so bad", replaced by instinctive noises and gestures.

311. "What greater difference could there be?" — In the case of pain, I believe that I can privately give myself an exhibition of the difference. But the difference between a broken and an unbroken tooth I can exhibit to anyone. — For the private exhibition, however, you don't have to give yourself actual pain; it is enough to *imagine* it — for instance, you screw up your face a bit. And do you know that what you are exhibiting to yourself in this way is pain and not, for example, a facial expression? And how do you know what you are to exhibit to yourself before you do it? This *private* exhibition is an illusion.

* 312. But again, *aren't* the cases of the tooth and the pain similar? For the visual impression in the one corresponds to the sensation of pain in the other. I can exhibit the visual impression to myself as little or as well as the sensation of pain. [104]

Let's imagine the following. The surfaces of the things around us (stones, plants, etc.) have patches and regions which cause pain in our skin when we touch them. (Perhaps through the chemical composition of these surfaces. But we needn't know that.) In this case, we'd speak of pain-patches on the leaf of a particular plant, just as at present we speak of red patches. I'm supposing that it is useful to us to notice these patches and their shapes; that we can infer important properties of the objects from them.

313. I can exhibit pain, as I exhibit red, and as I exhibit straight and crooked and trees and stones. — *That* is what we *call* “exhibiting”.

314. It indicates a fundamental misunderstanding, if I’m inclined to study my current headache in order to get clear about the philosophical problem of sensation.

315. Could someone who had *never* felt pain understand the word “pain”? — Is experience to teach me whether this is so or not? — And if we say “A man could not imagine pain without having sometime felt it”, how do we know? How can it be decided whether it’s true?

316. In order to get clear about the meaning of the word “think”, we watch ourselves thinking; what we observe will be what the word means! — But that’s just *not* how this concept is used. (It would be as if without knowing how to play chess, I were to try and make out what the word “checkmate” meant by close observation of the last move of a game of chess.)

317. Misleading parallel: a cry, an expression of a pain — a sentence, an expression of a thought.

As if the purpose of a sentence were to convey to one person how it is with another: only, so to speak, in his thinking apparatus, and not in his stomach.

318. When we speak, or write, with thought — I mean, as we normally do — we wouldn’t, by and large, say that we think more quickly than we talk; rather, the thought seems *not to be detached* from the expression. On the other hand, however, one does speak of the speed of thought, of how a thought goes through one’s head like lightning, of how problems become clear to us at a stroke, and so on. So it is natural to ask whether the same thing happens in lightning-like thought as in speech that is not thoughtless — only extremely accelerated. So that in the |105| first case the clockwork, as it were, runs down all at once, but in the second bit by bit, braked by the words.

319. I can see, or understand, a thought complete before my mind’s eye in a flash, in the same sense in which I can make a note of it in a few words or a few pencilled dashes.

What makes this note into an epitome of this thought?

320. A lightning-like thought may stand to a spoken thought as an algebraic formula to a sequence of numbers which I develop from it.

When, for example, I am given an algebraic function, I am CERTAIN that I shall be able to work out its values for the arguments 1, 2, 3 . . . up to 10. This certainty will be called ‘well-grounded’, for I have learnt to compute such functions, and so on. In other cases, there will be no grounds — but it will nonetheless be justified by success.

321. “What happens when a man suddenly understands?” — The question is badly framed. If it is a question about the meaning of the expression “sudden understanding”, the answer is not to point to a process to which we give this name. — The question might mean: what are the symptoms of sudden understanding; what are its characteristic mental accompaniments?

(There is no reason to think that a man feels his expressive facial movements, for example, or alterations in his breathing that are characteristic of some emotion. Even if he feels them as soon as he directs his attention towards them.) ((Posture.))

322. The question what the expression means is not answered by such a description; and this tempts us to conclude that understanding is a specific, indefinable experience. But one forgets that the question which should be our concern is: how do we *compare* these experiences; what criterion of identity *do we stipulate* for their occurrence?

323. “Now I know how to go on!” is an exclamation; it corresponds to an instinctive sound, a glad start. Of course, it does not follow from my feeling that I won’t find I’m stuck when I do try to go on. — Here there are cases in which I’d say: “When I said I knew how to go on, I *did* know.” One will say that if, for example, an unforeseen interruption occurs. But what is unforeseen must not simply be that I get stuck. |106|

One could also imagine a case in which light was constantly seeming to dawn on someone — he exclaims “Now I have it!”, and then can never substantiate this in practice. — It might seem to him as if in the twinkling of an eye he forgot again the meaning of the picture that occurred to him.

324. Would it be correct to say that this is a matter of induction, and that I am as certain that I’ll be able to continue the series as I am that this book will drop to the ground when I let it go; and that I’d be no

less astonished if I suddenly, and for no obvious reason, got stuck in working out the series than I would be if the book remained hanging in the air instead of falling? — To that I'll reply that we don't need any grounds for *this* certainty either. What could justify the certainty *better* than success?

325. "The certainty that I'll be able to go on after I've had this experience — seen this formula, for example — is simply based on induction." What does this mean? — "The certainty that fire will burn me is based on induction." Does it mean that I reason to myself: "Fire has always burned me, so it will happen now too"? Or is the previous experience the *cause* of my certainty, not its reason? Whether the earlier experience is the cause of the certainty depends on the system of hypotheses, of natural laws, in terms of which we are considering the phenomenon of certainty.

Is such confidence justified? — What people accept as a justification shows how they think and live.

326. We expect *this*, and are surprised at *that*. But the chain of reasons has an end.

327. "Can one think without speaking?" — And what is *thinking*? Well, don't you ever think? Can't you observe yourself and see what is going on? It should be quite simple. You don't have to wait for it as for an astronomical event, and then perhaps make your observation in a hurry.

328. Well, what does one call 'thinking'? What has one learnt to use this word for? — If I say I've thought — need I always be right? — What *kind* of mistake is there room for here? Are there circumstances in which one would ask, "Was what I was doing then really thinking; aren't I making a mistake?" Suppose someone takes a measurement in the middle of a train of thought: has he interrupted the thinking if he doesn't say anything to himself while measuring? [107]

329. When I think in words, I don't have 'meanings' in my mind in addition to the verbal expressions; rather, language itself is the vehicle of thought.

330. Is thinking a kind of speaking? One would like to say that it is what distinguishes speech with thought from talking without thought.

— And so it seems to be an accompaniment of speech. A process which may accompany something else or go on by itself.

Say: “Yes, this pen is blunt. Oh well, it’ll do.” First, with thought; then without thought; then just think the thought without the words.

— Well, while writing, I might test the point of my pen, make a face — and then go on writing with a gesture of resignation. — So too I might, while taking various measurements, act in such a way that an onlooker would say that I had wordlessly thought: if two magnitudes are equal to a third, they are equal to one another. — But what constitutes thought here is not some process which has to accompany the words if they are not to be spoken without thought.

331. Imagine people who could think only aloud. (As there are people who can read only aloud.)

332. True, we sometimes call accompanying a sentence by a mental process “thinking”; nonetheless, that accompaniment is not what we call a “thought”. — Utter a sentence, and think it; utter it with understanding. — And now don’t utter it, and just do what you accompanied it with when you uttered it with understanding! — (Sing this song with expression! And now don’t sing it, but repeat its expression! — And here too there is something one might repeat: for example, swaying of the body, slower and faster breathing, and so on.)

333. “Only someone who is *convinced* can say that.” — How does the conviction help him when he says it? — Is it present alongside the spoken expression? (Or is it masked by it, as a soft sound by a loud one, so that it can, as it were, no longer be heard when one expresses it out loud?) What if someone were to say, “In order to be able to sing a tune from memory, one has to hear it in one’s mind and sing from that”?

334. “So you really wanted to say . . .” — We use this phrase in order to lead someone from one form of expression to another. One is tempted to use the following picture: what he really ‘wanted to say’, what he ‘meant’, was already present in his mind even [108] before we articulated it. Various kinds of thing may persuade us to give up one expression and to adopt another in its place. To understand this, it’s useful to consider the relation in which solutions of mathematical problems stand to their occasion, and the original setting in which they were posed: the concept of trisecting an angle with ruler and compass,

when people are trying to do it, and, on the other hand, when it has been proved that there's no such thing.

335. What happens when we make an effort — say in writing a letter — to find the right expression for our thoughts? — This way of speaking compares the process to one of translating or describing: the thoughts are already there (perhaps were there in advance), and we merely look for their expression. This picture is more or less appropriate in different cases. — But can't all sorts of things happen here? — I surrender to a mood, and the expression *comes*. Or I have a picture before my mind, and I try to describe it. Or an English expression occurs to me, and I try to recollect the corresponding German one. Or I make a gesture, and ask myself: "What words correspond to this gesture?" And so on.

Now if it were asked, "Do you have the thought before finding the expression?", what would one have to reply? And what to the question "What did the thought, as it existed before its expression, consist in?"

- * 336. This case is similar to the one in which someone imagines that one could not think a sentence with the curious word order of German or Latin just as it stands. One first has to think it, and then one arranges the words in that strange order. (A French politician once wrote that it was a peculiarity of the French language that in it words occur in the order in which one thinks them.)

337. But didn't I already intend the whole construction of the sentence (for example) at its beginning? So surely it already existed in my mind before I uttered it out loud! — If it was in my mind, still it would not normally be there in some different word order. But here again, we are forming a misleading picture of 'intending': that is, of the use of this word. An intention is embedded in a setting, in human customs and institutions. If the technique of the game of chess did not exist, I could not intend to play a game of chess. To the extent that I do intend the construction of an English sentence in advance, that is made possible by the fact that I can speak English. |109|

338. After all, one can only say something if one has learned to talk. Therefore, in order to *want* to say something, one must also have mastered a language; and yet it is clear that one can want to speak without speaking. Just as one can want to dance without dancing.

And when one thinks about this, the mind reaches for the *idea* of dancing, speaking, etc.

- * 339. Thinking is not an incorporeal process which lends life and sense to speaking, and which it would be possible to detach from speaking, rather as the Devil took the shadow of Schlemihl from the ground. — But in what way “not an incorporeal process”? Am I acquainted with incorporeal processes, then, only thinking is not one of them? No; in my predicament, I helped myself to the expression “an incorporeal process” as I was trying to explain the meaning of the word “thinking” in a primitive way.
- * One could, however, say “Thinking is an incorporeal process” if one were using this to distinguish the grammar of the word “think” from that of, say, the word “eat”. Only that makes the difference between the meanings look *too slight*. (It is like saying: numerals are actual, and numbers are non-actual objects.) An inappropriate expression is a sure means of remaining stuck in confusion. It, as it were, bars the way out.

340. One cannot guess how a word functions. One has to *look* at its application and learn from that.

But the difficulty is to remove the prejudice which stands in the way of doing so. It is not a *stupid* prejudice.

341. Speech with and without thought is to be compared to playing a piece of music with and without thought.

- * 342. William James, in order to show that thought is possible without speech, quotes the reminiscences of a deaf-mute, Mr Ballard, who wrote that in his early youth, even before he could speak, he had had thoughts about God and the world. — What could that mean! — Ballard writes: “It was during those delightful rides, some two or three years before my initiation into the rudiments of written language, that I began to ask myself the question: how came the world into being?” — Are you sure — one would like to ask — that this is the correct translation of your wordless thoughts into words? And why does this question — which otherwise seems not to exist — arise here? Do I want to say that the writer’s memory deceives [110] him? — I don’t even know if I’d say *that*. These recollections are a strange memory phenomenon — and I don’t know what conclusions one can draw from them about the narrator’s past!

343. The words with which I express my memory are my memory reaction.

344. Is it conceivable that people should never speak an audible language, but should nevertheless talk to themselves inwardly, in the imagination?

“If people talked only inwardly, to themselves, then they would merely be doing *always* what, as it is, they do *sometimes*. ” — So it is quite easy to imagine this; one need only make the easy transition from some to all. (Similarly, “An infinitely long row of trees is simply one that does *not* come to an end.”) Our criterion for someone’s saying something to himself is what he tells us, as well as the rest of his behaviour; and we say that someone talks to himself only if, in the ordinary sense of the words, he *can talk*. And we do not say it of a parrot; or of a gramophone.

345. “What sometimes happens might always happen.” — What kind of proposition is that? It is similar to this one: If “F(a)” makes sense, “(x).F(x)” makes sense.

“If it is possible for someone to make a false move in some game, then it could be that everybody made nothing but false moves in every game.” — So we’re tempted to misunderstand the logic of our expressions here, to give an incorrect account of the use of our words.

Orders are sometimes not obeyed. But what would it be like if no orders were *ever* obeyed? The concept of an order would have lost its purpose.

346. But couldn’t we imagine God’s suddenly giving a parrot reason, and its now saying things to itself? — But here it is important that, in order to arrive at this idea, I had recourse to the notion of a deity.

347. “But at least I know from my own case what it means ‘to say things to oneself’. And if I were deprived of the organs of speech, I could still conduct internal monologues.”

If I know it only from my own case, then I know only what *I* call that, not what anyone else does.

348. “All these deaf-mutes have learned only a sign-language, but each of them talks to himself inwardly in a vocal language.” — Well, [111] don’t you understand that? — How should I know whether I

understand it?! — What can I do with this information (if that's what it is)? The whole idea of understanding smells fishy here. I don't know whether I am to say I understand it, or I don't understand it. I'm inclined to answer "It's an English sentence; *apparently* quite in order — that is, until one wants to do something with it; it has a connection with other sentences, which makes it difficult for us to say that one doesn't really know what it tells us. Anyone who has not become insensitive by doing philosophy notices that there is something wrong here."

349. "But this assumption surely makes good sense!" — Yes; in ordinary circumstances these words and this picture have an application with which we are familiar. — But if we suppose a case in which this application does not exist, we become aware for the first time of the nakedness, as it were, of the words and the picture.

350. "But if I suppose that someone has a pain, then I am simply supposing that he has just the same as I have so often had." — That gets us no further. It is as if I were to say, "You surely know what 'It's 5 o'clock here' means; so you also know what 'It's 5 o'clock on the sun' means. It means simply that it is just the same time there as it is here when it is 5 o'clock." — The explanation by means of *sameness* does not work here. For I know well enough that one can call 5 o'clock here and 5 o'clock there "the same time", but do not know in what cases one is to speak of its being the same time here and there.

In exactly the same way, it is no explanation to say: the supposition that he has a pain is simply the supposition that he has the same as I. For what's surely clear to me is *this* part of grammar: that one will say that the stove has the same experience as I *if* one says: it's in pain and I'm in pain.

- * 351. Yet we keep wanting to say: "A sensation of pain is a sensation of pain — whether *he* has it, or *I* have it, no matter how I come to know whether he has a pain or not." — I might go along with that. — And when you ask me, "Don't you know, then, what I mean when I say that the stove is in pain?", I can reply: "These words may lead me to imagine all sorts of things; but their usefulness goes no further." And I can also imagine something in connection with the words: "Just now it was 5 o'clock in the afternoon on the sun" — such as a grandfather clock which shows 5. — But a still better example would be that of the application of "above" and "beneath" to the globe. Here we all have a quite clear idea of what [112] "above" and "beneath" mean. I see well

enough that I am on top; the earth is surely beneath me! (And don't smile at this example. We are indeed all taught at elementary school that it is stupid to talk like that. But it is much easier to bury a problem than to solve it.) And it is only reflection that shows us that in this case "above" and "beneath" cannot be used in the customary way. (That we might, for instance, say that the people at the antipodes are 'beneath' our part of the earth, but must then also recognize it as right for them to use the same expression about us.)

352. At this point, our thinking plays us a strange trick. That is, we want to quote the law of excluded middle and say: "Either such an image floats before his mind, or it does not; there is no third possibility!" — We encounter this curious argument also in other regions of philosophy. "In the infinite expansion of π either the group '7777' occurs, or it does not — there is no third possibility." That is to say: God sees — but we don't know. But what does that mean? — We use a picture: the picture of a visible series, the whole of which one person can survey and another can't. Here the law of excluded middle says: it must look either like *this* or like *that*. So really — and this is surely obvious — it says nothing at all, but gives us a picture. And the problem is now supposed to be: does reality accord with the picture or not? And this picture *seems* to determine what we have to do, what to look for, and how — but it does not, precisely because we do not know how it is to be applied. Here, saying "There is no third possibility" or "There really isn't a third possibility!" expresses our inability to turn our eyes away from this picture — a picture which looks as if it must already contain both the problem and its solution, while all the time we *feel* that it is not so.

Similarly, when it is said "Either he has this sensation, or he doesn't", what primarily occurs to us is a picture which already seems to determine the sense of the statements *unequivocally*: "Now you know what is in question", one would like to say. And that's just what it does not tell you.

353. Asking whether and how a proposition can be verified is only a special form of the question "How do you mean?" The answer is a contribution to the grammar of the proposition.

354. The fluctuation in grammar between criteria and symptoms makes it look as if there were nothing at all but symptoms. We say,

[113] for example, “Experience teaches that there is rain when the barometer falls, but it also teaches that there is rain when we have certain feelings of wet and cold, or such-and-such visual impressions.” As an argument in support of this, one says that these sense impressions can deceive us. But here one overlooks the fact that their deceiving us precisely *about rain* rests on a definition.

355. The point here is not that our sense impressions can lie to us, but that we understand their language. (And this language, like any other, rests on convention.)

356. One is inclined to say: “Either it is raining, or it isn’t — how I know, how the message has reached me, is another matter.” But then let’s put the question like this: What do I call “a message that it is raining”? (Or have I only word of this message too?) And what gives this ‘message’ the character of a message about something? Doesn’t the form of our expression mislead us here? For isn’t it a misleading metaphor to say, “My eyes send me the message that there is a chair over there”?

357. We do not say that *possibly* a dog talks to itself. Is that because we are so minutely acquainted with its mind? Well, one might say this: if one sees the behaviour of a living being, one sees its mind. — But do I also say in my own case that I am talking to myself, because I am behaving in such-and-such a way? — I do *not* say it from observation of my behaviour. But it makes sense only because I do behave in this way. — So isn’t it because I *mean* it that it makes sense?

358. But isn’t it our *meaning* it that gives sense to the sentence? (And here, of course, belongs the fact that one cannot mean a senseless sequence of words.) And meaning something lies within the domain of the mind. But it is also something private! It is the intangible Something; comparable only to consciousness itself.

How *could* one find this ludicrous? After all, it is, as it were, a dream of our language.

359. Could a machine think? — Could it be in pain? — Well, is the human body to be called such a machine? It surely comes as close as possible to being such a machine.

360. But surely a machine cannot think! — Is that an empirical statement? No. We say only of a human being and what is like one that it

thinks. We also say it of dolls; and perhaps even of ghosts. Regard the word “to think” as an instrument! [114]

361. The chair is thinking to itself . . .

WHERE? In one of its parts? Or outside its body; in the air around it? Or not *anywhere* at all? But then what is the difference between this chair’s talking silently to itself and another one’s doing so, next to it? — But then how is it with man: where does *he* talk to himself? How come that this question seems senseless; and that no specification of a place is necessary, except just that this man is talking silently to himself? Whereas the question of *where* the chair talks silently to itself seems to demand an answer. — The reason is: we want to know *how* the chair is supposed to be like a human being; whether, for instance, its head is at the top of the back, and so on.

What is it like to talk silently to oneself; what goes on there? — How am I to explain it? Well, only in the way in which you can teach someone the meaning of the expression “to talk silently to oneself”. And we *do* learn the meaning of that as children. — Only no one is going to say that the person who teaches it to us tells us ‘what goes on here’.

362. Rather, it seems to us as though, in this case, the instructor *conveyed* the meaning to the pupil — without telling him directly; but in the end, the pupil is brought to the point of giving himself the correct ostensive definition. And this is where our illusion lies.

363. “But when I imagine something, something *goes on*, doesn’t it?” Well, something goes on — and then I make a noise. What for? Presumably in order to communicate what went on. — But how, in general, does one communicate something? When does one say that something is being communicated? — What is the language-game of communicating something?

I’d like to say: you regard it much too much as a matter of course that one can communicate anything to anyone. That is to say, we are so much accustomed to communicating in speech, in conversation, that it looks to us as if the whole point of communicating lay in this: that someone else grasps the sense of my words — which is something mental — that he, as it were, takes it into his own mind. If he then does something further with it as well, that is no part of the immediate purpose of language.

One would like to say “It is through my communicating it that he comes to *know* that I am in pain; it produces this mental phenomenon; everything else is immaterial to the communicating”. As for what this

remarkable phenomenon of knowledge is — that can be taken care of later. Mental processes just are strange. (It is as if one said, “The clock shows us the time. *What time is*, is not yet settled. And as regards the point of telling the time — that doesn’t come in here.”) |115|

364. Someone does a calculation in his head. He uses the result, let’s say, for building a bridge or a machine. — Do you want to say that it wasn’t *really* by a calculation that he arrived at this number? That it has, say, just dropped into his lap, after some sort of reverie? There surely must have been calculation going on, and there was. For he *knows* that, and how, he calculated; and the correct result he got would be inexplicable without calculation. — But what if I said: “It *seems to him* just as if he had calculated. And why should the correct result be explicable? Is it not incomprehensible enough, that without saying a word, without making a note, he was able to CALCULATE?” —

Is calculating in the imagination in some sense less real than calculating on paper? It is *real* — calculating-in-the-head. — Is it similar to calculating on paper? — I don’t know whether to call it similar. Is a bit of white paper with black lines on it similar to a human body?

* 365. Do Adelheid and the Bishop play a *real* game of chess? — Of course. They are not merely pretending to do so — which would also be possible as part of a play. — But the game, for example, has no beginning! — Of course it has; otherwise it would not be a game of chess. —

366. Is calculating in the head less real than calculating on paper? — One is, perhaps, inclined to say some such thing; but one can get oneself to think the opposite as well by telling oneself: paper, ink, and so on are only logical constructions out of our sense-data.

“I have done the multiplication . . . in my head” — don’t I *believe* such a statement? — But was it really a multiplication? It was not merely ‘a’ multiplication, but *this* one — in the head. This is the point at which I go wrong. For I now want to say: it was some mental process *corresponding* to the multiplication on paper. So it would make sense to say: “*This* process in the mind corresponds to *this* process on paper.” And then it would make sense to talk of a method of projection according to which the mental image of the sign was a representation of the sign itself.

367. A mental image is the image which is described when someone describes what he imagines.

368. I describe a room to someone, and then get him to paint an *impressionistic* picture from this description to show that he has understood it. — Now he paints the chairs which I described as green, dark red; where I said “yellow”, he paints blue. — That is the impression [116] which he got of that room. And now I say: “Quite right! That’s what it looks like.”

369. One is inclined to ask: “What is it like — what goes on — when one calculates in one’s head?” — And in a particular case, the answer may be “First I add 17 and 18, then I subtract 39 . . .” But that is not the answer to our question. What is called calculating in one’s head is not explained in *this* way.

* 370. One ought to ask, not what images are or what goes on when one imagines something, but how the word “imagination” is used. But that does not mean that I want to talk only about words. For the question of what imagination essentially is, is as much about the word “imagination” as my question. And I am only saying that this question is not to be clarified — neither for the person who does the imagining, nor for anyone else — by pointing; nor yet by a description of some process. The first question also asks for the clarification of a word; but it makes us expect a wrong kind of answer.

* 371. *Essence* is expressed in grammar.

372. Consider: “The only correlate in language to an objective necessity is an arbitrary rule. It is the only thing which one can milk out of this objective necessity into a proposition.”

* 373. Grammar tells what kind of object anything is. (Theology as grammar.)

374. The great difficulty here is not to present the matter as if there were something one *couldn’t* do. As if there really were an object, from which I extract a description, which I am not in a position to show anyone. — And the best that I can propose is that we yield to the temptation to use this picture, but then investigate what the *application* of the picture looks like.

375. How does one teach someone to read silently to himself? How does one know when he can do so? How does he himself know that he is doing what is required of him?

376. When I say the ABC silently to myself, what is the criterion that shows that I am doing the same as someone else who silently repeats it to himself? It might be found that the same thing goes on in my larynx and in his. (And similarly when we both think of the same thing, wish the same, and so on.) But then did we learn the use of the words “to [117] say such-and-such to oneself” by someone’s pointing to a process in the larynx or the brain? Is it not also perfectly possible that my auditory image of the sound *a* and his correspond to different physiological processes? The question is: How does one *compare* images?

377. A logician will perhaps think: The same is the same — how a person satisfies himself of sameness is a psychological question. (High is high — it is a matter of psychology that one sometimes *sees*, and sometimes *hears* it.)

What is the criterion for the sameness of two images? — What is the criterion for the redness of an image? For me, when it’s someone else’s image: what he says and does. — For myself, when it’s my image: nothing. And what goes for “red” also goes for “same”.

378. “Before I judge that two images which I have are the same, surely I must recognize them as the same.” And when that has happened, how am I to know that the word “same” describes what I recognize? Only if I can express my recognition in some other way, and if it is possible for someone else to teach me that “same” is the correct word here.

For if I need a warrant for using a word, it must also be a warrant for someone else.

379. First I recognize it as *this*; and then I remember what it is called. — Consider: in what cases can one rightly say this?

380. How do I recognize that this is red? — “I see that it is *this*; and then I know that that is what this is called.” This? — What?! What kind of answer to this question makes sense?

(You keep on steering towards an inner ostensive explanation.)

I could not apply any rules to a *private* transition from what is seen to words. Here the rules really would hang in the air; for the institution of their application is lacking.

381. How do I recognize that this colour is red? — One answer would be: “I have learnt English.”

382. How can I *justify* forming this image in response to this word?

Has anyone shown me the image of the colour blue and told me that it is the image of blue?

What is the meaning of the words “*this* image”? How does one point at an image? How does one point twice at the same image? [118]

383. We do not analyse a phenomenon (for example, thinking) but a concept (for example, that of thinking), and hence the application of a word. So it may look as if what we were doing were nominalism. Nominalists make the mistake of interpreting all words as *names*, and so of not really describing their use, but only, so to speak, giving a paper draft on such a description.

384. You learned the *concept* ‘pain’ in learning language.

385. Ask yourself: Is it conceivable that someone learn to calculate in his head without ever calculating aloud or on paper? — “Learning it” presumably means: being brought to the point of being able to do it. Only the question arises, what will count as a criterion for being able to do it? — But is it also possible for some tribe to be acquainted only with calculation in the head, and with no other kind? Here one has to ask oneself: “What will that look like?” — And so one will have to depict it as a limiting case. And the question will then arise whether we still want to apply the concept of calculating in the head here — or whether in such circumstances it has lost its purpose, because the phenomena now gravitate towards another paradigm.

386. “But why have you so little confidence in yourself? Ordinarily you know perfectly well what is called ‘calculating’. So if you say that you have calculated in the imagination, then you will have done so. If you had *not* calculated, you would not have said you had. Equally, if you say that you see something red in the imagination, then it will *be* red. You know what ‘red’ is elsewhere. — And further: you don’t always rely on agreement with other people; for you often report that you have seen something no one else has.” — But I do have confidence in myself — I say without hesitation that I have done this calculation in my head, have imagined this colour. The difficulty is not that I doubt whether I really imagined anything red. But it is *this*: that we should be able, just like that, to point out or describe the colour we have imagined, that mapping the image into reality presents no difficulty at all. Do they then

look so alike that one might mix them up? — But I can also recognize a man from a drawing straight off. — Well, but can I ask: “What does an actual mental image of this colour look like?” or “What sort of thing is it?”; can I *learn* this?

(I cannot accept his testimony, because it is not *testimony*. It tells me only what he is *inclined* to say.)

387. The *deep* aspect readily eludes us. [119]

388. “I don’t see anything violet here, but I can show it you if you give me a paint box.” How can one *know* that one can show it if . . . , in other words, that one can recognize it if one sees it?

How do I know from my *mental image*, what the colour really looks like?

How do I know that I’ll be able to do something? That is, that the state I am in now is that of being able to do that thing?

389. “A mental image must be more like its object than any picture. For however similar I make the picture to what it is supposed to represent, it may still be the picture of something else. But it is an intrinsic feature of a mental image that it is the image of *this* and of nothing else.” That is how one might come to regard a mental image as a super-likeness.

390. Could one imagine a stone’s having consciousness? And if someone can — why should that not prove merely that such image-mongery is of no interest to us?

391. I can perhaps even imagine (though it is not easy) that each of the people whom I see in the street is in frightful pain, but is adroitly concealing it. And it is important that I have to imagine adroit concealment here. That I do not simply say to myself: “Well, his mind is in pain: but what has that to do with his body?” or “After all, it need not show in his body”. — And if I imagine this — what do I do? What do I say to myself? How do I look at the people? Perhaps I look at one and think, “It must be difficult to laugh when one is in such pain”, and much else of the same kind. I, as it were, play a part, *act* as if the others were in pain. When I do this, one might say that I am imagining . . .

392. "When I imagine he's in pain, all that really goes on in me is . . ." Then someone else says: "I believe I can also imagine it *without* thinking . . ." ("I believe I can think without words.") That comes to nothing. The analysis oscillates between natural science and grammar.

393. "When I imagine that someone who is laughing is really in pain, I don't imagine any pain-behaviour, for I see just the opposite. So *what* do I imagine?" — I have already said what. And for that, I do not necessarily have to imagine that *I* feel pain. — "But then what is the process of imagining it?" — Well, where (outside philosophy) do we use the [120] words "I can imagine that he is in pain", or "I imagine that . . .", or "Imagine that . . ."?

One says, for example, to someone who has to play a part on-stage: "Here you must imagine that this man is in pain and is concealing this" — and now we give him no directions, don't tell him what he is *actually* to do. For this reason too, the suggested analysis is not to the point. — We now watch the actor, who is imagining this situation.

394. In what sort of circumstances would we ask someone: "What actually went on in you as you imagined this?" — And what sort of answer do we expect?

395. There is a lack of clarity about the role of *imaginability* in our investigation. Namely, about the extent to which it ensures that a sentence makes sense.

396. It is no more essential to the understanding of a sentence that one should imagine something in connection with it than that one should make a sketch from it.

397. Instead of "imaginability", one can also say here: representability in a particular medium of representation. And such a representation *may* indeed safely point a way to a further use of a sentence. On the other hand, a picture may obtrude itself upon us and be of no use at all.

398. "But when I imagine something, or even actually *see* objects, surely I have *got* something which my neighbour has not." — I understand you. You want to look about you and say: "At any rate only *I* have got THIS." — What are these words for? They serve no purpose. — Indeed, can't one add: "There is here no question of a 'seeing' — and therefore

none of a ‘having’ — nor of a subject, nor therefore of the I either”? Couldn’t I ask: In what sense have you *got* what you are talking about and saying that only you have got it? Do you possess it? You do not even *see* it. Don’t you really have to say that no one has got it? And indeed, it’s clear: if you logically exclude other people’s having something, it loses its sense to say that you have it.

But what are you then talking about? It’s true I said that I knew deep down what you meant. But that meant that I knew how one thinks to conceive this object, to see it, to gesture at it, as it were, by looking and pointing. I know how one stares ahead and looks about [121] one in this case — and the rest. I think one can say: you are talking (if, for example, you are sitting in a room) of the ‘visual room’. That which has no owner is the ‘visual room’. I can as little own it as I can walk about it, or look at it, or point at it. In so far as it cannot belong to anyone else, it doesn’t belong to me either. Or again, in so far as I want to apply the same form of expression to it as to the material room in which I sit, it doesn’t belong to me. Its description need not mention an owner. Indeed, it need not have an owner. But then the visual room *cannot* have an owner. “For” — one might say — “it has no master outside it, and none inside it either.”

Think of a picture of a landscape, an imaginary landscape with a house in it. — Someone asks “Whose house is that?” — The answer, by the way, might be “It belongs to the farmer who is sitting on the bench in front of it”. But then he cannot, for example, step into his house.

399. One could also say: surely the owner of the visual room has to be of the same nature as it; but he isn’t inside it, and there is no outside.

* 400. The visual room seemed like a discovery, as it were; but what its discoverer really found was a new way of speaking, a new comparison, and, one could even say, a new experience.

401. You interpret the new conception as the seeing of a new object. You interpret a grammatical movement that you have made as a quasi-physical phenomenon which you are observing. (Remember, for example, the question “Are sense-data the stuff of which the universe is made?”)

But my expression “You have made a ‘grammatical’ movement” is not unobjectionable. Above all, you have found a new conception. As if you had invented a new way of painting; or, again, a new metre, or a new kind of song. —

- * 402. "It's true that I say 'I now have such-and-such a visual image', but the words 'I have' are merely a sign for *others*; the visual world is described *completely* by the description of the visual image." — You mean: the words "I have" are like "Attention please!" You're inclined to say that it should really have been expressed differently. Perhaps simply by making a sign with one's hand and then giving a description. — When, as in this case, one disapproves of the expressions of ordinary language (which, after all, do their duty), we have got a picture in our heads which conflicts with the picture of our ordinary [122] way of speaking. At the same time, we're tempted to say that our way of speaking does not describe the facts as they really are. As if, for example, the proposition "he has pains" could be false in some other way than by that man's *not* having pains. As if the form of expression were saying something false, even when the proposition *faute de mieux* asserted something true.

For *this* is what disputes between idealists, solipsists and realists look like. The one party attacks the normal form of expression as if they were attacking an assertion; the others defend it, as if they were stating facts recognized by every reasonable human being.

403. If I were to reserve the word "pain" solely for what I had previously called "my pain", and others "L.W.'s pain", I'd do other people no injustice, so long as a notation were provided in which the loss of the word "pain" in other contexts were somehow made good. Other people would still be pitied, treated by doctors, and so on. It would, of course, be *no* objection to this way of talking to say "But look here, other people have just the same as you!"

But what would I gain from this new mode of representation? Nothing. But then the solipsist does not *want* any practical advantage when he advances his view either!

404. "When I say 'I am in pain', I don't point to a person who is in pain, since in a certain sense I don't know *who* is." And this can be given a justification. For the main point is: I didn't say that such-and-such a person was in pain, but "I am . . .". Now, in saying this, I don't name any person. Just as I don't name anyone when I *groan* with pain. Though someone else sees who is in pain from the groaning.

What does it mean to know *who* is in pain? It means, for example, to know which man in this room is in pain: for instance, that it's the one who is sitting over there, or the one who is standing in that corner, the tall one over there with the fair hair, and so on. — What am I

getting at? At the fact that there is a great variety of criteria for the ‘identity’ of a person.

Now, which of them leads me to say that *I* am in pain? None.

405. “But at any rate when you say ‘I’m in pain’, you want to draw the attention of others to a particular person.” — The answer could be: No, I just want to draw their attention to *myself*. — |123|

406. “But surely what you want to do with the words ‘I am . . .’ is to distinguish between *yourself* and *other* people.” — Can this be said in every case? Even when I merely groan? And even when I ‘want to distinguish’ between myself and other people — do I want to distinguish between the person L.W. and the person N.N.?

407. It would be possible to imagine someone groaning out: “Someone is in pain — I don’t know who!” — whereupon people would hurry to help him, the one who groaned.

408. “But you aren’t in doubt whether it is you or someone else who is in pain!” — The proposition “I don’t know whether I or someone else is in pain” would be a logical product, and one of its factors would be: “I don’t know whether I am in pain or not” — and that is not a significant sentence.

409. Imagine several people standing in a circle, myself among them. One of us, sometimes this one, sometimes that, is connected to the poles of an electrostatic generator without our being able to see this. I observe the faces of the others and try to see which of us has just been given an electric shock. — At one point I say: “Now I know who it is — it’s me.” In this sense I could also say: “Now I know who is feeling the shocks — it’s me.” This would be a rather odd way of speaking. — But if I suppose that I can feel an electric shock even when someone else is being given one, then the form of expression “Now I know who . . .” becomes quite inappropriate. It does not belong to this game.

410. “I” doesn’t name a person, nor “here” a place, and “this” is not a name. But they are connected with names. Names are explained by means of them. It is also true that it is characteristic of physics not to use these words.

411. Consider how the following questions can be applied, and how decided:

- (1) “Are these books *my* books?”
- (2) “Is this foot *my* foot?”
- (3) “Is this body *my* body?”
- (4) “Is this sensation *my* sensation?”

Each of these questions has practical (non-philosophical) applications.

For (2): Think of cases in which my foot is anaesthetized or paralysed. Under certain circumstances, the question could be settled by finding out whether I can feel pain in this foot. [124]

For (3): Here one might be pointing to a reflection in a mirror. But in certain circumstances, one might touch a body and ask the question. In others, it means the same as “Does my body look like *that*? ”

For (4): But which sensation is *this* one? That is, how is one using the demonstrative pronoun here? Certainly otherwise than in, say, the first example. Here, again, one goes astray, because one imagines that by directing one’s attention to a sensation, one is pointing at it.

412. The feeling of an unbridgeable gulf between consciousness and brain process: how come that this plays no role in reflections of ordinary life? This idea of a difference in kind is accompanied by slight giddiness — which occurs when we are doing logical tricks. (The same giddiness attacks us when dealing with certain theorems in set theory.) When does this feeling occur in the present case? It is when I, for example, turn my attention in a particular way on to my own consciousness and, astonished, say to myself: “THIS is supposed to be produced by a process in the brain!” — as it were clutching my forehead. — But what can it mean to speak of “turning my attention on to my own consciousness”? There is surely nothing more extraordinary than that there should be any such thing! What I described with these words (which are not used in this way in ordinary life) was an act of gazing. I gazed fixedly in front of me — but *not* at any particular point or object. My eyes were wide open, brows not contracted (as they mostly are when I am interested in a particular object). No such interest preceded this gazing. My glance was vacant; or again, *like* that of someone admiring the illumination of the sky and drinking in the light.

Note that the sentence which I uttered as a paradox ("THIS is produced by a brain process!") has nothing paradoxical about it. I could have said it in the course of an experiment whose purpose was to show that an effect of light which I see is produced by stimulation of a particular part of the brain. — But I did not utter the sentence in the surroundings in which it would have had an everyday and unparadoxical sense. And my attention was not such as would have been in keeping with that experiment. (If it had been, my gaze would have been intent, not vacant.)

413. Here we have a case of introspection, not unlike that which gave William James the idea that the 'self' consisted mainly of 'peculiar motions in the head and between the head and throat'. [125] And James's introspection showed, not the meaning of the word "self" (so far as it means something like "person", "human being", "he himself", "I myself"), or any analysis of such a being, but the state of a philosopher's attention when he says the word "self" to himself and tries to analyse its meaning. (And much could be learned from this.)

414. You think that after all you must be weaving a piece of cloth: because you are sitting at a loom — even if it is empty — and going through the motions of weaving.

415. What we are supplying are really remarks on the natural history of human beings; not curiosities, however, but facts that no one has doubted, which have escaped notice only because they are always before our eyes.

416. "Human beings agree in saying that they see, hear, feel, and so on (even though some are blind and some are deaf). So they are their own witnesses that they have *consciousness*." — But how strange this is! Whom do I really inform if I say "I have consciousness"? What is the purpose of saying this to myself, and how can another person understand me? — Now, sentences like "I see", "I hear", "I am conscious" really have their uses. I tell a doctor "Now I can hear with this ear again", or I tell someone who believes I am in a faint "I am conscious again", and so on.

417. Do I observe myself, then, and perceive that I am seeing or conscious? And why talk about observation at all? Why not simply say "I perceive I am conscious"? — But what are the words "I perceive" for

here — why not say “I am conscious”? But don’t the words “I perceive” here show that I am attending to my consciousness? — which is ordinarily not the case. — If so, then the sentence “I perceive I am conscious” does not say that I am conscious, but that my attention is focused in such-and-such a way.

But isn’t it a particular experience that occasions my saying “I am conscious again”? — *What* experience? In what situations do we say it?

418. Is my having consciousness a fact of experience? —

But doesn’t one say that human beings have consciousness, and that trees or stones do not? — What would it be like if it were otherwise? — Would human beings all be unconscious? — No; not in the ordinary sense of the word. But I, for instance, would not have consciousness — as I now in fact have it. |126|

419. In what circumstances shall I say that a tribe has a *chief*? And the chief must surely have *consciousness*. Surely he mustn’t be without consciousness!

420. But can’t I imagine that people around me are automata, lack consciousness, even though they behave in the same way as usual? — If I imagine it now — alone in my room — I see people with fixed looks (as in a trance) going about their business — the idea is perhaps a little uncanny. But just try to hang on to this idea in the midst of your ordinary intercourse with others — in the street, say! Say to yourself, for example: “The children over there are mere automata; all their liveliness is mere automatism.” And you will either find these words becoming quite empty; or you will produce in yourself some kind of uncanny feeling, or something of the sort.

Seeing a living human being as an automaton is analogous to seeing one figure as a limiting case or variant of another; the cross-pieces of a window as a swastika, for example.

421. It seems paradoxical to us that in a single report we should make such a medley, mixing physical states and states of consciousness up together: “He suffered great torments and tossed about restlessly.” It is quite usual; so why does it seem paradoxical to us? Because we want to say that the sentence is about both tangibles and intangibles. — But does it worry you if I say: “These three struts give the building stability?” Are three and stability tangible? — Regard the sentence as an instrument, and its sense as its employment.

422. What do I believe in when I believe that man has a soul? What do I believe in when I believe that this substance contains two carbon rings? In both cases, there is a picture in the foreground, but the sense lies far in the background; that is, the application of the picture is not easy to survey.

423. *Certainly* all these things happen in you. — And now just let me understand the expression we use. — The picture is there. And I am not disputing its validity in particular cases. — Only let me now understand its application.

424. The picture is there; and I do not dispute its *correctness*. But *what* is its application? Think of the picture of blindness as a darkness in the mind or in the head of a blind person.

425. While in innumerable cases we exert ourselves to find a picture, and once it is found, the application, as it were, comes about automatically, [127] here we already have a picture which obtrudes itself on us at every turn — but does not help us out of the difficulty, which begins only now.

If I ask, for example, “How am I to imagine *this* mechanism fitting into *this* casing?” — perhaps a drawing reduced in scale may serve to answer me. Then I can be told: “You see, it fits like *this*.” Or perhaps even: “Why are you surprised? See how it works *here*; well, it is the same there.” — Of course, the latter no longer explains anything: it merely invites me to apply the picture I was given.

426. A picture is conjured up which seems to fix the sense unambiguously. The actual use, compared with that traced out by the picture, seems like something muddied. Here again, what is going on is the same as in set theory: the form of expression seems to have been tailored for a god, who knows what we cannot know; he sees all of those infinite series, and he sees into the consciousness of human beings. For us, however, these forms of expression are like vestments, which we may put on, but cannot do much with, since we lack the effective power that would give them point and purpose.

In the actual use of these expressions we, as it were, make detours, go by side roads. We see the straight highway before us, but of course cannot use it, because it is permanently closed.

427. "While I was speaking to him, I did not know what was going on in his head." In saying this, one is not thinking of brain processes, but of thought processes. This picture should be taken seriously. We really would like to see into his head. And yet we only mean what we ordinarily mean by saying that we would like to know what he is thinking. I want to say: we have this vivid picture — and that use, apparently contradicting the picture, which expresses something mental.

428. "A thought — what a strange thing!" — but it does not strike us as strange when we are thinking. A thought does not strike us as mysterious while we are thinking, but only when we say, as it were retrospectively, "How was that possible?" How was it possible for a thought to deal with *this very object*? It seems to us as if we had captured reality with the thought.

429. The agreement, the harmony, between thought and reality consists in this: that if I say falsely that something is *red*, then all the same, it is *red* that it isn't. [128] And in this: that if I want to explain the word "red" to someone, in the sentence "That is not red", I do so by pointing to something that *is* red.

430. "Put a ruler against this object; it does not say that the object is so-and-so long. Rather, it is in itself — I am tempted to say — dead, and achieves nothing of what a thought can achieve." — It is as if we had imagined that the essential thing about a living human being was the outward form. Then we made a lump of wood into that form and were abashed to see the lifeless block, lacking any similarity to a living creature.

431. "There is a gap between an order and its execution. It has to be closed by the process of understanding."

"Only in the process of understanding does the order mean that we are to do THIS. The *order* — why, that is nothing but sounds, ink-marks. —"

432. Every sign *by itself* seems dead. *What* gives it life? — In use it *lives*. Is it there that it has living breath within it? — Or is the *use* its breath?

433. When we give an order, it may look as if the ultimate thing sought by the order had to remain unexpressed, as there is still a gap between an order and its execution. Say I want someone to make a particular movement: for example, to raise his arm. To make my order quite clear,

I demonstrate the movement to him. This picture seems unambiguous until the question is raised: how does he know that *he is to make that movement?* — How does he know at all what he is to do with the signs I give him, whatever they are? — Perhaps I shall now try to supplement the order with further signs, by pointing from myself to him, by making encouraging gestures, and so forth. Here it looks as if the order were beginning to stammer.

As if the sign were precariously trying to induce understanding in us.
— But if we now understand it, in what signs do we do so?

434. The gesture — one would like to say — tries to prefigure, but can't do so.

435. If it is asked, “How does a sentence manage to represent?” — the answer might be: “Don’t you know? Surely you see it, when you use one.” After all, nothing is concealed.

How does a sentence do it? — Don’t you know? After all, nothing is hidden.

But when given the answer “But you know how a sentence does it, after all, nothing is concealed”, one would like to retort, “Yes, but it all goes by so quickly, and I should like to see it, as it were, more fully laid out.” |129|

- * 436. Here it is easy to get into that dead end in philosophizing where one believes that the difficulty of the problem consists in our having to describe phenomena that evade our grasp, the present experience that slips quickly by, or something akin — where we find ordinary language too crude, and it looks as if we were dealing not with the phenomena of everyday conversation, but with ones that “are evanescent, and, in their coming to be and passing away, tend to produce those others”.
- * (Augustine: *Manifestissima et usitatissima sunt, et eadem rursus nimis latent, et nova est inventio eorum.*)
- * 437. A wish seems already to know what will or would satisfy it; a proposition, a thought, to know what makes it true — even when there is nothing there! Whence this determining of what is not yet there? This despotic demand? (“The hardness of the logical must”.)
- 438. “A plan, as such, is something unsatisfied.” (Like a wish, an expectation, a conjecture, and so on.)

Here I mean: expectation is unsatisfied, because it is an expectation of something; a belief, an opinion, is unsatisfied, because it is an opinion that something is the case, something real, something outside the process of believing.

439. In what sense can one call wishes, expectations, beliefs, etc. “unsatisfied”? What is our prototype of non-satisfaction? Is it a hollow space? And would one call that “unsatisfied”? Wouldn’t this be a metaphor too? — Isn’t what we call non-satisfaction — say, hunger — a feeling?

In a particular system of expressions we can describe an object by means of the words “satisfied” and “unsatisfied”. For example, if we stipulate that a hollow cylinder is to be called “an unsatisfied cylinder”, and the solid cylinder that fills it “its satisfaction”.

440. Saying “I’d like an apple” does not mean: I believe an apple will quell my feeling of non-satisfaction. *This* utterance is an expression not of a wish but of non-satisfaction.

441. By nature and by a particular training, a particular education, we are predisposed to express wishes in certain circumstances. (A wish is, of course, not such a ‘circumstance’.) In this game, the question as to whether I know what I wish before my wish is [130] fulfilled cannot arise at all. And the fact that some event stops my wishing does not mean that it fulfills it. Perhaps I wouldn’t have been satisfied if my wish had been satisfied.

- * On the other hand, the word “wish” is also used in this way: “I don’t know myself what I wish for.” (“For wishes themselves are a veil between us and the thing wished for.”)
- * Suppose someone asked, “Do I know what I long for before I get it?” If I have learned to talk, then I do.

442. I see someone aiming a gun and say “I expect a bang”. The shot is fired. — What! — was that what you expected? So did that bang somehow already exist in your expectation? Or is it just that your expectation agrees in some other respect with what occurred; that that noise was not contained in your expectation, and merely supervened as an accidental property when the expectation was being fulfilled? — But no, if the noise had not occurred, my expectation would not have been

fulfilled; the noise fulfilled it; it was not an accompaniment of the fulfilment like a second guest accompanying the one I expected. Was the feature of the event that was not also in the expectation something accidental, an extra provided by fate? — But then, what was *not* an extra? Did something of the shot already occur in my expectation? — Then what *was* extra? for wasn't I expecting the whole shot.

“The bang was not as loud as I had expected.” — “Then was there a louder bang in your expectation?”

443. “The red which you imagine is surely not the same (not the same thing) as the red which you see in front of you; so how can you say that it is what you imagined?” — But haven't we an analogous case with the sentences “Here is a red patch” and “Here there isn't a red patch”. The word “red” occurs in both; so this word can't indicate the presence of something red.

444. One may have the feeling that in the sentence “I expect he is coming” one is using the words “he is coming” in a different sense from the one they have in the assertion “He is coming”. But if that were so, how could I say that my expectation had been fulfilled? If I wanted to explain the words “he” and “is coming”, say by means of ostensive explanations, the same explanations of these words would go for both sentences.

But now one might ask: what does his coming look like? — The door opens, someone walks in, and so on. — What does my expecting him [131] to come look like? — I walk up and down the room, look at the clock now and then, and so on. — But the one sequence of events has not the slightest similarity to the other! So how can one use the same words in describing them? — But then perhaps I say, as I walk up and down: “I expect he'll come in.” — Now there is a similarity here. But of what kind?!

445. It is in language that an expectation and its fulfilment make contact.

446. It would be odd to say: “A process looks different when it happens from when it doesn't happen.” Or: “A red patch looks different when it is there from when it isn't there — but language abstracts from this difference, for it speaks of a red patch whether it is there or not.”

447. The feeling is as if the negation of a proposition had first, in a certain sense, to make it true, in order to be able to negate it.

(The assertion of the negating proposition contains the proposition which is negated, but not the assertion of it.)

448. "If I say I did *not* dream last night, still I must know where to look for a dream; that is, 'I dreamt', applied to this actual situation, may be false, but mustn't be nonsense." — Does that mean, then, that you did, after all, feel something, as it were the hint of a dream, which made you aware of the place which a dream would have occupied?

Again, if I say "I have no pain in my arm", does that mean that I have a shadow of a sensation of pain, which, as it were, indicates the place where a pain could have been?

In what sense does my present painless state contain the possibility of pain?

If someone says, "For the word 'pain' to have a meaning, it is necessary that pain should be recognized as such when it occurs" — one can reply: "It is not more necessary than that the absence of pain should be recognized."

449. "But mustn't I know what it would be like if I were in pain?" — One can't shake oneself free of the idea that using a sentence consists in imagining something for every word.

One fails to bear in mind the fact that one *calculates*, operates, with words, and in due course transforms them into this or that picture. — It is as if one believed that a written order for a |132| cow, which someone is to hand over to me, always had to be accompanied by a mental image of a cow if the order was not to lose its sense.

450. Knowing what someone looks like: being able to imagine it — but also: being able to *mimic* it. Need one imagine it in order to mimic it? And isn't mimicking it just as good as imagining it?

451. What if I give someone the order "Imagine a red circle here" — and now I say: understanding the order means knowing what it is like for it to have been carried out — or even: being able to imagine what it is like . . . ?

452. I want to say: "If someone could see an expectation, the mental process, then he'd surely see *what* was being expected." — But that's just how it is: anyone who sees the expression of an expectation will see what is being expected. And in what other way, in what other sense, could one see it?

453. Anyone who perceived my expecting should perceive directly *what* was expected — that is, not *infer* it from the process he perceived! — But to say that someone perceives an expectation *makes no sense*. Unless it means something like: he perceives the manifestations of expectation. To say of an expectant person that he perceives his expectation, instead of saying “he expects” would be an idiotic distortion of the words.

- * 454. “Everything is already there in . . .” How does it come about that this arrow »———— *points*? Doesn’t it seem to carry within it something extraneous to itself? — “No, not the dead line on paper; only a mental thing, the meaning, can do that.” — That is both true and false. The arrow points only in the application that a living creature makes of it.

This pointing is *not* a hocus-pocus that can be performed only by the mind.

455. We are inclined to say: “When we mean something, there is no dead picture here (no matter of what kind), but, rather, it’s like going towards someone.” We go towards the thing we mean.

456. “When one means something, it is oneself that means”; so one sets oneself in motion. One rushes ahead, and so cannot also observe one’s rushing ahead. Indeed not. |133|

457. Yes, meaning something is like going towards someone.

- * 458. “An order orders its own execution.” So it knows its execution before it is even there? — But that was a grammatical proposition, and it says: if an order runs “Do such-and-such”, then *doing such-and-such* is called “executing the order”.

459. We say “The order orders *this* —”, and do it; but also: “The order orders this: I am to . . .” We translate it at one time into a sentence, at another into a demonstration, and at another into action.

460. Could a justification of an action as the execution of an order run like this: “You said ‘Bring me a yellow flower’, whereupon this flower gave me a feeling of satisfaction; that’s why I’ve brought it”? Wouldn’t one have to reply: “But I didn’t tell you to bring me a flower that would give you that sort of feeling in response to my words!”?

461. In what sense does an order anticipate its fulfilment? — By now ordering *just that* which later on is carried out? — But this would surely have to run: “which later on is carried out, or again is not carried out”. And that says nothing.

“But even if my wish does not determine what is going to be the case, still it does, so to speak, determine the theme of a fact, no matter whether such a fact fulfils the wish or not.” We are, as it were, surprised, not at someone’s knowing the future, but at his being able to prophesy at all (right or wrong).

As if the mere prophecy, no matter whether true or false, foreshadowed the future; whereas it knows nothing of the future and cannot know less than nothing.

462. I can look for him when he is not there, but not hang him when he is not there.

One might want to say: “But he must be around, if I am looking for him.” — Then he must also be around if I don’t find him, and even if he doesn’t exist at all.

463. “You were looking for *him*? You couldn’t even have known if he was there!” — But this problem *really does* arise when one looks for something in mathematics. One can ask, for example, how was it possible so much as to *look* for the trisection of an angle?

464. What I want to teach is: to pass from unobvious nonsense to obvious nonsense. |134|

465. “An expectation is so made that whatever happens has to accord with it, or not.”

If someone now asks: then is what is the case determined, give or take a yes or no, by an expectation or not — that is, is it determined in what sense the expectation would be satisfied by an event, no matter what happens? — then one has to reply: “Yes, unless the expression of the expectation is indefinite, for example, if it contains a disjunction of different possibilities.”

466. What does man think for? What is it good for? — Why does he make boilers according to *calculations*, and not leave the thickness of their walls to chance? After all, it is only a fact of experience that boilers made according to these calculations do not explode so often. But, just as having once been burnt, he would do anything rather than put

his hand into a fire, so too he would do anything rather than not calculate for a boiler. — However, since we are not interested in causes, we shall say: human beings do in fact think: this is how they proceed, for example, when they make a boiler. — Now, can't a boiler produced in this way explode? Oh, yes.

467. Does man think, then, because he has found that thinking pays?
— Because he thinks it advantageous to think?

(Does he bring his children up because he has found it pays?)

468. How could one find out *why* he thinks?

469. And yet one may say that thinking has been found to pay. That there are fewer boiler explosions than there used to be, now that we no longer go by hunches in deciding the thickness of the walls, but make such-and-such calculations instead. Or, ever since each calculation done by one engineer got checked by another.

470. So *sometimes* one thinks because it has been found to pay.

471. Often it is only when we suppress the question “Why?” that we become aware of those important facts, which then, in the course of our investigations, lead to an answer.

472. The character of the belief in the uniformity of nature can perhaps be seen most clearly in the case in which what is expected is something we fear. Nothing could induce me to put my hand into a flame — even though it is *only in the past* that I have burnt myself.

473. The belief that fire will burn me is of the same kind as the fear that it will burn me. [135]

474. I shall get burnt if I put my hand in the fire — that is certainty.
That is to say, here we see what certainty means. (Not just the meaning of the word “certainty” but also what certainty amounts to.)

475. On being asked for the reasons for a supposition, one calls them to mind. Does the same thing happen here as when one considers what may have been the causes of an event?

476. A distinction should be made between the object of fear and the cause of fear.

So a face which inspires fear or delight (the object of fear or delight) is not on that account its cause, but — one might say — its target.

477. “Why do you believe that you will burn yourself on the hotplate?” — Have you reasons for this belief, and do you need reasons?

478. What kind of reason have I to assume that my finger will feel a resistance when it touches the table? What kind of reason for believing that this pencil will not pierce my hand without hurting it? — When I ask this, a hundred reasons present themselves, each drowning out the voice of the others. “But I have experienced it myself innumerable times, often heard of similar experiences; if it were not so, it would . . . ; and so forth.”

479. The question “For what reasons do you believe this?” might mean: “From what reasons are you now deriving it (have you just derived it?)” But it might also mean: “With hindsight, what reasons can you give me for this supposition?”

* 480. So one could actually take “reasons” for a belief to mean only what a person had said to himself before he arrived at the belief — the calculation that he actually carried out. If someone now asks, “But how *can* previous experience be a reason for the supposition that such-and-such will occur later on?”, the answer is: What general concept have we of reasons for this kind of supposition? This sort of statement about the past is simply what we call a reason for supposing that this will happen in the future. — And if one is surprised at our playing such a game, I appeal to the *effect* of a past experience (to the fact that a burnt child fears the fire). [136]

481. If anyone said that information about the past couldn’t convince him that something would happen in the future, I wouldn’t understand him. One might ask him: What do you expect to be told, then? What sort of information do you call a reason for believing this? What do you call “convincing”? In what kind of way do you expect to be convinced? — If *these* are not reasons, then what are reasons? — If you say that these are not reasons, then you must surely be able to state what must be the case for us to be warranted in saying that there are reasons for our supposition.

For note: here reasons are not propositions which logically imply what is believed.

But it is not as if one can say: less is needed for belief than for knowledge. — For this is not a matter of approximating to logical consequence.

482. We are misled by this way of putting it: "This is a good reason, for it makes the occurrence of the event probable." That is as if we had said something further about the reason, something which justified it as a reason; whereas to say that this reason makes the occurrence probable is to say nothing except that this reason comes up to a particular standard of good reasons — but that the standard has no grounds!

483. A good reason is one that looks *like this*.

484. One would like to say: "It is a good reason only because it makes the occurrence *really* probable." Because it, so to speak, really has an influence on the event; as it were an empirical one.

485. Justification by experience comes to an end. If it did not, it would not be justification.

486. Does it *follow* from the sense impressions which I get that there is a chair over there? — How can a *proposition* follow from sense impressions? Well, does it follow from the propositions which describe the sense impressions? No. — But don't I infer that a chair is there from impressions, from sense-data? — I make no inference! — and yet I sometimes do. I see a photograph, for example, and say "So there must have been a chair over there", or again, "From what one can see here, I infer that there is a chair over there". That is an inference; but not one belonging to logic. An inference is a transition to an assertion; and so also to the behaviour that corresponds to the assertion. 'I draw the consequences' not only in words, but also in deeds. |137|

Was I justified in drawing these consequences? What is *called* a justification here? — How is the word "justification" used? Describe language-games! From these you will also be able to see the importance of being justified.

487. "I'm leaving the room because you tell me to."

"I'm leaving the room, but not because you tell me to."

Does this sentence *describe* a connection between my action and his order; or does it make the connection?

Can one ask: “How do you know that you do it because of this, or not because of this?” And is the answer perhaps: “I feel it”?

488. How do I judge whether it is so? By circumstantial evidence?

489. Ask yourself: On what occasion, for what purpose, do we say this?

What kinds of action accompany these words? (Think of a greeting.) In what kinds of setting will they be used; and what for?

490. How do I know that *this train of thought* has led me to this action?

— Well, it is a particular picture: for example, of a calculation leading to a further experiment in an experimental investigation. It looks like *this* — and now I could describe an example.

491. Not: “without language we could not communicate with one another” — but for sure: without language we cannot influence other human beings in such-and-such ways; cannot build roads and machines, and so on. And also: without the use of speech and writing, human beings could not communicate.

492. To invent a language could mean to invent a device for a particular purpose on the basis of the laws of nature (or consistently with them); but it also has the other sense, analogous to that in which we speak of the invention of a game.

Here I am saying something about the grammar of the word “language”, by connecting it with the grammar of the word “invent”.

493. One says, “The cock calls the hens by crowing” — but isn’t all this already based on a comparison with our language? — Don’t we see all this quite differently if we imagine the crowing to set the hens in motion by some kind of physical causation?

But if it were shown how the words “Come to me” act on the person addressed so that, finally, given certain conditions, the muscles of his [138] legs are innervated, and so on — would that sentence thereby lose the character of a *sentence* for us?

494. I want to say: it is *above all* the apparatus of our ordinary language, of our word-language, that we call “language”; and then other things by analogy or comparability with it.

495. Clearly, I can establish by experience that a human being (or animal) reacts to one sign as I want him to, and to another not. That, for example, a human being goes to the right at the sign “→” and goes to the left at the sign “←”; but does not react to the sign “0—|” as to “←”, and so on.

I don’t even need to make up a case, I just have to consider what is actually so: namely, that I can direct a person who has learned only English, only by using English. (For here I am looking at learning English as adjusting a mechanism to respond to a certain kind of influence; and it may be all one to us whether someone has learned the language, or was perhaps from birth constituted to react to sentences in English like a normal person who has learned English.)

496. Grammar does not tell us how language must be constructed in order to fulfil its purpose, in order to have such-and-such an effect on human beings. It only describes, and in no way explains, the use of signs.

497. The rules of grammar may be called “arbitrary”, if that is to mean that the *purpose* of grammar is nothing but that of language.

If someone says, “If our language had not this grammar, it could not express these facts” — it should be asked what “could” means here.

498. When I say that the orders “Bring me sugar!” and “Bring me milk!” have a sense, but not the combination “Milk me sugar”, this does not mean that the utterance of this combination of words has no effect. And if its effect is that the other person stares at me and gapes, I don’t on that account call it an order to stare at me and gape, even if that was precisely the effect that I wanted to produce.

499. To say “This combination of words has no sense” excludes it from the sphere of language, and thereby bounds the domain of language. But when one draws a boundary, it may be for various kinds of reason. If I surround an area with a fence or a line or otherwise, the purpose may be to prevent someone from getting in or out; |139| but it

may also be part of a game and the players are supposed, say, to jump over the boundary; or it may show where the property of one person ends and that of another begins; and so on. So if I draw a boundary-line, that is not yet to say what I am drawing it for.

500. When a sentence is called senseless, it is not, as it were, its sense that is senseless. Rather, a combination of words is being excluded from the language, withdrawn from circulation.

501. "The purpose of language is to express thoughts." — So presumably the purpose of every sentence is to express a thought. Then what thought is expressed, for example, by the sentence "It's raining"? —

502. Asking what the sense is. Compare:

"This sentence has a sense." — "What sense?"

"This sequence of words is a sentence." — "What sentence?"

503. If I give anyone an order, I feel it to be *quite enough* to give him signs. And I'd never say: these are just words, and I've got to get behind the words. Equally, when I've asked someone something, and he gives me an answer (that is, a sign), I am content — that's what I expected — and I don't object: but that's a mere answer.

504. But if someone says, "How am I to know what he means — I see only his signs?", then I say, "How is *he* to know what he means, he too has only his signs?"

505. Must I understand an order before I can act on it? — Certainly, otherwise you wouldn't know what you had to do! — But from *knowing* to doing is surely a further step! —

506. The absent-minded man who at the order "Right turn!" turns left, and then, clutching his forehead, says "Oh! right turn", and does a right turn. — What has struck him? An interpretation?

507. "I am not merely saying this, I mean something by it." — When one considers what is going on in us when we *mean* (and don't merely say) words, it seems to us as if there were something coupled to these words, which otherwise would run idle. — As if they, so to speak, engaged with something in us.

508. I utter the sentence “The weather is fine”; but the words are, after all, arbitrary signs — so let’s put “a b c d” in their place. But now, when I read this, I can’t connect it, without more ado, with the above sense. |140| I am not used, I might say, to saying “a” instead of “the”, “b” instead of “weather”, and so on. But I don’t mean by this that I am not used to making an immediate association between the word “the” and “a”; rather, that I am not used to using “a” *in the place of* “the” — and therefore in the sense of “the”. (I don’t know this language.)

(I am not used to Fahrenheit measures of temperature. That’s why such a specification of temperature ‘says’ nothing to me.)

509. What if we asked someone, “In what sense are these words a description of what you see?” — and he answers: “I *mean* this by these words.” (Perhaps he was looking at a landscape.) Why is this answer “I *mean* this . . .” no answer at all?

How does one *mean*, with words, what one sees before one?

Suppose I said “a b c d” and meant thereby: the weather is fine. For as I uttered these signs, I had the experience normally had only by someone who, year in, year out, used “a” in the sense of “the”, “b” in the sense of “weather”, and so on. — Does “a b c d” now say: the weather is fine?

What should be the criterion for my having had *that* experience?

510. Try to do the following: *say* “It’s cold here”, and *mean* “It’s warm here”. Can you do it? — And what are you doing as you do it? And is there only one way of doing it?

511. What does “discovering that an utterance doesn’t make sense” mean? — And what does it mean to say, “If I mean something by it, surely it must make sense”? — If I mean something by it? — If I mean *what* by it?! — One wants to say: a sentence that makes sense is one which one can not merely say, but also think.

512. It looks as if one could say: “Word-language allows of nonsensical combinations of words, but the language of imagining does not allow us to imagine anything nonsensical.” — Hence, too, the language of drawing doesn’t allow nonsensical drawings? Suppose they were drawings from which bodies were to be modelled. In this case, some drawings make sense, some not. — What if I imagine nonsensical combinations of words?

513. Consider the following form of expression: “The number of pages in my book is equal to a solution of the equation $x^3 + 2x - 3 = 0$.” Or: “The number of my friends is n , and $n^2 + 2n + 2 = 0$.” Does this sentence make sense? This cannot be seen immediately. From this example [141] one can see how it can come about that something looks like a sentence which we understand, and yet makes no sense.

(This throws light on the concepts of understanding and of meaning something.)

514. A philosopher says that he understands the sentence “I am here”, that he means something by it, thinks something — even though he doesn’t call to mind in the least how, on what occasions, this sentence is used. And if I say “A rose is red in the dark too”, you virtually see this red in the dark before you.

515. Two pictures of a rose in the dark. One is quite black; for the rose is not visible. In the other, it is painted in full detail and surrounded by black. Is one of them right, the other wrong? Don’t we talk of a white rose in the dark and of a red rose in the dark? And don’t we nevertheless say that they can’t be distinguished in the dark?

516. It seems clear that we understand the meaning of the question “Does the sequence 7777 occur in the development of π ? ” It is an English sentence; it can be shown what it means for 415 to occur in the development of π ; and similar things. Well, our understanding of that question reaches just so far, one may say, as such explanations reach.

517. The question arises: Can’t we be mistaken in thinking that we understand a question?

For some mathematical proofs do lead us to say that we *cannot* imagine something which we believed we could imagine. (For example, the construction of a heptagon.) They lead us to revise what counts as the domain of the imaginable.

* 518. Socrates to Theaetetus: “And if someone imagines, mustn’t he imagine *something*? ” — Th.: “Yes, he must.” — Soc.: “And if he imagines something, mustn’t it be something real? ” — Th.: “Apparently.”

And mustn’t someone who is painting be painting something — and someone who is painting something be painting something real? — Well, tell me what the object of painting is: the picture of the man (for example), or the man whom the picture portrays?

519. One wants to say that an order is a picture of the action that was carried out on the order; but also that it is a picture of the action that *is to be* carried out on the order.

520. "Even if one conceives of a proposition as a picture of a possible state of affairs, and says that it shows the possibility of the state of affairs, [142] still, the most that a proposition can do is what a painting or relief or film does; and so it can, at any rate, not present what is not the case. So does what is, and what is not, called (logically) possible depend wholly on our grammar — that is, on what it 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 that has a use in our life; and when we are tempted in philosophy to count something quite useless as a proposition, that is often because we have not reflected sufficiently on its application.

521. Compare 'logically possible' with 'chemically possible'. One might perhaps call a combination chemically possible if a formula with the right valencies existed (e.g. H - O - O - O - H). Of course, such a combination need not exist; but even the formula HO₂ cannot have less than no combination corresponding to it in reality.

522. If we compare a proposition to a picture, we must consider whether we are comparing it to a portrait (a historical representation) or to a genre-picture. And both comparisons make sense.

When I look at a genre-picture, it 'tells' me something, even though I don't believe (imagine) for a moment that the people I see in it really exist, or that there have really been people in that situation. For suppose I ask, "*What* does it tell me, then?"

523. "A picture tells me itself" is what I'd like to say. That is, its telling me something consists in its own structure, in *its* own forms and colours. (What would it mean to say "A musical theme tells me itself"?)

524. Don't take it as a matter of course, but as a remarkable fact, that pictures and fictitious narratives give us pleasure, absorb us.

("Don't take it as a matter of course" — that means: puzzle over this, as you do over some other things which disturb you. Then what is problematic will disappear, by your accepting the one fact as you do the other.)

- * ((The transition from obvious nonsense to something which is unobvious nonsense.))

525. "After he had said this, he left her as he did the day before." — Do I understand this sentence? Do I understand it just as I would if I heard it in the course of a report? If it stood alone, [143] I'd say I don't know what it's about. But all the same, I'd know how this sentence might perhaps be used; I could even invent a context for it.

(A multitude of familiar paths lead off from these words in all directions.)

526. What does it mean to understand a picture, a drawing? Here too there is understanding and not understanding. And here too these expressions may mean various kinds of thing. The picture is, say, a still-life; but I don't understand one part of it: I cannot see solid objects there, but only patches of colour on the canvas. — Or I see all the objects, but I am not familiar with them (they look like implements, but I don't know their use). — Perhaps, however, I know the objects, but, in another sense, do not understand the way they are arranged.

527. Understanding a sentence in language is much more akin to understanding a theme in music than one may think. What I mean is that understanding a spoken sentence is closer than one thinks to what is ordinarily called understanding a musical theme. Why is just *this* the pattern of variation in intensity and tempo? One would like to say: "Because I know what it all means." But what does it mean? I'd not be able to say. As an 'explanation', I could compare it with something else which has the same rhythm (I mean the same pattern). (One says, "Don't you see, this is as if a conclusion were being drawn" or "This is, as it were, a parenthesis", and so on. How does one justify such comparisons? — There are very different kinds of justification here.)

528. One might imagine people who had something not altogether unlike a language: vocal gestures, without vocabulary or grammar. ('Speaking with tongues').

529. "But what would the meaning of the sounds be in such a case?" — What is it in music? Though I don't at all wish to say that this language of vocal gestures would have to be compared to music.

530. There might also be a language in whose use the ‘soul’ of the words played no part. In which, for example, we had no objection to replacing one word by a new, arbitrarily invented one.

531. We speak of understanding a sentence in the sense in which it can be replaced by another which says the same; but also in the sense [144] in which it cannot be replaced by any other. (Any more than one musical theme can be replaced by another.)

In the one case, the thought in the sentence is what is common to different sentences; in the other, something that is expressed only by these words in these positions. (Understanding a poem.)

532. Then has “understanding” two different meanings here? — I would rather say that these kinds of use of “understanding” make up its meaning, make up my *concept* of understanding.

For I *want* to apply the word “understanding” to all this.

533. But in the second case, how can one explain the expression, communicate what one understands? Ask yourself: How does one *lead* someone to understand a poem or a theme? The answer to this tells us how one explains the sense here.

534. *Hearing* a word as having this meaning. How curious that there should be such a thing!

Phrased like *this*, emphasized like this, heard in this way, this sentence is the beginning of a transition to *these* sentences, pictures, actions.

* ((A multitude of familiar paths lead off from these words in all directions.))

535. What happens when we learn to *feel* the ending of a church mode as an ending?

536. I say: “I can think of this face (which gives an impression of timidity) as courageous too.” We do not mean by this that I can imagine someone with this face perhaps saving someone’s life (that, of course, is imaginable in connection with any face). I am speaking, rather, of an aspect of the face itself. Nor do I mean that I can imagine that this man’s face might change so that it looked courageous in the ordinary sense, though I may very well mean that there is a quite definite way in which it can turn into a courageous face. The reinterpretation of a

facial expression can be compared to the reinterpretation of a chord in music, when we hear it as a modulation first into this, then into that, key.

- * 537. It is possible to say "I read timidity in this face", but, at any rate, the timidity does not seem to be merely associated, outwardly connected, with the face; rather, fear is there, alive, in the features. If the features change slightly, we can speak of a corresponding change in the [145] fear. If we were asked, "Can you think of this face as an expression of courage too?" — we should, as it were, not know how to lodge courage in these features. Then perhaps I say, "I don't know what it would mean if this is a courageous face." But what would an answer to such a question be like? Perhaps one says: "Yes, now I understand: the face is, as it were, indifferent to the outer world." So we have somehow read courage into the face. Now once more, one might say, courage *fits* this face. But *what fits what* here?

538. There is a related case (though perhaps it will not seem so) when, for example, we Germans are surprised that in French the predicative adjective agrees with the substantive in gender, and when we explain it to ourselves by saying: they mean "der Mensch ist *ein guter*".

539. I see a picture which represents a smiling face. What do I do if I take the smile now as a kind one, now as malicious? Don't I often imagine it with a spatial and temporal context of kindness or malice? Thus I might, when looking at the picture, imagine it to be of a smiler smiling down on a child at play, or again on the suffering of an enemy.

This is in no way altered by the fact that I can also take the apparently genial situation and interpret it differently by putting it into a wider context. — If no special circumstances reverse my interpretation, I shall conceive a particular smile as kind, call it a "kind" one, react accordingly.

((Probability, frequency.))

540. "Isn't it very peculiar that, without the institution of language and all its surroundings, I shouldn't be able to think that it will soon stop raining?" — Do you want to say that it is strange that you should be unable to say these words to yourself and *mean* them without those surroundings?

Suppose someone were to point at the sky and come out with a number of unintelligible words. When we ask him what he means, he explains that the words mean “Thank heaven it’ll soon stop raining”. He even explains to us what the individual words mean. — I am assuming that he will, as it were, suddenly come to himself and say that the sentence was complete nonsense, but that when he uttered it, it had seemed to him like a sentence in a language he knew (perhaps even [146] like a familiar quotation.) — What am I to say now? Didn’t he understand the sentence as he was saying it? Wasn’t the whole meaning there in the sentence?

541. But what did this understanding, and the meaning, consist in? He uttered the sounds in a cheerful voice perhaps, pointing to the sky while it was still raining but was already beginning to clear up; *later* he made a connection between his words and the English words.

542. “But the point is, the words felt to him like the words of a language he knew well.” — Yes; a criterion for it is his later saying just *that*. And now *don’t* say: “The feel of the words in a language we know is of a quite particular kind.” (What is the *expression* of this feeling?)

543. Can’t I say: a cry, a laugh, are full of meaning?

And that means, roughly: much can be gathered from them.

544. When longing makes me exclaim “Oh, if only he’d come!”, the feeling gives the words ‘meaning’. But does it give the individual words their meanings?

But here one could also say that the feeling gave the words *truth*. And now you see how the concepts here shade into one another. (This recalls the question: what is the *sense* of a mathematical proposition?)

545. But when one says “I *hope* he’ll come” — doesn’t the feeling give the word “hope” its meaning? (And what about the sentence “I *no longer* hope he’ll come”?) The feeling does perhaps give the word “hope” its special ring; that is, it is expressed in that ring. — If the feeling gives the word its meaning, then here “meaning” amounts to: *that which matters*. But why is the feeling what matters?

Is hope a feeling? (Characteristic marks.)

546. In this way, I’d like to say, the words “Oh, if only he’d come!” are charged with my longing. And words can be wrung from us — like

a cry. Words can be *hard* to utter: those, for example, with which one renounces something, or confesses a weakness. (Words are also deeds.)

547. Negating: a ‘mental activity’. Negate something and observe what you are doing. — Do you perhaps inwardly shake your head? And if you do, is this process more deserving of our interest than, say, [147] that of writing a sign of negation in a sentence? Do you now know the *essence* of negation?

548. What is the difference between the two processes: wishing that something should happen and wishing that the same thing should *not* happen?

If one wanted to represent it pictorially, one might treat the picture of the event in different ways: cross it out, or put a line round it, and so on. But this strikes us as a *crude* method of expression. In word-language we do indeed use the sign “not”. This is like a clumsy expedient. One supposes that in *thought* it happens differently.

549. “How can the word ‘not’ negate?” — “The sign ‘not’ indicates that you are to take what follows negatively.” One would like to say: the sign of negation is our occasion for doing something — possibly something very complicated. It is as if the negation sign prompted us to do something. But what? That is not said. It is as if it only needed to be hinted at; as if we already knew. As if no explanation were needed, since we are already familiar with the matter anyway.

- * (a) “The fact that three negations yield a negation again must already be contained in the single negation that I am using now.” (The temptation to invent a myth of ‘meaning’.)

It looks as if it followed from the nature of negation that a double negation is an affirmation. (And there is something right about this. What? *Our* nature is connected with both.)

- (b) There can be no debate about whether these or other rules are the right ones for the word “not” (I mean, whether they accord with its meaning). For without these rules, the word has as yet no meaning; and if we change the rules, it now has another meaning (or none), and in that case we may just as well change the word too. [p. 147 n.]

550. Negating, one might say, is a gesture of exclusion, of rejection. But we use such a gesture in a great variety of cases!

551. "Is the negation in 'Iron does not melt at 100 degrees Centigrade' the same as in 'Two times two is not five'?" Is this to be decided by introspection, by trying to see what we are *thinking* as we utter the two sentences?

552. What if I were to ask: does it become evident, while we are uttering the sentences "This rod is 1 metre long" and "Here is 1 soldier", [148] that we mean different things by "1", that "1" has different meanings? — It does not become evident at all. — Say, for example, such a sentence as "1 metre is occupied by 1 soldier, and so 2 metres are occupied by 2 soldiers". Asked, "Do you mean the same by both 'ones'?", one would perhaps answer, "Of course I mean the same: *one!*" (Perhaps raising one finger.)

553. Now has "1" a different meaning when it stands for a measure and when it stands for a number? If the question is framed in *this* way, one will answer affirmatively.

554. We can easily imagine human beings with a 'more primitive' logic, in which something corresponding to our negation is applied only to certain sentences; perhaps to those that do not yet contain any negation. It would be possible to negate the sentence "He is going into the house", but a negation of the negated sentence would be senseless, or would count only as a repetition of the negation. Think of means of expressing negation different from ours: by the pitch of the uttered sentence, for instance. What would a double negation be like there?

555. The question of whether negation had the same meaning to these people as to us would be analogous to the question as to whether the figure "5" meant the same to people whose number series ended at 5 as to us.

556. Imagine a language with two different words for negation, "X" and "Y". Doubling "X" yields an affirmation, doubling "Y" an emphatic negation. Apart from that, the two words are used similarly. — Now have "X" and "Y" the same meaning in sentences where they occur without being repeated? — One might give various answers to this.

(a) The two words have different uses. So they have different meanings. But sentences in which they occur without being repeated, and which are otherwise the same, have the same sense.

(b) The two words have the same function in language-games, except for this one difference, which is just an unimportant matter of custom. The use of the two words is taught in the same way, by means of the same actions, gestures, pictures, and so on; and in explanations of the words, the difference in the ways they are used is appended as something incidental, as one of the capricious features of the language. That's why we'll say: "X" and "Y" have the same meaning.

(c) We connect different images with the two negations. "X", as it [149] were, turns the sense through 180°. And *that* is why two such negations restore the sense to its former position. "Y" is like shaking one's head. And just as one doesn't annul a shake of the head by shaking it again, so too one doesn't cancel one "Y" by a second one. And so even if in practice sentences with the two signs of negation come to the same thing, still "X" and "Y" express different ideas.

557. When I uttered the double negation, what constituted my meaning it as an emphatic negation and not as an affirmation? There is no answer running: "It consisted in the fact that . . ." In certain circumstances, instead of saying "This reiteration is meant as an emphasis", I can *pronounce* it as an emphasis. Instead of saying "The reiteration of the negation is meant to cancel it", I can, for example, insert brackets. — "Yes, but these brackets may themselves have different roles; for who says that they are to be taken as *brackets*?" No one does. And haven't you explained your own conception in turn by means of words? What the brackets mean lies in the technique of applying them. The question is: under what circumstances does it make sense to say "I meant . . .", and what circumstances warrant my saying "He meant . . .?"

558. What does it mean to say that the "is" in "The rose is red" has a different meaning from the "is" in "Two times two is four"? If it is answered that it means that different rules are valid for these two words, the retort is that we have only *one* word here. — And if I attend only to the grammatical rules, these do allow the use of the word "is" in both kinds of context. — But the rule which shows that the word "is" has different meanings in these sentences is the one allowing us to replace the word "is" in the second sentence by the sign of equality, and forbidding this substitution in the first sentence.

- * 559. One would like to speak of the function of a word in *this* sentence. As if the sentence were a mechanism in which the word had a particular function. But what does this function consist in? How does it come to light? For after all, nothing is hidden — we see the whole sentence! The function must come out in operating the calculus. ((Meaning-bodies.))
- * 560. “The meaning of a word is what an explanation of its meaning explains.” That is, if you want to understand the use of the word “meaning”, look for what one calls “an explanation of meaning”. |150|

561. Now isn’t it remarkable that I say that the word “is” is used with two different meanings (as copula and as sign of equality), and wouldn’t want to say that its meaning is its use; its use, namely, as copula and as sign of equality?

One would like to say that these two kinds of use don’t yield a single meaning; the union under one head, effected by the same word, is an inessential coincidence.

562. But how can I decide what is an essential, and what an inessential, coincidental, feature of the notation? Is there some reality lying behind the notation, to which its grammar conforms?

Let’s think of a similar case in a game: in draughts a king is indicated by putting one piece on top of another. Now won’t one say that it’s inessential to the game for a king to consist of two pieces?

563. Let’s say that the meaning of a piece is its role in the game. — Now let it be decided by lot, before a game of chess begins, which of the players gets white. For this, one player holds a king in each closed hand, while the other chooses one of the two hands, trusting to luck. Will it be counted as part of the role of the king in chess that it is used to draw lots in this way?

564. So I am inclined to distinguish between essential and inessential rules in a game too. The game, one would like to say, has not only rules but also a *point*.

565. What’s the point of using the same word? In the calculus we don’t make use of any such sameness of sign! — Why the same chess piece for both purposes? — But what does it mean here to speak of “making use of the sameness of sign”? For isn’t it a single use, if we actually use the same word?

566. And now it looks as if the use of the same word or the same piece had a *purpose* — if the sameness is not coincidental, inessential. And as if the purpose were that one should be able to recognize the piece and know how to play. — Are we talking about a physical or a logical possibility here? If the latter, then the sameness of the piece is part of the game.

567. But, after all, the game is supposed to be determined by the rules! So, if a rule of the game prescribes that the kings are to be used for drawing lots before a game of chess, then that is an essential part of the game. What objection might one make to this? That one does not see the point of this prescription. Perhaps as one likewise wouldn't see the point of a rule by which each piece had to be turned round three times [151] before one moved it. If we found this rule in a board-game, we'd be surprised and would speculate about the purpose of the rule. ("Was this prescription meant to prevent one from moving without due consideration?")

568. If I understand the character of the game aright, I might say, then this isn't an essential part of it.

* ((Meaning — a physiognomy.))

569. Language is an instrument. Its concepts are instruments. Now perhaps one thinks that it can make no *great* difference *which* concepts we employ. As, after all, it is possible to do physics in feet and inches as well as in metres and centimetres; the difference is merely one of convenience. But even this is not true if, for instance, calculations in some system of measurement demand more time and trouble than we can afford.

570. Concepts lead us to make investigations. They are the expression of our interest and direct our interest.

571. A misleading parallel: psychology treats of processes in the mental sphere, as does physics in the physical.

* Seeing, hearing, thinking, feeling, willing, are not the subject matter of psychology *in the same sense* as that in which the movements of bodies, the phenomena of electricity, and so forth are the subject matter of physics. You can see this from the fact that the physicist sees, hears, thinks about and informs us of these phenomena, and the psychologist observes the utterances (the behaviour) of the subject.

572. Expectation is, grammatically, a state; like being of an opinion, hoping for something, knowing something, being able to do something. But in order to understand the grammar of these states, it is necessary to ask: "What counts as a criterion for anyone's being in such a state?" (States of hardness, of weight, of fitting.)

573. To have an opinion is a state. — A state of what? Of the soul? Of the mind? Well, what does one say has an opinion? Mr N.N., for example. And that is the correct answer.

One should not expect to be enlightened by the answer to *that* question. Other questions that go deeper are: What, in particular cases, do we regard as criteria for someone's being of such-and-such an opinion? When do we say that he reached this opinion at that time? When that he has altered his opinion? And so on. The picture that the answers to these questions give us shows *what* gets treated grammatically as a *state* here. |152|

574. A sentence, and hence in another sense a thought, can be the 'expression' of belief, hope, expectation, etc. But believing is not thinking. (A grammatical remark.) The concepts of believing, expecting, hoping are less different in kind from one another than they are from the concept of thinking.

575. When I sat down on this chair, of course I believed it would bear me. The thought of its collapsing never crossed my mind.

But: "In spite of everything that he did, I held fast to the belief . . ." Here there is thought, and perhaps a recurrent struggle to maintain an attitude.

576. I look at a burning fuse, excitedly watching the flame approach the explosive. Perhaps I don't think anything at all, or have lots of disjointed thoughts. This is certainly a case of expecting.

577. We say "I'm expecting him" when we believe that he'll come, though his coming does not *occupy* our thoughts. (Here "I'm expecting him" would mean "I'd be surprised if he didn't come" — and that will not be called a description of a state of mind.) But we also say "I'm expecting him" when it is supposed to mean: I'm eagerly awaiting him. We could imagine a language in which different verbs were consistently used in these cases. And similarly, more than one verb where we speak of 'believing', 'hoping', and so on. The concepts of such a language would

perhaps be more suitable for understanding psychology than are the concepts of our language.

578. Ask yourself: What does it mean to *believe* Goldbach's conjecture? What does this belief consist in? In a feeling of certainty as we state, hear or think the conjecture? (That would not interest us.) And what are the characteristics of this feeling? Why, I don't even know how far the feeling may be caused by the conjecture itself.

Am I to say that belief is a colour tone of our thoughts? Where does this idea come from? Well, there is a tone of believing, as of doubting.

I should like to ask: how does the belief engage with this conjecture? Let us look and see what are the consequences of this belief, where it takes us. "It makes me search for a proof of the conjecture." — Very well; and now let us look and see what your searching really consists in! Then we shall know what believing the conjecture amounts to. [153]

579. A feeling of confidence. How is it manifested in behaviour?

580. An 'inner process' stands in need of outward criteria.

581. An expectation is embedded in a situation, from which it arises. The expectation of an explosion may, for example, arise from a situation in which an explosion *is to be expected*.

582. If, instead of saying "I expect the explosion any moment now", someone whispered "It'll go off in a moment", then his words do not describe a feeling, although they and their tone may be a manifestation of it.

583. "But you talk as if I weren't really expecting, hoping, *now* — when I thought I was. As if what were happening *now* had no deep significance." — What does it mean to say "What is happening now has significance" or "has deep significance"? What is a *deep* feeling? Could someone have a feeling of ardent love or hope for 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. (A smiling mouth *smiles* only in a human face.)

584. Now suppose I sit in my room and hope that N.N. will come and bring me some money, and suppose one minute of this state could be

isolated, cut out of its context; would what happened in it then not be hoping? — Think, for example, of the words which you may utter in this time. They are no longer part of this language. And in different surroundings the institution of money doesn't exist either.

A coronation is the picture of pomp and dignity. Cut one minute of this proceeding out of its surroundings: the crown is being placed on the head of the king in his coronation robes. — But in different surroundings, gold is the cheapest of metals, its gleam is thought vulgar. There the fabric of the robe is cheap to produce. A crown is a parody of a respectable hat. And so on.

585. When someone says “I hope he'll come”, is this a *report* about his state of mind, or a *manifestation* of his hope? — I may, for example, say it to myself. And surely I am not giving myself a report. It may be a sigh; but it need not be. If I tell someone, “I can't keep my mind on my work today; I keep on thinking of his coming” — *this* will be called a description of my state of mind. |154|

586. “I've heard he is coming; I've been expecting him all day.” This is a report on how I have spent the day. — In conversation, I come to the conclusion that a particular event is to be expected, and I draw this conclusion in the words “So now I must expect him to come”. This may be called the first thought, the first act, of this expectation. — The exclamation “I'm expecting him — I'm longing to see him!” may be called an act of expecting. But I can utter the same words as the result of self-observation, and then they might amount to: “So, after all that has happened, I'm still expecting him with longing.” It all depends on what led up to these words.

587. Does it make sense to ask “How do you know that you believe that?” — and is the answer: “I find it out by introspection”?

In *some* cases it will be possible to say some such thing, in most not.

It makes sense to ask, “Do I really love her, or am I only fooling myself?”, and the process of introspection is the calling up of memories, of imagined possible situations, and of the feelings that one would have if . . .

588. “I'm in two minds whether to go away tomorrow.” (This may be called a description of a state of mind.) — “Your arguments don't convince me; now as before it is my intention to go away tomorrow.” Here

one is tempted to call the intention a feeling. The feeling is one of a certain rigidity, of irrevocable decision. (But here too there are many different characteristic feelings and attitudes.) — I am asked: “How long are you staying here?” I reply: “Tomorrow I’m going away; it’s the end of my holidays.” — But, by contrast, I say, at the end of a quarrel, “All right! Then I’ll go tomorrow!” — I make a decision.

* 589. “In my heart I’ve decided it.” And one is even inclined to point to one’s breast as one says it. Psychologically, this way of speaking should be taken seriously. Why should it be taken less seriously than the statement that faith is a state of the soul? (Luther: “Faith is under the left nipple.”)

590. Someone might learn to understand the meaning of the expression “seriously *meaning* what one says” by a gesture of pointing at the heart. But now one must ask: “What shows that he has learnt it?” |155|

591. Am I to say that any one who has an intention has an experience of tending towards something? That there are particular experiences of ‘tending’? — Remember this case: if one urgently wants to make some remark, some objection, in a discussion, it often happens that one opens one’s mouth, draws a breath, and holds it; if one then decides to let the objection drop, one lets one’s breath out. The experience of what goes on here seems to be an experience of a tendency to say something. An observer will realize that I wanted to say something and then thought better of it. In *this* situation, that is. — In a different one, he would not interpret my behaviour in this way, however characteristic of the intention to speak it may be in the present situation. And is there any reason for assuming that this same experience could not occur in some quite different situation in which it has nothing to do with any ‘tending’?

592. “But when you say ‘I intend to go away’, you surely mean it! Here again it just is the mental act of meaning that gives the sentence life. If you merely repeat the sentence after someone else, say in order to mock his way of speaking, then you utter it without this act of meaning.” — When we are doing philosophy, it may sometimes look like that. But let’s think up really *different* situations and conversations, and the ways in which that sentence is uttered in them. — “I always discover a mental undertone; perhaps not always the *same* one.” — And was there no

undertone there when you repeated the sentence after someone else? And how is the ‘undertone’ now to be separated from the rest of the experience of speaking?

593. A main cause of philosophical diseases — a one-sided diet: one nourishes one’s thinking with only one kind of example.

594. “But the words, significantly uttered, have, after all, not only a surface, but also a dimension of depth!” After all, something different does take place when they are uttered significantly from when they are merely uttered. — How I express this is not the point. Whether I say that in the first case they have depth; or that something goes on in me, in my mind, as I utter them; or that they have an atmosphere — it always comes to the same thing.

“Well, if we all agree about that, won’t it be true?”

(I cannot accept the other person’s testimony, because it is not *testimony*. It only tells me what he is *inclined* to say.)

595. It is natural for us to say a sentence in such-and-such a context, and unnatural to say it in isolation. Are we to say that [156] there is a particular feeling accompanying the utterance of every sentence whose utterance comes naturally to us?

596. The feeling of ‘familiarity’ and of ‘naturalness’. It is easier to come across a feeling of unfamiliarity and of unnaturalness. Or, *feelings*. For not everything that is unfamiliar to us makes an impression of unfamiliarity upon us. And here one has to consider what we call “unfamiliar”. If a boulder lies on the road, we know it for a boulder, but perhaps not for the one which has always been lying there. We recognize a man, say, as a man, but not as an acquaintance. There are feelings of long-standing familiarity: they are sometimes manifest in a particular way of looking or by the words “The same old room!” (which I occupied many years before and, now returning, find unchanged). Equally, there are feelings of strangeness: I stop short, look at the object or man questioningly or suspiciously, and say “I find it all strange”. — But the existence of this feeling of strangeness does not give us a reason for saying that every object which we know well and which does not seem strange to us gives us a feeling of familiarity. — It is as if we thought that the space once filled by the feeling of strangeness must surely be filled by *something*. The space for these kinds of atmosphere is there, and if one of them is not filling it, then another is.

597. Germanisms will creep into the speech of a German who speaks English well, even though he does not first construct the German expression and then translate it into English. This will make him speak English *as if he were translating* ‘unconsciously’ from German. So too, we often think in a way that makes it seem as if our thinking were grounded in a thought-schema, as if we were translating from a more primitive mode of thought into our own.

598. When we do philosophy, we are inclined to hypostatize feelings where there are none. They serve to explain our thoughts to us.

“*Here* the explanation of our thinking requires a feeling!” It is as if our conviction answered to this demand.

599. In philosophy no inferences are drawn. “But it must be like this!” is not a philosophical proposition. Philosophy only states what everyone concedes to it.

600. Does everything that we do not find conspicuous make an impression of inconspicuousness? Does what is ordinary always make the *impression* of ordinariness? |157|

601. When I talk about this table — do I *remember* that this object is called a “table”?

602. Asked “Did you recognize your desk when you entered your room this morning?” — I’d no doubt say “Certainly!” And yet it would be misleading to say that any recognizing had occurred. Of course, the desk was not strange to me; I wasn’t surprised to see it, as I would have been if another one had been standing there, or some unfamiliar object.

603. No one will say that every time I enter my room, my long familiar surroundings, there occurs an act of recognition of all that I see and have seen hundreds of times before.

604. It is easy to misconceive what is called “recognizing”; as if recognizing always consisted in comparing two impressions with one another. It is as if I carried a picture of an object with me and used it to identify an object as the one represented by the picture. Our memory seems to us to be the agent of such a comparison, by preserving a picture of what has been seen before, or by allowing us to look into the past (as if down a spyglass).

605. Indeed, it is not so much as if I were comparing the object with a picture set beside it, but as if the object *coincided* with the picture. So I see only one thing, not two.

606. We say "The expression in his voice was *genuine*". If it was spurious, we think of another one, as it were behind it. — *This* is the face he shows the world; inwardly he has another one. — But this does not mean that when his expression is *genuine*, he has two identical faces.

* ((A quite particular expression.))

607. How does one guess the time? I don't mean by clues, such as the position of the sun, the brightness of the room, and the like. — One asks oneself, say, "What time can it be?", pauses a moment, perhaps imagines a clock face, and then says a time. — Or one considers various possibilities, thinks first of one time, then of another, and in the end stops at a particular one. That's the sort of thing one does. — But isn't the hunch accompanied by a feeling of conviction; and doesn't that mean that it now accords with an inner clock? — No, I don't read the time off from any clock; there is a feeling of conviction inasmuch as I say a time to myself *without* a feeling of doubt, with calm assurance. — But doesn't something click as I say [158] the time, stopping at a number? And I'd never have spoken of 'a feeling of conviction' here, but would have said: I considered a while and then plumped for its being quarter past five. — But what did I go by? I might perhaps have said "just by feeling", which only means that I relied on a hunch. — But surely you must at least have put yourself in a particular state of mind in order to guess the time; and you don't take just any old idea of what time it is as giving the correct time! — To repeat: I *asked* myself "I wonder what time it is" That is, I did not, for example, read this sentence in a story, or quote it as someone else's utterance; nor was I practising the pronunciation of these words; and so on. *These* were not the circumstances of my saying the words. — But then, *what* were the circumstances? — I was thinking about my breakfast, and wondering whether it would be late today. These were the kind of circumstances. — But do you really not see that you were in a state of mind which, though intangible, is characteristic of guessing the time, as if you were surrounded by an atmosphere characteristic of doing so. — Yes; what was characteristic was that I

said to myself "I wonder what time it is" — And if this sentence has a particular atmosphere, how am I to separate it from the sentence itself? It would never have occurred to me to think that the sentence had such an aura, if I had not thought of how one might say it differently — as a quotation, as a joke, as practice in elocution, and so on. And *then* all at once I wanted to say — then all at once it seemed to me — that I must after all have *meant* the words somehow specially; differently, that is, from in those other cases. The picture of the special atmosphere forced itself upon me; I virtually see the atmosphere before me — so long, that is, as I do not look at what, according to my memory, really happened.

And as for the feeling of certainty: I sometimes say to myself, "I am sure it's . . . o'clock", and in a more or less confident tone of voice, and so on. If you ask me the *reason* for this certainty, I have none.

If I say: I read it off from an inner clock — that is a picture, and all that corresponds to it is that I estimated the time. And the purpose of the picture is to assimilate this case to the other one. I am reluctant to acknowledge two different cases here.

608. The idea of the intangibility of that mental state in estimating the time is of the greatest importance. Why is it *intangible*? Isn't it [159] because we refuse to count what is tangible about our state as part of the specific state which we are postulating?

609. The description of an atmosphere is a special application of language, for special purposes.

* ((Interpreting 'understanding' as atmosphere; as a mental act. One can fabricate an atmosphere apropos anything. 'An indescribable character.'))

610. Describe the aroma of coffee! — Why can't it be done? Do we lack the words? And for *what* are words lacking? — But where do we get the idea that such a description must, after all, be possible? Have you ever felt the lack of such a description? Have you tried to describe the aroma and failed?

* ((I am inclined to say: "These notes say something glorious, but I do not know what." These notes are a powerful gesture, but I cannot put anything side by side with it that will serve as an explanation. A grave nod. James: "We lack the words." Then why don't we introduce new ones? What would have to be the case for us to be able to?))

- * 611. "Willing — wanting — too is merely an experience," one would like to say (the 'will' too only 'idea'). It comes when it comes, and I cannot bring it about.

Not bring it about? — Like *what*? What can I bring about, then? What am I comparing it with when I say this?

612. I wouldn't say of the movement of my arm, for example, that it comes when it comes, and so on. And this is the domain in which it makes sense to say that something doesn't simply happen to us, but that we *do* it. "I don't need to wait for my arm to rise — 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.

613. In the sense in which I can ever bring about anything (such as stomach-ache through overeating), I can also bring about wanting. In this sense, I bring about wanting to swim by jumping into the water. I suppose I was trying to say: I can't want to want; that is, it makes no sense to speak of wanting to want. "Wanting" is not the name of an action, and so not of a voluntary one either. And my use of a wrong expression came from the fact that one is inclined to think of wanting as an immediate non-causal bringing about. But a misleading analogy lies at the root of this idea; the causal [160] nexus seems to be established by a mechanism connecting two parts of a machine. The connection may be disrupted if the mechanism malfunctions. (One thinks only of the normal ways in which a mechanism goes wrong, not, say, of cog-wheels suddenly going soft, or penetrating each other, and so on.)

614. When I raise my arm 'voluntarily', I don't make use of any means to bring the movement about. My wish is not such a means either.

615. "Willing, if it is not to be a sort of wishing, must be the action itself. It mustn't stop anywhere short of the action." If it is the action, then it is so in the ordinary sense of the word; so it is speaking, writing, walking, lifting a thing, imagining something. But it is also striving, trying, making an effort — to speak, to write, to lift a thing, to imagine something, and so on.

616. When I raise my arm, I have *not* wished it to rise. The voluntary action excludes this wish. It is, however, possible to say: "I hope I shall draw the circle faultlessly." And that is to express a wish that one's hand should move in such-and-such a way.

617. If we cross our fingers in a special way, we are sometimes unable to move a particular finger when someone tells us to do so, if he only *points* to the finger — merely shows it to the eye. However, if he touches it, we *can* move it. One would like to describe this experience as follows: we are unable to *will* to move the finger. The case is quite different from that in which we are not able to move the finger because someone is, say, holding it. One is now inclined to describe the former case by saying: one can't find any point of application for the will until the finger is touched. Only when one feels the finger can the will know where it is to engage. — But this way of putting it is misleading. One would like to say: "How am I to know where I am to catch hold with the will, if the feeling does not indicate the place?" But then how do I know to what point I am to direct the will when the feeling *is* there?

It is experience that shows that in this case the finger is, as it were, paralysed until we feel a touch on it; it could not have been known *a priori*.

- * 618. One imagines the willing subject here as something without any mass (without any inertia), as a motor which has no inertia in itself to overcome. And so it is only mover, not moved. That is: [161] one can say "I will, but my body does not obey me" — but not: "My will does not obey me." (Augustine)

But in the sense in which I can't fail to will, I can't try to will either.

619. And one might say: "It is only inasmuch as I can never try to will that I can always will."

620. *Doing* itself seems not to have any experiential volume. It seems like an extensionless point, the point of a needle. This point seems to be the real agent — and what happens in the realm of appearances merely consequences of this doing. "I *do*" seems to have a definite sense, independently of any experience.

621. But there is one thing we shouldn't overlook: when 'I raise my arm', my arm rises. And now a problem emerges: what is left over if I subtract the fact that my arm rises from the fact that I raise my arm?

- * ((Are the kinaesthetic sensations my willing?))

622. When I raise my arm, I don't usually *try* to raise it.

623. "I want to get to that house at all costs." — But if there is no difficulty about it, *can* I strive at all costs to get to the house?

624. In the laboratory, when subjected to an electric current, for example, someone with his eyes shut says "I am moving my arm up and down" — though his arm is not moving. "So", we say, "he has the special feeling of making that movement." — Move your arm to and fro with your eyes shut. And now try, while you do so, to talk yourself into the idea that your arm is staying still and that you are only having certain strange feelings in your muscles and joints!

625. "How do you know that you've raised your arm?" — "I feel it." So what you recognize is the feeling? And are you certain that you recognize it right? — You're certain that you've raised your arm; isn't this the criterion, the measure, of recognizing?

626. "When I touch this object with a stick, I have the sensation of touching in the tip of the stick, not in the hand that holds it." When someone says "The pain isn't here in my hand, but in my wrist", this has the consequence that the doctor examines the wrist. But what difference does it make if I say that I feel the hardness of the [162] object in the tip of the stick or in my hand? Does what I say mean "It's as if I had nerve endings in the tip of the stick?" *In what way* is it like that? — Well, I am at any rate inclined to say, "I feel the hardness and so forth in the tip of the stick". What goes with this is that when I touch the object, I look not at my hand but at the tip of the stick; that I describe what I feel by saying "I feel something hard and round there" — not "I feel a pressure against the tips of my thumb, middle finger, and index finger . . ." If, for example, someone were to ask me, "What are you now feeling in the fingers that hold the probe?", I might reply: "I don't know — I feel something hard and rough *over there*".

627. Consider the following description of a voluntary action: "I form the decision to pull the bell at 5 o'clock; and when it strikes 5, my arm makes this movement." — Is that the correct description, and not *this* one: ". . . and when it strikes 5, I raise my arm"? — One would like to supplement the first description: "And lo and behold! my arm goes up when it strikes 5." And this "lo and behold!" is precisely what

doesn't belong here. I do *not* say "Look, my arm is going up!" when I raise it.

628. So one might say: voluntary movement is marked by the absence of surprise. And now I don't mean you to ask "But *why* isn't one surprised here?"

629. When people talk about the possibility of foreknowledge of the future, they always overlook the case of predicting one's voluntary movements.

630. Consider these two language-games:

(a) Someone gives someone else the order to make particular movements with his arm, or to assume particular bodily positions (gymnastics instructor and pupil). And a variant of this language-game is this: the pupil gives himself orders and then carries them out.

(b) Someone observes certain regular processes — for example, the reactions of different metals to acids — and thereupon makes predictions about the reactions that will occur in certain cases.

There is an evident kinship between these two language-games, and also a fundamental difference. In both, one might call the spoken words "predictions". But compare the training which leads to the first technique with the training for the second one! |163|

631. "I'm going to take two powders now, and in half an hour I shall be sick." — It explains nothing to say that in the first case I am the agent, in the second merely the observer. Or that in the first case I see the causal connection from inside, in the second from outside. And much else to the same effect.

Nor is it to the point to say that a prediction of the first kind is no more infallible than one of the second kind.

It wasn't on the basis of observations of my behaviour that I said I was going to take two powders. The antecedents of this statement were different. I mean the thoughts, actions, and so on which led up to it. And it can only be misleading to say: "The only essential presupposition of your utterance was precisely your decision."

632. I do not want to say that in the case of the expression of intention "I am going to take two powders" the prediction is a cause — and its fulfilment the effect. (Perhaps a physiological investigation could determine this.) So much, however, is true: we can often predict a man's actions from his expression of a decision. An important language-game.

633. "You were interrupted a while ago; do you still know what you were going to say?" — If I do know now, and say it, does that mean that I had already thought it before, only not said it? No. Unless you take the certainty with which I continue the interrupted sentence as a criterion of the thought's already having been completed at that time. — But, to be sure, the situation and the thoughts I had already contain all sorts of things to help the sentence on.

634. When I continue the interrupted sentence and say that *this* was how I had been going to continue it, this is similar to elaborating a train of thought from brief notes.

Then don't I *interpret* the notes? Was only *one* continuation possible in these circumstances? Of course not. But I didn't *choose* between these interpretations. I *remembered* that I was going to say this.

635. "I was going to say . . ." — You remember various details. But not even all of them together show this intention. It is as if a snapshot of a scene had been taken, but only a few scattered details of it were to be seen: here a hand, there a bit of a face, or a hat — the rest is dark. And now it is as if I knew quite certainly what the whole picture represented. As if I could read the darkness. [164]

636. These 'details' are not irrelevant in the sense in which other circumstances, which I can also remember, are irrelevant. But if I tell someone "For a moment I was going to say . . .", he doesn't learn those details from this, nor need he guess them. He needn't know, for instance, that I had already opened my mouth to speak. But he *can* 'fill out the picture' in this way. (And this ability is part of understanding what I tell him.)

637. "I know exactly what I was going to say!" And yet I didn't say it. — And yet I don't read it off from some other process which took place then and which I remember.

Nor am I *interpreting* that situation and its antecedents, which, after all, I neither consider nor judge.

638. How does it come about that, in spite of this, I am inclined to see an interpretation in saying "For a moment I was going to deceive him"?

"How can you be certain that, for a moment, you were going to deceive him? Weren't your actions and thoughts much too rudimentary?"

For may the evidence not be too scanty? Yes, when one follows it up, it seems extraordinarily scanty; but isn't this because one is taking no account of the background of this evidence? If, for a moment, I intended to pretend to someone that I was unwell, that required an antecedent context.

If someone says "For a moment . . .", is he really only describing a momentary process?

But not even the entire background was my evidence for saying "For a moment . . ."

* 639. Meaning something, one wants to say, *develops*. But there is a mistake in this too.

640. "This thought links up with thoughts which I have had before."

— How does it do so? Through a *feeling* of such a link? But how can a feeling really link these thoughts? — The word "feeling" is very misleading here. But it is sometimes possible to say with certainty, "This thought is connected with those earlier ones", even though one is unable to point out the connection. Perhaps one will succeed later.

641. "Even if I had uttered the words 'Now I'm going to deceive him', my intention would have been no more certain than it already was."

— But if you had uttered those words, would you necessarily have meant them seriously? (So [165] the most explicit expression of intention is by itself insufficient evidence of intention.)

642. "At that moment I hated him." — What happened here? Didn't it consist in thoughts, feelings and actions? And if I were to rehearse that moment to myself, I'd assume a particular expression, think of certain happenings, breathe in a particular way, arouse certain feelings in myself. I might think up a conversation, a whole scene in which that hatred flared up. And I might act this scene with feelings approximating those of a real incident. That I have actually been through something of the sort will naturally help me to do so.

643. If I now become ashamed of this incident, I am ashamed of the whole thing: of the words, of the poisonous tone, and so on.

644. "I'm not ashamed of what I did then, but of the intention which I had." — And didn't the intention lie *also* in what I did? What justifies the shame? The whole background of the incident.

645. "For a moment I was going to . . ." That is, I had a particular feeling, an inner experience; and I remember it. — And now remember *quite precisely!* Then the 'inner experience' of intending seems to vanish again. Instead, one remembers thoughts, feelings, movements and also connections with earlier situations.

It is as if one had altered the adjustment of a microscope: one did not see before what is now in focus.

646. "Well, that only shows that you have adjusted your microscope wrongly. You were supposed to examine a particular slice of the preparation, and now you are looking at a different one."

There is something right about this. But suppose that (with a certain adjustment of the lenses) I did remember a particular sensation; what allows me to say that it is what I call the "intention"? It might be that (for example) a particular tickle accompanied every one of my intentions.

647. What is the natural expression of an intention? — Look at a cat when it stalks a bird; or a beast when it wants to escape.

((Connection with propositions about sensations.))

648. "I no longer remember the words I used, but I remember my intention precisely; I wanted my words to calm him down." What does my memory *show* me; what does it bring before my mind? Suppose it did [166] nothing but suggest those words to me! — and perhaps others which fill out the picture still more exactly. — ("I don't remember my words any more, but I certainly remember their spirit.")

649. "So if someone has not learned a language, is he unable to have certain memories?" Of course — he cannot have linguistic memories, linguistic wishes or fears, and so on. And memories and suchlike in language are not mere threadbare representations of the *real* experiences; for is what is linguistic not an experience?

650. We say a dog is afraid his master will beat him; but not: he is afraid his master will beat him tomorrow. Why not?

651. "I remember that I would have been glad then to stay still longer." — What picture of this desire comes before my mind? None at all. What I see in my memory allows no conclusion as to my feelings. And yet I remember quite clearly that they were there.

652. "He sized him up with a hostile glance and said . . ." The reader of the story understands this; he has no doubt in his mind. Now you say: "Very well, he supplies the meaning, he guesses it." — Generally speaking, no. Generally speaking, he supplies nothing, guesses nothing. — But it is also possible that the hostile glance and the words later prove to have been pretence, or that the reader is kept in doubt whether they are so or not, and so that he really does guess at a possible interpretation. — But then the main thing he guesses is a context. He says to himself, for example: the two men affecting such hostility here are in reality friends, and so forth.

((("If you want to understand the sentence, you have to imagine the psychological significance, the states of mind involved.")))

653. Imagine this case: I tell someone that I walked a certain route, going by a map which I had prepared beforehand. Thereupon I show him the map, and it consists of lines on a piece of paper; but I cannot explain how these lines come to be a map of my route, I cannot tell him any rule for interpreting the map. Yet I did follow the drawing with all the characteristic tokens of reading a map. I might call such a drawing a 'private' map; or the phenomenon that I have described, "following a private map". (But this expression would, of course, be very easy to misunderstand.)

Could I now say: "I read off my having then meant to do such-and-[167] such, as if from a map, although there is no map"? That, however, means nothing but: *I am now inclined to say* "I read the intention of acting thus in certain states of mind which I remember".

* 654. Our mistake is to look for an explanation where we ought to regard the facts as 'proto-phenomena'. That is, where we ought to say: *this is the language-game that is being played.*

655. The point is not to explain a language-game by means of our experiences, but to take account of a language-game.

656. What is the *purpose* of telling someone that previously I had such-and-such a wish? — Regard the language-game as the *primary thing*. And regard the feelings, and so forth, as a way of looking at, interpreting, the language-game!

One might ask: how did human beings ever come to make the kind of linguistic utterance which we call "reporting a past wish" or "a past intention"?

657. Suppose this sort of utterance always took the form “I said to myself, ‘if only I could stay longer!’” The purpose of such a report might be to acquaint someone with my reactions. (Compare the grammar of “mean” and “vouloir dire”.)

658. Suppose we always expressed the fact that a man had an intention by saying “He as it were said to himself ‘I will . . .’” — That is the picture. And now I want to know: how does one employ the expression “as it were to say something to oneself”? For it doesn’t mean: to say something to oneself.

659. Why do I want to tell him about an intention too, over and above telling him what I did? — Not because the intention too was something going on at that time. But because I want to tell him something about *myself*, which goes beyond what happened at that time.

I reveal to him something of myself when I tell him what I was going to do. — Not, however, on grounds of self-observation, but by way of a reaction (it might also be called an intuition).

660. The grammar of the expression “I was then going to say . . .” is related to that of the expression “I could then have gone on”.

In the one case I remember an intention, in the other I remember having understood. [168]

661. I remember having meant *him*. Am I remembering a process or a state? — When did it begin, how did it continue; and so on?

662. In an only slightly different situation, instead of silently beckoning, he would have said to someone “Tell N. to come to me”. One may now say that the words “I wanted N. to come to me” describe the state of my mind at that time; and again one may *not* say so.

663. If I say “I meant *him*”, a picture might come to my mind, perhaps of how I looked at him, and so forth; but the picture is only like an illustration to a story. From it alone, it would mostly be impossible to infer anything at all; only when one knows the story, does one know what the picture is for.

664. In the use of words, one might distinguish ‘surface grammar’ from ‘depth grammar’. What immediately impresses itself upon us about the

use of a word is the way it is used in the sentence structure, the part of its use — one might say — that can be taken in by the ear. — And now compare the depth grammar, say of the verb “to mean”, with what its surface grammar would lead us to presume. No wonder one finds it difficult to know one’s way about.

665. Imagine someone pointing to his cheek with a grimace of pain and saying “abracadabra!” — We ask, “What do you mean?” And he answers, “I meant toothache.” — You at once think to yourself: how can one ‘mean toothache’ by that word? Or, what did to *mean* pain by that word *amount to*? And yet, in a different context, you would have asserted that the mental activity of *meaning* such-and-such was just what was most important in using language.

But how come? — 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.

666. Imagine that you were in pain and were simultaneously hearing a piano being tuned in the next room. You say “It’ll soon stop”. It surely makes quite a difference whether you mean the pain or the piano-tuning! — Of course; but what does this difference consist in? I admit, in many cases some direction of attention will correspond to your meaning one thing or another, just as a look often does, or a gesture, or a way of shutting one’s eyes which might be called “looking into oneself”. |169|

667. Imagine someone simulating pain, and then saying “It’ll get better soon”. Can’t one say that he means the pain even though he is not concentrating his attention on any pain? — And what about when I finally say “It’s stopped now”?

668. But can’t one also lie in this way: one says “It’ll stop soon”, and means pain — but when asked “What did you mean?”, one answers “The noise in the next room”? In this sort of case, one perhaps says: “I was going to answer . . . , but thought better of it and answered . . . ”

669. When speaking, one can refer to an object by pointing at it. Here pointing is a part of the language-game. And now it seems to us as if one spoke of a sensation by directing one’s attention to it. But where is the analogy? It evidently lies in the fact that one can point at a thing by *looking* or *listening*.

But in certain circumstances, even *pointing* at the object one is talking about may be quite inessential to the language-game, to one's thought.

670. Imagine that you were telephoning someone, and you said to him, "This table is too tall", and pointed at the table. What is the role of pointing here? Can I say: I *mean* the table in question by pointing at it? What is this pointing for, or these words, or whatever else may accompany them?

671. And what do I point at by the inner activity of listening? At the sound that comes to my ears, and at the silence when I hear *nothing*?

Listening, as it were, *searches for* an auditory impression, and so can't point at it, but only at the *place* where it is searching for it.

672. If the receptive attitude is called a kind of 'pointing' at something — then it isn't at the impression we get in that way.

673. A mental attitude doesn't 'accompany' words in the sense in which a gesture accompanies them. (As a man can travel alone, and yet be accompanied by my good wishes; or as a room can be empty, and yet flooded with light.)

674. Does one say, for example, "I didn't really mean my pain just now; my mind wasn't on it enough for that?" Do I ask myself, say, "What did I mean by this word just now? My attention was divided between my pain and the noise —"? |170|

675. "Tell me, what was going on in you when you uttered the words . . . ?" — The answer to this is not "I was meaning . . . "!

676. "I meant *this* by that word" is a statement which is used differently from one about an affection of the mind.

677. On the other hand: "When you were swearing just now, did you really mean it?" This amounts to something like: "Were you really angry?" — And the answer may be given on the basis of introspection, and is often some such thing as "I didn't mean it very seriously", "I meant it half jokingly", and so on. There are differences of degree here.

And one does indeed also say, "I was half thinking of him when I said that".

678. What does this meaning (the pain, or the piano-tuning) consist in? No answer comes — for the answers which at first sight suggest themselves are of no use. — “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.

679. “But can you doubt that you meant *this*? ” — No; but neither can I be certain of it, know it.

680. When you tell me that you cursed and meant N. as you did so, it is all one to me whether you looked at a picture of him, or imagined him, uttered his name, or whatever. The inferences from this fact that interest me have nothing to do with these things. On the other hand, someone might explain to me that cursing was *effective* only when one had a clear image of the man or spoke his name out loud. But one wouldn’t say, “It depends on how the man who is cursing *means* his victim”.

681. Nor, of course, does one ask: “Are you sure that you cursed *him*, that the link with him was established?”

Then this link is presumably very easy to establish, if one can be so sure of it, can know that it doesn’t miss its target! — Well, can it happen to me that I intend to write to one person and in fact write to another? And how might that occur?

682. “You said, ‘It’ll stop soon’. — Were you thinking of the noise or of your pain?” If he answers, “I was thinking of the piano-tuning” — is he stating that the link existed, or is he making it by means [171] of these words? — Can’t I say *both*? If what he said was true, didn’t the link exist — and is he not for all that making one which did not exist?

683. I draw a head. You ask, “Whom is that supposed to represent?” — I: “It’s supposed to be N.” — You: “But it doesn’t look like him; if anything, it’s rather like M.” — When I said it represented N., was I making a connection, or reporting one? And what connection was there?

684. What is there in favour of saying that my words describe an existing connection? Well, they refer to various things which didn’t materialize only with the words; they say, for example, that I *would have* given a particular answer then, if I had been asked. And even if this is only conditional, still it does say something about the past.

685. "Look for A" does not mean "Look for B"; but I may do just the same thing in obeying the two orders.

To say that something different must happen in the two cases would be like saying that the sentences "Today is my birthday" and "My birthday is on April 26th" must refer to different days, because their sense is not the same.

686. "Of course I meant B; I didn't think of A at all!"

"I wanted B to come to me, so as to . . ." — All this points to a wider context.

687. Instead of "I meant him", one can, of course, sometimes say, "I thought of him"; sometimes even "Yes, we were speaking of him". So, ask yourself what 'speaking of him' consists in!

688. In certain circumstances, one can say, "As I was speaking, I felt I was saying it *to you*". But I wouldn't say this if I were in any case talking with you.

689. "I am thinking of N." "I am speaking of N."

How do I speak of him? I say, for instance, "I must go and see N. today" — But surely that is not enough! After all, when I say "N.", I might mean various people of this name. — "Then there must surely be a further link between my words and N., for otherwise I would *still* not have meant **HIM**."

Certainly such a link exists. Only not as you imagine it: namely, by means of a mental *mechanism*.

(One compares "meaning him" with "aiming at him".) |172|

690. What if I at one time make an apparently innocent remark and accompany it with a furtive sidelong glance at someone; and at another time, looking straight ahead, speak openly of somebody present, mentioning his name — am I really thinking *specially* about him when I use his name?

691. When I make myself a sketch of N.'s face from memory, I can surely be said to *mean* him by my drawing. But which of the processes taking place while I draw (or before or afterwards) could I say is meaning him?

For one would, of course, like to say: when he meant him, he aimed at him. But how does someone do that, when he calls the other person's face to mind?

I mean, how does he call HIM to mind?

How does he call him?

692. Is it correct for someone to say: “When I gave you this rule, I meant that in this case you should . . .”? Even if he did not think of this case at all as he gave the rule? Of course it is correct. For “to mean it” just did not mean: to think of it. But now the question is: How are we to judge whether someone meant such-and-such? — That he has, for example, mastered a particular technique in arithmetic and algebra, and taught someone else the expansion of a series in the usual way, is such a criterion.

693. “When I teach someone the construction of the series . . . , I surely mean him to write . . . at the hundredth place.” — Quite right; you mean it. And evidently without necessarily even thinking of it. This shows you how different the grammar of the verb “to mean something” is from that of the verb “to think”. And nothing is more wrong-headed than to call meaning something a mental activity! Unless, that is, one is setting out to produce confusion. (Similarly, one might speak of an activity of butter when it rises in price; and if no problems are produced by this, it is harmless.) |173|

Philosophie der Psychologie — Ein Fragment

Philosophy of Psychology — A Fragment

[previously known as ‘Part II’]

1. One can imagine an animal angry, fearful, sad, joyful, startled. But hopeful? And why not?

A dog believes his master is at the door. But can he also believe that his master will come the day after tomorrow? — And *what* can he not do here? — How do I do it? — What answer am I supposed to give to this?

Can only those hope who can talk? Only those who have mastered the use of a language. That is to say, the manifestations of hope are modifications of this complicated form of life. (If a concept points to a characteristic of human handwriting, it has no application to beings that do not write.)

2. “Grief” describes a pattern which recurs, with different variations, in the tapestry of life. If a man’s bodily expression of sorrow and of joy alternated, say with the ticking of a clock, here we would not have the characteristic course of the pattern of sorrow or of the pattern of joy.

3. “For a second he felt violent pain.” — Why does it sound odd to say: “For a second he felt deep grief”? Only because it so seldom happens?

4. But don’t you feel grief *now*? (“But aren’t you playing chess *now*?”) The answer may be affirmative, but this does not make the concept of grief any more like the concept of sensation. — The question was really, of course, a temporal and personal one, not the logical question we wanted to ask.

* 5. “I must tell you: I am frightened.”

“I must tell you: it horrifies me.” — Well, one can say this in a *smiling* tone of voice too.

And do you mean to tell me that he doesn’t feel it? How else does he *know* it? — But even if it is a report, he does not learn it from his feelings.

6. Suppose that the feelings are produced by *gestures* of horror: the words “it horrifies me” are themselves such a gesture; and when I hear and feel them as I utter them, this belongs among the rest of those feelings. Now, why should the wordless gesture be the ground of the verbal one?

7. If someone says, “When I heard this word, it meant . . . to me”, he is referring to a *point in time* and to a *way of using the word*. (Of course, it is this combination that we fail to grasp.)

And the expression “I was then going to say . . .” refers to a *point in time* and to an *action*.

I speak of the essential *references* of the utterance in order to separate them from other particularities of the expression we use. And the references that are essential to the utterance are the ones which would make us translate an otherwise unfamiliar kind of expression into this, our customary form.

8. Someone who was unable to say that the word “till” can be both a verb and a conjunction or to construct sentences in which it was now the one and now the other, would be unable to manage simple schoolroom exercises. But a schoolboy is not asked to *take* the word in one way or another out of any context, or to report how he has taken it.

* 9. The words “the rose is red” are senseless if the word “is” has the meaning “is identical with”. — Does this mean: if you utter this sentence and mean the “is” in it as the sign of identity, the sense disintegrates?

We take a sentence and tell someone the meaning of each of its words; in this way he learns how to apply them, and so how to apply the sentence too. If we had chosen a senseless sequence of words instead of our sentence, he would not learn how to apply *that* sequence. And if one explains the word “is” as the sign of identity, then he doesn’t learn how to use the sentence “The rose is red”.

And yet there is something right about this ‘disintegration of the sense’. You get it in the following example. One might tell someone: if you want to pronounce the salutation “Hail!” expressively, you had better not think of hailstones as you say it.

10. Experiencing a meaning and experiencing a mental image. “In both cases”, one would like to say, “one is *experiencing* something, only something different. A different content is presented to — stands before — consciousness.” — What is the content of the experience of imagining? The answer is a picture, or a description. And what is the content [176] of the experience of a meaning? I don’t know how I should answer. — If there is any sense in the above remark, it is that the two concepts stand to each other as ‘red’ does to ‘blue’; and that is wrong.

11. Can one keep hold of understanding a meaning as one can keep hold of a mental image? That is, if one meaning of a word suddenly occurs to me — can it also remain there before my mind?
12. “The whole plan came to my mind at a stroke and stayed there like that for five minutes.” Why does this sound odd? One would like to think: what struck me and what stayed there in my mind can’t have been the same.
13. I exclaimed “Now I’ve got it!” — I gave a sudden start, and then I was able to present the plan in detail. What is supposed to have stayed in this case? A picture, perhaps. But “Now I’ve got it” did not mean “I’ve got a picture”.
14. If a meaning of a word has occurred to someone and he has not *forgotten* it, he can now use the word in such-and-such a way.
A person to whom the meaning has occurred now *knows* it, and its occurring to him was the beginning of his knowing it. Then how is this like an experience of imagining something?
15. If I say “Mr Scot is not a Scot”, I mean the first “Scot” as a proper name, the second one as a common name. Must what went on in my mind at the first “Scot” differ from what went on at the second? (Unless I’m uttering the sentence ‘parrot-wise’.) — Try to mean the first “Scot” as a common name and the second one as a proper name. — How does one do it? When *I* do it, I blink with effort as I try to display to myself the right meaning of each of the two words. — But, in their ordinary use, do I also display their meanings to myself?
16. When I utter the sentence with these switched meanings, its sense disintegrates for me. — Well, it disintegrates for *me*, but not for the person I am saying it to. So what harm is done? — “But still, when one utters the sentence in the usual way, something *else* takes place.” — What takes place is *not* this ‘displaying the meaning’. |177|

17. What makes my mental image of him into an image of *him*?

Not any pictorial likeness.

The same question applies to the utterance “I see him now vividly before me” as to the image. What makes this utterance into an utterance about *him*? — Nothing in it or simultaneous with it (‘behind it’). If you want to know whom he meant, ask him!

(But it is also possible for me to visualize a face, and even to draw it, without my knowing whose it is or where I have seen it.)

18. Suppose that while imagining, or instead of imagining, someone were to draw, even if only in the air with his finger. (This might be called “motor imagery”.) Here one might ask: “Whom does that represent?” And his answer would be decisive. — It is just as if he had given a verbal description, which, after all, can also *take the place* of the image. |178|

19. “I believe that he is suffering.” — Do I also *believe* that he isn’t an automaton?

Only reluctantly could I use the word in both contexts.

(Or is it like *this*: I believe that he is suffering, but am certain that he is not an automaton? Nonsense!)

20. Suppose I say of a friend: “He isn’t an automaton.” — What information is conveyed by this, and to whom would it be information? To a *human being* who meets him in ordinary circumstances? What information *could* it give him? (At the very most, that this man always behaves like a human being, and not occasionally like a machine.)

21. “I believe that he is not an automaton”, just like that, so far makes no sense.

22. My attitude towards him is an attitude towards a soul. I am not of the *opinion* that he has a soul.

23. Religion teaches that the soul can exist when the body has disintegrated. Now do I understand what it teaches? — Of course I understand it — I can imagine various things in connection with it. After all, pictures of these things have even been painted. And why should such a picture be only an imperfect rendering of the idea expressed? Why should it not do the *same* service as the spoken doctrine? And it is the service that counts.

24. If the picture of thoughts in the head can force itself upon us, then why not much more that of thoughts in the mind or soul?

25. The human body is the best picture of the human soul.

26. But how about an expression like this: “When you said that, I understood it in my heart”? In saying which, one points at one’s heart. And doesn’t one *mean* this gesture? Of course one means it. Or is one aware of using a *mere* picture? Certainly not. — It is not a picture that we choose, not a simile, yet it is a graphic expression. |179|

27. Suppose we were observing the movement of a point (for example, a point of light on a screen). Important inferences of the most varied kinds could be drawn from the behaviour of this point. And what a variety of observations can be made here! — The path of the point and certain of its characteristic measures (amplitude and wavelength for instance), or the velocity and the law according to which it varies, or the number or position of the places at which it changes discontinuously, or the curvature of the path at these places, and innumerable other things. — Any of these features of its behaviour might be the only one to interest us. We might, for example, be indifferent to everything about its path except for the number of loops it made in a certain time. — And if we were interested, not in just *one* such feature, but in several, each might yield us special information, different in kind from all the rest. This is how it is with the behaviour of man; with the different characteristics that we observe in this behaviour.

28. Then psychology treats of behaviour, not of the mind?

What does a psychologist report? — What does he observe? Isn't it the behaviour of people, in particular their utterances? But *these* are not about their behaviour.

29. "I noticed that he was out of humour." Is this a report about his behaviour or his state of mind? ("The sky looks threatening": is this about the present or the future?) Both; not side by side, however, but about the one via the other.

30. A doctor asks: "How is he feeling?" The nurse says: "He is groaning." A report on his behaviour. But need there be any question, for the two of them, whether the groaning is really genuine, is really the expression of anything? Might they not, for example, draw the conclusion "If he groans, we must give him more analgesic" — without suppressing a middle term? Isn't what counts the service to which they put the description of behaviour?

31. "But then they make a tacit presupposition." Then playing our language-game always rests on a tacit presupposition. [180]

- * 32. I describe a psychological experiment: the apparatus, the questions of the experimenter, the actions and replies of the subject — and then I say that it is a scene in a play. — Now everything has changed. So one will observe: if this experiment were described in the same way in a book on psychology, then the description of the behaviour would be understood *as* an expression of something mental precisely because it is *presupposed* that the subject is not taking us in, hasn't learnt the replies by heart, and other things of the kind. — So we are making a presupposition?

Would we ever really express ourselves like this: "Naturally I am presupposing that . . ."? — Or do we not do so only because the other person already knows that?

- 33. Doesn't a presupposition exist when a doubt exists? And doubt may be entirely lacking. Doubting has an end.

- * 34. There is a similarity here to the way in which 'physical object' and 'sense impressions' stand to each other. We have here two language-games, and their mutual relations are of a complicated kind. — If one tries to reduce their relations to a *simple* formula, one goes wrong.

|181|

- * 35. Suppose someone said: every familiar word, in a book for example, actually carries an atmosphere with it in our minds, a ‘corona’ of faintly indicated uses. — Just as if each figure in a painting were surrounded by delicate shadowy drawings of scenes, as it were in another dimension, and in them we saw the figures in different contexts. — Let’s take this assumption very seriously! — Then it turns out that it cannot explain *intentionality*.

If the possible uses of a word are before our minds in half-tones as we say or hear it — this goes just for *us*. But we communicate with other people without knowing whether they have these experiences too.

36. What would we reply to someone who told us that with *him* understanding was an inner process? — What would we reply to him if he said that with him knowing how to play chess was an inner process? — We’d say that when we want to know if he can play chess, we aren’t interested in anything that goes on inside him. — And if he retorts that this is in fact just what we are interested in, that is, in whether he can play chess — then we should have to draw his attention to the criteria which would demonstrate his ability, and on the other hand to the criteria for ‘inner states’.

Even if someone had a particular ability only when, and only as long as, he had a particular feeling, the feeling would not be the ability.

37. The meaning of a word is not the experience one has in hearing or uttering it, and the sense of a sentence is not a complex of these experiences. — (How is the sense of the sentence “I haven’t seen him yet” composed of the meanings of its words?) The sentence is composed of the words, and that is enough.

38. Though — one would like to say — every word can have a different character in different contexts, at the same time there is a single character it always has — a face. It looks at us, after all. — But a face in a painting looks at us too.

39. Are you sure that there is a single if-feeling, and not perhaps several? Have you tried saying the word in a great variety of contexts? For [182] example, when it bears the principal stress of the sentence, and when the following word does.

40. Suppose we found a man who, speaking of how words felt to him, told us that "if" and "but" felt the *same*. — May we not believe him? We might think it strange. "He doesn't play our game at all," one would like to say. Or even: "This is a different kind of human being."

If he *used* the words "if" and "but" as we do, wouldn't we think he understood them as we do?

41. One misjudges the psychological interest of the if-feeling if one regards it as the obvious correlate of a meaning; it needs, rather, to be seen in a different context, in that of the special circumstances in which it occurs.

42. Does a person never have the if-feeling unless he is uttering the word "if"? Surely it is at least curious if this cause is the only one to produce this feeling. And this applies generally to the 'atmosphere' of a word: — why does one regard it so much as a matter of course that only *this* word has this atmosphere?

43. The if-feeling is not a feeling which accompanies the word "if".

44. The if-feeling should be comparable to the special 'feeling' which a musical phrase gives us. (One sometimes describes such a feeling by saying "Here it is as if a conclusion were being drawn", or "I should like to say '*therefore . . .*'", or "Here I should always like to make a gesture —" and then one makes it.)

45. But can this feeling be separated from the phrase? And yet it is not the phrase itself, for someone can hear it without this feeling.

46. Is it in this respect similar to the 'expression' with which the phrase is played?

47. We say this passage gives us a quite special feeling. We sing it to ourselves, and at the same time make a certain movement, and also perhaps have some special feeling. But in a different context we would not recognize these accompaniments — the movement, the feeling — at all. They are quite empty, except just when we are singing this passage. [183]

48. "I sing it with a quite particular expression." This expression is not something that can be separated from the passage. It is a different concept. (A different game.)

49. The experience is this passage played like *this* (that is, as I am demonstrating, for instance; a description could only *hint* at it).

50. An atmosphere that is inseparable from its object — is no atmosphere.

Closely associated things, things which *have been* associated, seem to fit one another. But in what way do they seem to fit? How does it come out that they seem to fit? Like this, for example: we cannot imagine the man who had this name, this face, this handwriting, not to have produced *these* works, but perhaps quite different ones instead (those of another great man).

We cannot imagine it? Do we try? —

51. It might be like this: I hear that someone is painting a picture “Beethoven writing the Ninth Symphony”. I could easily imagine the kind of thing such a picture would show us. But suppose someone wanted to represent what Goethe would have looked like writing the Ninth Symphony? Here I could imagine nothing that would not be embarrassing and ridiculous. |184|

52. People who on waking tell us certain incidents (that they have been in such-and-such places, and so forth). Then we teach them the expression “I dreamt”, which is followed by the narrative. Afterwards I sometimes ask them, “Did you dream anything last night?” and am answered Yes or No, sometimes with a dream narrative, sometimes not. That is the language-game. (I have assumed here that I don’t dream myself. But then, nor do I ever have feelings of an invisible presence; other people do, and I can question them about their experiences.)

Now must I make an assumption about whether these people are deceived by their memories or not, whether they really had such images while they slept, or whether it merely seems so to them on waking? And what sense does this question have? — And what interest?! Do we ever ask ourselves this when someone is telling us his dream? And if not — is it because we are sure that his memory won’t have deceived him? (And suppose it were a man with an exceptionally bad memory. —)

53. Does this mean that it is nonsense ever to raise the question of whether dreams really take place during sleep, or are a memory phenomenon of the awakened? It will depend on how the question is used.

54. “It seems that the mind can give a word meaning” — isn’t this as if I were to say “It seems that the carbon atoms in benzene lie at the corners of a hexagon”? But this is no seeming; it is a picture.

55. The evolution of the higher animals and of man, and the awakening of consciousness at a particular stage. The picture is something like this: Though the ether is filled with vibrations, the world is dark. But one day, man opens his seeing eye, and there is light.

In the first place, our language describes a picture. What is to be done with the picture, how it is to be used, is still obscure. Quite clearly, however, it must be explored if we want to understand the sense of our words. But the picture seems to spare us this work: it already points to a particular use. This is how it takes us in. |185|

56. "My kinaesthetic sensations apprise me of the movements and positions of my limbs."

I let my index finger make an easy pendulum movement of small amplitude. I either hardly feel it or don't feel it at all. Perhaps a little in the tip of the finger, as a slight tension. (Nothing at all in the joint.) And this sensation apprises me of the movement? — for I can describe the movement exactly.

57. "But still, you must feel it, otherwise you wouldn't know (without looking) how your finger is moving." But "knowing" it only means: being able to describe it. — I may be able to tell the direction from which a sound comes only because it affects one ear more strongly than the other, but I don't feel this in my ears; yet its effect is: I '*know*' the direction from which the sound comes; for instance, I look in that direction.

58. It is the same with the idea that it must be some feature of a pain-sensation that apprises us of its location; and so too with the idea that some feature of a memory-image apprises us of the time to which it refers.

59. A sensation *can* apprise us of the movement or position of a limb. (For example, if someone does not know, as a normal person does, whether his arm is stretched out, a piercing pain in the elbow might convince him.) — In the same way, the character of a pain can apprise us of its location. (And the yellowness of a photograph of its age.)

60. What is the criterion for a sense impression's apprising me of shape and colour?

61. *What* sense impression? Well, *this* one; I describe it by words, or by a picture.

And now: what do you feel when your fingers are in this position? — "How is one to explain a feeling? It is something inexplicable, special." But it must be possible to teach the use of the words!

62. What I am looking for now is the grammatical difference.

63. Let's leave the kinaesthetic feeling out for the moment. — I want to describe a feeling to someone, and I tell him "Do *this*, and then you'll

[186] get it”, at the same time holding my arm or my head in a particular position. Now is this a description of a feeling? and when shall I say that he has understood what feeling I meant? — He will have to give a *further* description of the feeling afterwards. And what kind of description must it be?

64. I say, “Do *this*, and you’ll get it.” Can’t there be a doubt here? Mustn’t there be one, if it is a feeling that is meant?

65. *This* looks *so*; *this* tastes *so*; *this* feels *so*. “This” and “so” must be differently explained.

66. A ‘feeling’ has for us a quite *particular* interest. And that involves, for instance, the ‘degree of intensity of the feeling’, its ‘location’, and the extent to which one feeling can be submerged by another. (When a movement is very painful, so that the pain submerges every other slight sensation in the same place, does this make it uncertain whether you have really made this movement? Could it lead you to make sure by looking?) [187]

67. If someone observes his own grief, which senses does he use to observe it? With a special sense — one that *feels* grief? Then does he feel it *differently* when he is observing it? And what is the grief that he is observing — one which is there only while being observed?

‘Observing’ does not produce what is observed. (That is a conceptual statement.)

Again: I do not ‘observe’ *that* which comes into being only through observation. The object of observation is something else.

68. A touch, which hurt yesterday, no longer does so today.

Today I feel the pain only when I think of it. (That is: under certain circumstances.)

My grief is no longer the same; a memory which was still unbearable to me a year ago is now no longer so.

That is a result of observation.

69. When does one say: someone is observing? Roughly, when he puts himself in a favourable position to receive certain impressions, in order (for example) to describe what they apprise him of.

70. Someone who was trained to emit a particular sound at the sight of something red, another sound at the sight of something yellow, and so on for other colours, would not yet be describing objects by their colours. Though he might help *us* to arrive at a description. A description is a representation of a distribution in a space (in that of time, for instance).

71. I let my gaze wander round a room and suddenly it lights on an object of a striking red colour, and I say “Red!” — I haven’t thereby given a description.

72. Are the words “I’m afraid” a description of a state of mind?

73. I say “I’m afraid”; someone else asks me: “What was that? A cry of fear; or did you want to tell me how you feel; or was it an observation on your present state? — Could I always give him a clear answer? Could I never give him one? |188|

74. One can imagine all sorts of things here: for example, “No, no! I’m afraid!”

“I’m afraid. I am sorry to have to admit it.”

“I’m still a bit afraid, but no longer as much as before.”

“In fact I’m still afraid, though I’m reluctant to admit it to myself.”

“I torment myself with all sorts of fearful thoughts.”

“Now, just when I should be fearless, I’m afraid!”

To each of these sentences a special tone of voice is appropriate, to each a different context.

It would be possible to imagine people who, as it were, thought much more precisely than we, and used different words where we use only one.

75. One wonders, “What does ‘I’m afraid’ really mean; what do I aim at when I say it?” And, of course, no answer is forthcoming, or only an inadequate one.

The question is: “In what sort of context does it occur?”

76. No answer is forthcoming if I try to settle the question “What do I aim at?”, “What am I thinking when I say it?” by repeating the fear utterance and at the same time attending to myself, as it were observing my mind out of the corner of my eye. In a concrete case, I can indeed ask, “Why did I say that, what was I up to?” — and I could answer the question too; but not on the ground of observing what accompanied the speaking. And my answer would supplement, paraphrase, the earlier utterance.

77. What is fear? What does “being afraid” mean? If I wanted to explain it at a *single* showing — I would *act* fear.

78. Could I also represent hope in this way? Hardly. And what about belief?

79. Describing my state of mind (of fear, say) is something I do in a particular context. (Just as it is only in a particular context that a certain activity is an experiment.)

Is it so surprising that I use the same expression in different games? And sometimes, as it were, even in between the games?

80. And do I always talk with very definite purpose? — And is what I say senseless because I don’t? |189|

81. When it is said in a funeral oration “We mourn our . . .”, this is surely supposed to be an expression of mourning; not to communicate anything to those who are present. But in a prayer at the grave, these words would be a kind of communication.

* 82. Isn’t the problem this: a cry, which cannot be called a description, which is more primitive than any description, for all that, does the service of a description of the psychological.

83. A cry is not a description. But there are intermediate cases. And the words “I am afraid” may approximate more, or less, to being a cry. They may come very close to one, and also be *very* far removed from it.

84. We surely do not invariably say that someone is *complaining* because he says he is in pain. So the words “I am in pain” may be a cry of complaint, and may be something else.

85. But if “I’m afraid” is not always similar to a cry of complaint and yet sometimes is, then why should it *always* be a description of a state of mind? |190|

86. How did people ever come to use such an expression as “I believe . . .”? Did they at some time notice a phenomenon (of believing)?

Did they observe themselves and others, and so discover believing?

87. Moore’s paradox can be put like this: the utterance “I believe that this is the case” is used in a similar way to the assertion “This is the case”; and yet the *supposition* that I believe this is the case is not used like the supposition that this is the case.

88. So it seems as if the assertion “I believe” were not the assertion of what is supposed in the supposition “I believe”!

89. Similarly, the statement “I believe it’s going to rain” has a similar sense, that is to say, a similar use, to “It’s going to rain”, but that of “I believed then that it was going to rain” is not similar to that of “It rained then”.

“But surely ‘I believed’ must say the very same thing in the past tense as ‘I believe’ in the present!” — Surely $\sqrt{-1}$ must mean just the same for -1 , as $\sqrt{1}$ means for 1 ! This signifies nothing at all.

90. “Basically, in using the words ‘I believe . . .’, I describe my own state of mind — but here this description is indirectly an assertion of the fact believed.” — As in certain circumstances, I describe a photograph in order to describe what it is a photograph of.

But then I must be able to go on to say that the photograph is a good one. So also: “I believe it’s raining, and my belief is reliable, so I rely on it.” — In that case, my belief would be a kind of sense impression.

91. One can mistrust one’s own senses, but not one’s own belief.

92. If there were a verb meaning ‘to believe falsely’, it would not have a meaningful first person present indicative.

93. Don’t regard it as a matter of course, but as a most remarkable thing, that the verbs “believe”, “wish”, “want” display all the grammatical forms possessed by “cut”, “chew”, “run”.

94. The language-game of reporting can be given such a turn that a report is meant to inform the hearer not about its subject matter but about the speaker. [191]

It is so when, for instance, a teacher examines a pupil. (One can measure to test a ruler.)

95. Suppose I were to introduce some expression — “I believe”, for example — in this way: it is to be prefixed to reports when they serve to give information about the speaker himself. (So no uncertainty need attach to the expression. Remember that the uncertainty of an assertion can be expressed impersonally: “He might come today.”) — “I believe . . . , and it isn’t so” would be a contradiction.

96. “I believe . . . ” throws light on my state. Inferences about my conduct can be drawn from this utterance. So there is a *similarity* here to manifestations of emotion, of mood, and so on.

97. If, however, “I believe it is so” throws light on my state, then so does the assertion “It is so”. For the sign “I believe” can’t do it, can at the most hint at it.

98. Imagine a language in which “I believe it is so” is expressed only by means of the tone of the assertion “It is so”. In this language they say, not “He believes” but “He is inclined to say . . . ”, and there exists also the supposition (in the subjunctive) “Suppose I were inclined etc.”, but no utterance like “I’m inclined to say”.

Moore’s paradox wouldn’t exist in this language; instead, however, there would be a verb lacking one form.

But this ought not to surprise us. Think of the fact that one can predict one’s *own* future action in expressing one’s intention.

99. 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 not see and hear myself, then? — One might say that.

100. “One feels conviction within oneself, one doesn’t infer it from one’s own words or their intonation.” — What’s true is: one does not infer one’s own conviction from one’s own words, nor yet the actions which arise from that conviction.

101. “But now, the assertion ‘I believe’ seems not to be the assertion of what the supposition assumes.” — So I am tempted to cast around for a variant first person present indicative in the inflection of the verb.

102. This is how I’m thinking of it: Believing is a state of mind. It persists; and that independently of the process of expressing it in a sentence, for example. So it’s a kind of disposition of the believing person. This is revealed to me in the case of someone else by his behaviour; and [192] by his words. And so just as well by the utterance “I believe . . .” as by the simple assertion. — Now what about my own case: how do I myself recognize my own disposition? — Here I would have to be able to do what others do — to attend to myself, listen to myself talking, make inferences from what I say!

103. My attitude to my own words is wholly different from that of others.

I could find that variant conjugation of the verb, if only I could say “I seem to believe”.

104. If I listened to the words issuing from my mouth, then I could say that someone else was speaking out of it.

105. “Judging from my words, *this* is what I believe.” Now, it would be possible to think up circumstances in which this made sense.

And then it would also be possible for someone to say “It is raining and I don’t believe it”, or “It seems to me that my ego believes this, but it isn’t true”. One would have to imagine a kind of behaviour suggesting that two beings were speaking through my mouth.

106. Even in the *assumption*, the pattern is not what you think.

With the words “Assuming I believe . . .” you are presupposing the whole grammar of the word “to believe”, the ordinary use, which you have mastered. — You are not assuming some state of affairs which, so to speak, a picture presents unambiguously to you, so that you can tack on to this assumption some assertion other than the ordinary one. — You would not know at all what you were assuming here (that is, what, for example, would follow from such an assumption), if you were not already familiar with the use of “believe”.

107. Think of the expression “I say . . .”, for example in “I say it will rain today”, which simply amounts to the same as the assertion “It will

rain today”. “He says it will rain today” means roughly “He believes it will rain today”. “Assuming I say it will rain today” does *not* mean “Assuming it rains today”.

- * 108. Different concepts touch here and run side by side for a stretch. One does not have to think that all these lines are *circles*.



109. Consider also the misbegotten sentence: “It’s going to rain, but it won’t”.

And here one should be on one’s guard against saying that “It’s going to rain” really means “I believe it will rain”. — For why not the other way round, why should not the latter mean the former?

110. Don’t regard a hesitant assertion as an assertion of hesitancy. |193|

111. Two uses of the word “see”.

The one: “What do you see there?” — “I see *this*” (and then a description, a drawing, a copy). The other: “I see a likeness in these two faces” — let the man to whom I tell this be seeing the faces as clearly as I do myself.

What is important is the categorial difference between the two ‘objects’ of sight.

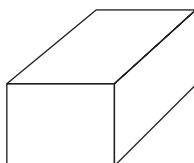
112. The one man might make an accurate drawing of the two faces, and the other notice in the drawing the likeness which the former did not see.

113. I observe a face, and then suddenly notice its likeness to another. I *see* that it has not changed; and yet I see it differently. I call this experience “noticing an aspect”.

114. Its *causes* are of interest to psychologists.

115. We are interested in the concept and its place among the concepts of experience.

116. One could imagine the illustration



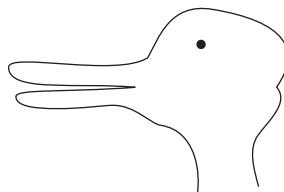
appearing in several places in a book, a textbook for instance. In the accompanying text, something different is in question every time: here a glass cube, there an upturned open box, there a wire frame of that shape, there three boards forming a solid angle. Each time the text supplies the interpretation of the illustration.

But we can also *see* the illustration now as one thing, now as another. — So we interpret it, and *see* it as we *interpret* it.

117. Here perhaps one would like to respond: The description of immediate, visual experience by means of an interpretation is an

indirect description. “I see the figure as a box” amounts to: I have a particular visual experience which is empirically found to accompany interpreting the figure as a box, or looking at [194] a box. But if it amounted to this, I ought to know it. I ought to be able to refer to the experience directly, and not only indirectly. (As I can speak of red without necessarily calling it the colour of blood.)

- * 118. In my remarks, the following figure, derived from Jastrow, will be called “the duck–rabbit”. It can be seen as a rabbit’s head or as a duck’s.



And I must distinguish between the ‘continuous seeing’ of an aspect and an aspect’s ‘lighting up’.

The picture might have been shown me, without my ever seeing in it anything but a rabbit.

- 119. Here it is useful to introduce the concept of a picture-object. For instance, the figure



would be a ‘picture-face’.

In some respects, I engage with it as with a human face. I can study its expression, can react to it as to the expression of the human face. A child can talk to a picture-man or picture-animal, can treat them as it treats dolls.

- 120. I may, then, have seen the duck–rabbit simply as a picture-rabbit from the first. That is to say, if asked “What’s that?” or “What do you see there?”, I would have replied: “A picture-rabbit.” If I had further been asked what that was, I would have explained by pointing to all sorts of pictures of rabbits, would perhaps have pointed to real rabbits, talked about their kind of life, or given an imitation of them.

121. I would not have answered the question “What do you see here?” by saying: “Now I see it as a picture-rabbit.” I would simply [195] have described my perception, just as if I had said “I see a red circle over there”.

Nevertheless, someone else could have said of me: “He sees the figure as a picture-rabbit.”

122. It would have made as little sense for me to say “Now I see it as ...” as to say at the sight of a knife and fork “Now I see this as a knife and fork”. This utterance would not be understood. Any more than: “Now it is a fork for me” or “It can be a fork too”.

123. One doesn’t ‘take’ what one knows to be the cutlery at a meal *for* cutlery, any more than one ordinarily tries to move one’s mouth as one eats, or strives to move it.

124. If someone says “Now it’s a face for me”, then one can ask him: “What change are you alluding to?”

125. I see two pictures, with the duck-rabbit surrounded by rabbits in one, by ducks in the other. I don’t notice that they are the same. Does it *follow* from this that I *see* something different in the two cases? — It gives us a reason for using this expression here.

126. “I saw it quite differently, I’d never have recognized it!” Now, that is an exclamation. And there is also a justification for it.

127. I’d never have thought of superimposing the heads in this way, of comparing them in *this* way. For they suggest a different mode of comparison.

The head seen in *this* way hasn’t even the slightest similarity to the head seen in *that* way — although they are congruent.

128. I’m shown a picture-rabbit and asked what it is; I say “It’s a rabbit”. Not “Now it’s a rabbit”. I’m reporting my perception. — I’m shown the duck-rabbit and asked what it is; I *may* say “It’s a duck-rabbit”. But I may also react to the question quite differently. — The answer that it is a duck-rabbit is again the report of a perception; the answer “Now it’s a rabbit” is not. Had I replied “It’s a rabbit”, the ambiguity would have escaped me, and I would have been reporting my perception.

129. The change of aspect. “But surely you’d say that the picture has changed altogether now!”

But what is different: my impression? my attitude? — Can I say? I *describe* the change like a perception; just as if the object had changed before my eyes. [196]

130. “Ah, now I see *this*”, I might say (pointing to another picture, for example). This has the form of a report of a new perception.

The expression of a change of aspect is an expression of a *new* perception and, at the same time, an expression of an unchanged perception.

131. I suddenly see the solution of a puzzle-picture. Where there were previously branches, now there is a human figure. My visual impression has changed, and now I recognize that it has not only shape and colour, but also a quite particular ‘organization’. — My visual impression has changed — what was it like before; what is it like now? — If I represent it by means of an exact copy — and isn’t that a good representation of it? — no change shows up.

132. And above all do not say “Surely, my visual impression isn’t the *drawing*; it is *this* — which I can’t show to anyone.” Of course it is not the drawing; but neither is it something of the same category, which I carry within myself.

133. The concept of an ‘inner picture’ is misleading, since the model for this concept is the ‘outer picture’; and yet the uses of these concept-words are no more like one another than the uses of “numeral” and “number”. (Indeed, someone who was inclined to call numbers ‘ideal numerals’ could generate a similar confusion by doing so.)

134. Someone who puts the ‘organization’ of a visual impression on a level with colours and shapes would be taking it for granted that the visual impression is an inner object. Of course, this makes this object chimerical, a strangely vacillating entity. For the similarity to a picture is now impaired.

135. If I know that the schematic cube has various aspects, and I want to find out what someone else sees, I can get him to make a model of what he sees, in addition to a copy, or to show such a model; even though *he* has no idea of my purpose in demanding two accounts.

But with a changing aspect, the case is altered. What before perhaps seemed, or even was, a useless specification once there was a copy, now becomes the only possible expression of the experience.

* 136. And this suffices to dispose of the comparison of ‘organization’ with colour and shape in the visual impression.

137. If I saw the duck–rabbit as a rabbit, then I saw such-and-such shapes and colours (I reproduce them in detail) — and, in addition, I saw something like this: [197] and here I point to a great variety of pictures of rabbits. — This shows the difference between the concepts.

‘Seeing as . . .’ is not part of perception. And therefore it is like seeing, and again not like seeing.

138. I look at an animal; someone asks me: “What do you see?” I answer: “A rabbit.” — I see a landscape; suddenly a rabbit runs past. I exclaim: “A rabbit!”

Both things, both the report and the exclamation, are expressions of perception and of visual experience. But the exclamation is so in a different sense from the report: it is forced from us. — It stands to the experience somewhat as a cry to pain.

139. But since the exclamation is the description of a perception, one can also call it the expression of thought. — Someone who looks at an object need not think of it; but whoever has the visual experience expressed by the exclamation is also *thinking* of what he sees.

140. And that’s why the lighting up of an aspect seems half visual experience, half thought.

141. Someone suddenly sees something which he does not recognize (it may be a familiar object, but in an unusual position or lighting); the lack of recognition perhaps lasts only a few seconds. Is it correct to say that he has a different visual experience from someone who recognized the object straightaway?

142. Couldn’t someone describe an unfamiliar shape that appeared before him just as *accurately* as I, to whom it is familiar? And isn’t that the answer? — Of course, generally it won’t be so. And his description will run quite differently. (I say, for example, “The animal had long ears” — he: “There were two long appendages”, and then he draws them.)

143. I meet someone whom I have not seen for years; I see him clearly, but fail to recognize him. Suddenly I recognize him, I see his former face in the altered one. I believe that I would portray him differently now if I could paint.

144. Now, when I recognize my acquaintance in a crowd, perhaps after looking in his direction for quite a while — is this a special sort of seeing? Is it a case of both seeing and thinking? Or a fusion of the two — as I would almost like to say?

The question is: *why* does one want to say this? |198|

145. The very expression which is also a report of what is seen is here a cry of recognition.

146. What is the criterion of the visual experience? — What should the criterion be?

A representation of ‘what is seen’.

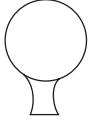
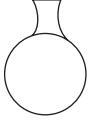
147. The concept of a representation of what is seen, like that of a copy, is very elastic, and so *together with it* is the concept of what is seen. The two are intimately connected. (Which is *not* to say that they are alike.)

148. How does one tell that human beings *see* three-dimensionally? — I ask someone about the lie of the land (over there) of which he has a view. “Is it like *this*?” (I show him with my hand) — “Yes.” — “How do you know?” — “It’s not misty, I see it very clearly.” — No reasons are given for the *presumption*. It is altogether natural to us to represent what we see three-dimensionally, whereas special practice and instruction are needed for two-dimensional representation, whether in drawing or in words. (The oddity of children’s drawings.)

149. If someone sees a smile and does not recognize it as a smile, does not understand it as such, does he see it differently from someone who understands it? — He mimics it differently, for instance.

150. Hold the drawing of a face upside down and you can’t recognize the expression of the face. Perhaps you can see that it is smiling, but not exactly what *kind* of smile it is. You cannot imitate the smile or describe its character more exactly.

And yet the picture which you have turned round may be a most exact representation of a person’s face.

- * 151. The figure (a)  is the reverse of the figure (b) 

As (c)  is the reverse of (d) *Pleasure*.

But — I'd like to say — there is another kind of difference between my impressions of (c) and (d) and between those of (a) and (b). (d), for example, looks neater than (c). (Compare a remark of Lewis Carroll's.) (d) is easy, (c) hard to copy. [199]

152. Imagine the duck–rabbit hidden in a tangle of lines. Now I suddenly notice it in the picture, and notice it simply as the head of a rabbit. At some later time, I look at the same picture and notice the same outline, but see it as a duck, without necessarily realizing that it was the same outline both times. If I later see the aspect change — can I say that the duck and rabbit aspects are now seen quite differently from when I recognized them separately in the tangle of lines? No.

But the change produces a surprise not produced by the recognition.

- * 153. If someone searches in a certain figure (call it Figure 1) for another figure (call it Figure 2), and then finds it, he sees Figure 1 in a new way. Not only can he give a new kind of description of it, but noticing the second figure was a new visual experience.

154. But he wouldn't necessarily want to say: "Figure 1 looks quite different now; there isn't even any similarity to the figure I saw before, though they are congruent!"

155. Here there is an enormous number of interrelated phenomena and possible concepts.

156. Then is the copy of the figure an *incomplete* description of my visual experience? No. — After all, whether, and what, more detailed specifications are necessary depends on the circumstances. — It *may* be an incomplete description — if some question still remains.

157. Of course one can say: There are certain things which fall both under the concept 'picture-rabbit' and under the concept 'picture-duck'. And a picture, a drawing, is such a thing. — But an *impression* is not simultaneously of a picture-duck and a picture-rabbit.

158. "What I really *see* must surely be what is produced in me by the object." — Then what is produced in me is a sort of replica, something that in its turn can be looked at, can be before one; almost something like a *materialization*.

And this materialization is something spatial and must be describable in purely spatial terms. For instance, it may be smiling (if it is a face); the concept of friendliness, however, has no place in a description of it, but is *foreign* to such a description (even though it may help it).

159. If you ask me what I saw, perhaps I'll be able to make a sketch which shows it; but how my glance wandered, I'll mostly not recollect at all. [200]

160. The concept of seeing makes a tangled impression. Well, that's how it is. — I look at the landscape; my gaze wanders over it, I see all sorts of distinct and indistinct movement; *this* impresses itself sharply on me, *that* very hazily. How completely piecemeal what we see can appear! And now look at all that can be meant by "description of what is seen"! — But this just is what is called "description of what is seen". There is not *one genuine*, proper case of such description — the rest just being unclear, awaiting clarification, or simply to be swept aside as rubbish.

161. Here we are in enormous danger of wanting to make fine distinctions. — It is similar when one tries to explain the concept of a physical object in terms of 'what is really seen'. — Rather, the everyday language-game is to be *accepted*, and *false* accounts of it characterized as false. The primitive language-game which children are instructed in needs no justification; attempts at justification need to be rejected.

162. Take as an example the aspects of a triangle. This triangle



can be seen as a triangular hole, as a solid, as a geometrical drawing; as standing on its base, as hanging from its apex; as a mountain, as a wedge, as an arrow or pointer, as an overturned object which is meant, for example, to stand on the shorter side of the right angle, as a half parallelogram, and as various other things.

163. "You can think now of *this*, now of *this*, as you look at it, can regard it now as *this*, now as *this*, and then you will see it now *this* way, now *this*." — *What* way? There is, after all, no further qualification.

- * 164. But how is it possible to *see* an object according to an *interpretation*? — The question presents it as a strange fact; as if something had been pressed into a mould it did not really fit into. But no squeezing, no pressing, took place here.
- * 165. If it looks as if there were no room for such a form between other ones, you must find it in another dimension. If there's no room here, there will be in another dimension. [201]

(It is in this sense that there is no room for imaginary numbers in the continuum of real numbers. And this surely means: the application of the concept of imaginary numbers is less like that of real numbers than is revealed by the look of the *calculations*. It is necessary to descend to the application, and then the concept finds a different place — one which, so to speak, one never dreamed of.)

166. How would the following account do: "I can see something as whatever it can be a picture of"?

What this means is: the aspects in a change of aspects are *those* which, in certain circumstances, the figure could have *permanently* in a picture.

167. A triangle can really be *standing up* in one picture, hanging in another, and in a third represent something fallen over — in such a way that I, who am looking at it, say, not "It may also represent something fallen over", but "That glass has fallen over and is lying there in fragments". This is how we react to the picture.

168. Could I say what a picture must be like to produce this effect? No. There are, for example, styles of painting which do not convey anything to me in this immediate way, but do to other people. I think custom and upbringing have a hand in this.

169. What does it mean to say that I '*see the sphere floating in the air*' in a picture?

Is it enough that for me this description is the most suggestive, natural one? No; for it might be so for various reasons. It might, for instance, simply be the conventional description.

But what is an expression for my not merely understanding the picture in this way, for instance (knowing what it is *supposed* to represent), but *seeing* it in this way? — It is expressed by, say, “The sphere seems to float”, “One sees it floating”, or perhaps, in a special tone of voice, “It floats!”

This, then, is an expression for taking something to be so. But not being used as such.

170. Here we are not asking ourselves what are the causes and what produces this impression in a particular case.

171. And *is* it a special impression? — “Surely I see something *different* when I see the sphere floating from when I merely see it lying there.” — This really amounts to: This expression is justified! (For, taken literally, it is no more than a repetition.) [202]

(And yet my impression is not that of a real floating sphere either. There are derivative forms of ‘three-dimensional seeing’. The three-dimensional character of a photograph and the three-dimensional character of what we see through a stereoscope.)

172. “And is it really a different impression?” — In order to answer this, I’d like to ask myself whether there is really something different there in me. But how can I ascertain this? — I *describe* what I see differently.

173. Certain drawings are always seen as flat figures, and others sometimes, or always, three-dimensionally.

Here one would now like to say: the visual impression of drawings seen three-dimensionally is three-dimensional; with the schematic cube, for instance, it is a cube. (For the description of the impression is the description of a cube.)

174. And then it is strange that with some drawings our impression should be something flat, and with others something three-dimensional. One wonders, “Where is this going to end?”

175. When I see the picture of a galloping horse — do I only *know* that this is the kind of movement meant? Is it superstition to think I *see* the horse galloping in the picture? — And does my visual impression gallop too?

176. What does anyone tell me by saying “Now I see it as . . .”? What consequences has this information? What can I do with it?

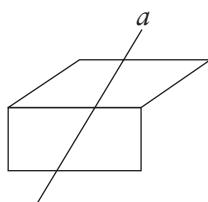
177. People often associate colours with vowels. It might be that for someone a vowel changed its colour when it was repeated over and over again. For him *a* is ‘now blue — now red’, for instance.

An utterance of “Now I see it as . . .” might have no more significance for us than “*a* is now red for me”.

(Linked with physiological observations, even this change might acquire importance for us.)

178. Here it occurs to me that in conversation on aesthetic matters we use the words “You have to see it like *this*, this is how it is meant”; “When you see it like *this*, you see where it goes wrong”; “You have to hear these bars as an introduction”; “You must listen out for this key”; “You must phrase it like *this*” (which can refer to hearing as well as to playing). |203|

179. This figure



is supposed to represent a convex step and to be used in some kind of topological demonstration. For this purpose, for example, we draw the straight line *a* through the geometric centres of the two surfaces. — Now, if someone saw the figure three-dimensionally only for a moment, and even then, now as a concave step, now as a convex one, this might make it difficult for him to follow our demonstration. And if for him the flat aspect alternates with a three-dimensional one, that is just as if I were to show him completely different objects in the course of the demonstration.

180. What does it amount to if I look at a drawing in descriptive geometry and say: “I know that this line appears again here, but I can’t *see* it like that”? Does it simply amount to a lack of facility in operating with the drawing, that I don’t ‘know my way about’ all that well? — Such facility is certainly one of our criteria. What convinces us that someone is seeing the drawing three-dimensionally is a certain kind of ‘knowing one’s way about’: certain gestures, for instance, which indicate the three-dimensional relations — fine shades of behaviour.

I see that an animal in a picture is transfixed by an arrow. It has struck it in the throat, and sticks out at the back of the neck. Let the picture be a silhouette. — Do you *see* the arrow — or do you merely *know* that these two bits are supposed to represent part of an arrow?

* (Compare Köhler's figure of interpenetrating hexagons.)

181. "But this surely isn't *seeing!*" — "But this surely *is* seeing!" — It must be possible to give both remarks a conceptual justification.

182. But this surely *is* seeing! *In what way* is it seeing?

183. "The phenomenon is at first surprising, but a physiological explanation of it will certainly be found." —

Our problem is not a causal but a conceptual one.

184. If the picture of the transfixed animal or of the interpenetrating hexagons were shown to me just for a moment and then I had to describe it, *that* would be my description; if I had to draw it I'd [204] certainly produce a very faulty copy, but it would show some sort of animal transfixed by an arrow, or two hexagons interpenetrating. That is to say: there are certain mistakes that I'd *not* make.

185. The first thing to jump to my eye in this picture is: there are two hexagons.

Now I look at them and ask myself: "Do I really see them *as* hexagons?" — and for the whole time they are before my eyes? (Assuming that they have not changed their aspect in that time.) — And I'd like to reply: "I'm not thinking of them as hexagons the whole time."

186. Someone tells me: "I saw it at once as two hexagons. Indeed that was *all* I saw." But how do I understand this? I think he would have given this description at once in answer to the question "What do you see?", and wouldn't have treated it as one among several possibilities. In this respect, his description is like the answer "A face" on being shown the figure



187. The best description I can give of what was shown me for a moment is *this*: . . .

“The impression was that of a rearing animal.” So a perfectly specific description was given. — Was it *seeing*, or was it a thought?

188. Don’t try to analyse the experience within yourself.

189. Of course, I might also have seen the picture first as something different, and then have said to myself “Oh, it’s two hexagons!” So the aspect would have altered. And does this prove that I in fact *saw* it as something specific?

190. “Is it a *genuine* visual experience?” The question is: in what way is it one?

191. Here it is *difficult* to see that what is at issue is determination of concepts.

What forces itself on one is a *concept*. (You must not forget that.)

192. When should I call it just knowing, not seeing? — Perhaps when someone treats the picture as a working drawing, *reads* it like a blueprint. (Fine shades of behaviour. — Why are they *important*? They have important consequences.) |205|

193. “To me it is an animal transfixed by an arrow.” That is what I treat it as; this is my *attitude* to the figure. This is one meaning in calling it a case of ‘seeing’.

194. But can I say in the same sense: “To me these are two hexagons”? Not in the same sense, but in a similar one.

195. You need to think of the role which pictures such as paintings (as opposed to working drawings) play in our lives. This role is by no means a uniform one.

A comparison: proverbs are sometimes hung on the wall. But not theorems of mechanics. (Our attitude to these two things.)

196. From someone who sees the drawing as such-and-such an animal, what I expect will be rather different from what I expect from someone who merely knows what it is meant to represent.

197. Perhaps the following expression would have been better: we *view* the photograph, the picture on our wall, as the very object (the man, landscape, and so on) represented in it.

198. This need not have been so. We could easily imagine people who did not have this attitude to such pictures. Who, for example, would be repelled by photographs, because a face without colour, and even perhaps a face reduced in scale, struck them as inhuman.

199. I say: “We view a portrait as a human being” — when do we do so, and for how long? *Always*, if we see it at all (and don’t, say, see it as something else)?

I might go along with this, and thereby determine the concept of viewing a picture. — The question is whether yet another concept, related to this one, also becomes important to us: that, namely, of a seeing-as which occurs only while I am actually concerning myself with the picture as the object represented.

200. I could say: a picture is not always *alive* for me while I am seeing it.

“Her picture smiles down on me from the wall.” It need not always do so, whenever my glance lights on it.

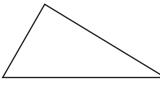
201. The duck-rabbit. One asks oneself: how can the eye, this *dot*, be looking in a direction? — “See how it’s looking!” (And one ‘looks’ oneself as one says this.) But one does not say and do this the whole time one is looking at the picture. And now, what is this “See how it’s looking!” — does it express a feeling? |206|

202. (In giving all these examples, I am not aiming at some kind of completeness. Not a classification of psychological concepts. They are only meant to enable the reader to cope with conceptual unclarities.)

203. “Now I see it as a . . .” goes with “I am trying to see it as a . . .”, or “I still can’t see it as a . . .”. But I cannot try to see a conventional picture of a lion as a lion, any more than an F as that letter (though I may well try to see it as a gallows, for example).

204. Do not ask yourself: “How does it work with *me*?” — Ask: “What do I know about someone else?”

- * 205. How does one play the game: “It could also be *this*”? (*This* — which the figure could also be, which is what it can be seen as — is

not simply another figure. Someone who said “I see  as

” might still mean very different things.)

Here is a game played by children: they say of a chest, for example, that it is now a house; and thereupon it is interpreted as a house in every detail. A piece of fancy is woven around it.

206. And does the child now *see* the chest as a house?

“He quite forgets that it is a chest; for him it actually is a house.” (There are certain signs of this.) Then would it not also be correct to say he *sees* it as a house?

207. And if someone knew how to play this game, and in a certain situation exclaimed with special expression “Now it’s a house!” — he would be giving expression to the lighting up of an aspect.

208. If I heard someone talking about the duck–rabbit picture, and *now* he spoke in a certain way about the special expression of the rabbit’s face, I’d say, now he’s seeing the picture as a rabbit.

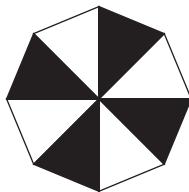
209. But the expression in one’s voice and gestures is the same as if the object had altered and had ended by *becoming* this or that.

I have a theme played to me several times and each time in a slower tempo. Eventually I say “Now it’s right”, or “Now at last it’s a march”, “Now at last it’s a dance”. — In *this* tone of voice the lighting up of an aspect is also expressed. [207]

210. ‘Fine shades of behaviour.’ — When my understanding of a theme is expressed by my whistling it with the correct expression, this is an example of such fine shades.

211. The aspects of the triangle: it is as if an *idea* came into contact, and for a time remained in contact, with the visual impression.

212. In this, however, these aspects differ from the concave and convex aspects of the step (for example). And also from the aspects of the figure



(which I shall call a “double cross”) as a white cross on a black ground and as a black cross on a white ground.

213. You must remember that the descriptions of the alternating aspects are of a different kind in each case.

214. (The temptation to say “I see it like *this*”, pointing to the same thing for “it” and “this”.) Always get rid of the idea of the private object in this way: assume that it constantly changes, but that you don’t notice the change because your memory constantly deceives you.

215. Those two aspects of the double cross (I shall call them A aspects) might be reported simply by pointing alternately to a free-standing white and a free-standing black cross.

Indeed, one could imagine this as a primitive reaction in a child, even before he could talk.

(So in reporting A aspects, a part of the double cross is indicated. — The duck and rabbit aspects could not be described in an analogous way.)

216. Only someone conversant with the shapes of the two animals can ‘see the duck–rabbit aspects’. There is no analogous condition for seeing A aspects.

217. Someone can take the duck–rabbit simply for the picture of a rabbit, the double cross simply for the picture of a black cross, but not the bare triangular figure for the picture of an object that has fallen over. To see this aspect of the triangle demands *imagination*. [208]

218. The A aspects are not essentially three-dimensional; a black cross on a white ground is not essentially a cross with a white surface in the background. One could teach someone the idea of the black cross on a ground of different colour without showing him anything other than crosses painted on sheets of paper. Here the ‘background’ is simply the surrounding of the cross.

The A aspects are not connected with the possibility of illusion in the same way as are the three-dimensional aspects of the drawing of a cube or step.

219. I can see the schematic cube as a box — but can I also see it now as a paper, now as a tin box? — What ought I to say, if someone assured me *he* could? — I can draw a conceptual boundary here.

Yet think of the expression “*felt*” in connection with looking at a picture. (“One feels the softness of that material.”) (*Knowing* in dreams. “And I *knew* that . . . was in the room.”)

- * 220. One *kind* of aspect might be called ‘organizational aspects’. When the aspect changes, parts of the picture belong together which before did not.
- * 221. How does one teach a child (say in calculating) “Now take *these* dots together!” or “Now *these* belong together”? Clearly “taking together” and “belonging together” must originally have had another meaning for him than that of *seeing* in this way or that. — And this is a remark about concepts, not about teaching methods.

222. In the triangle I can see now *this* as apex, *that* as base — now *this* as apex, *that* as base. — Clearly the words “Now I am seeing *this* as the apex” cannot so far have any significance for a learner who has only just met the concepts of apex, base, and so on. — But I do not mean this as an empirical proposition.

Only of someone *capable* of making certain applications of the figure with facility would one say that he saw it now *this* way, now *that* way.

The substratum of this experience is the mastery of a technique.

223. But how odd for this to be the logical condition of someone’s having such-and-such an *experience!* After all, you don’t say that one ‘has toothache’ only if one is capable of doing such-and-such. — From this it follows that we cannot be dealing with the same concept of experience here. It is a different concept, even though related. |209|

224. Only of someone who *can do*, has learnt, is master of, such-and-such, does it make sense to say that he has had *this* experience.

And if this sounds silly, you need to remember that the *concept* of seeing is modified here. (A similar consideration is often needed to dispel a feeling of dizziness in mathematics.)

We talk, we produce utterances, and only *later* get a picture of their life.

225. How could I see that this posture was hesitant before I knew that it was a posture, and not the anatomy of the creature?

But doesn't that mean only that I couldn't then use *this* concept, which doesn't refer *solely* to what is visual, to describe what is seen? — Couldn't I, for all that, have a purely visual concept of that hesitant posture, that timid face?

226. Such a concept would then be comparable to the musical concepts of 'major' and 'minor', which certainly have emotive value, but can also be used solely to describe a perceived structure.

227. The epithet "sad", as applied, for example, to the face of a stick-figure, characterizes the grouping of lines in an oval. Applied to a human being, it has a different (though related) meaning. (But this does *not* mean that a sad facial expression is *similar* to the feeling of sadness!)

228. Think of this too: I can only see, not hear, red and green — but to the extent to which I can see sadness, I can also hear it.

229. Just think of the expression "I heard a plaintive melody"! And now the question is: "Does he *hear* the plaint?"

230. And if I reply: "No, he doesn't hear it, he merely senses it" — where does that get us? One cannot even specify a sense-organ for this 'sensing'.

Some would now like to reply: "Of course I hear it!" — Others: "I don't really *hear* it."

However, it is possible here to discern conceptual differences.

* 231. We react to a facial expression differently from someone who does not recognize it as timid (in the *full* sense of the word). — But I do *not* want to say here that we feel this reaction in our muscles and joints, and that this is the 'sensing'. — No, what we have here is a modified concept of *sensing*. [210]

232. One might say of someone that he was blind to the *expression* of a face. Would his eyesight on that account be defective?

But this, of course, is not simply a question for physiology. Here the physiological is a symbol of the logical.

233. What does someone who senses the solemnity of a melody perceive? Nothing that could be conveyed by repetition of what was heard.

234. I can imagine some arbitrary cipher — this, for instance,  to be a strictly correct letter of some foreign alphabet. Or again, to be a faultily written one, and faulty in this way or that: for example, it might be slapdash, or typical childish awkwardness, or, like the flourishes in an official document. It could deviate from the correctly written letter in a variety of ways. — And according to the fiction with which I surround it, I can see it in various aspects. And here there is a close kinship with ‘experiencing the meaning of a word’.

* 235. It is almost as if ‘seeing the sign in this context’ were an echo of a thought.

“The echo of a thought in sight” — one would like to say.

* 236. Imagine a physiological explanation of the experience. Let it be this: When we look at the figure, our eyes scan it repeatedly, always following a particular path. The path corresponds to a particular pattern of oscillation of the eyeballs in looking. It can happen that one such pattern switches to another, and that the two alternate (A aspects). Certain patterns of movement are physiologically impossible; so, for example, I cannot see the schematic cube as two interpenetrating prisms. And so on. Let this be the explanation. — “Yes, now I realize that it is a kind of *seeing*.” — You have now introduced a new, a physiological, criterion for seeing. And this can conceal the old problem, but not solve it. — The purpose of this remark, however, was to bring out what happens when a physiological explanation is offered. The psychological concept hangs out of reach of this explanation. And this makes the nature of the problem clearer.

237. I’d like to say that what lights up here lasts only as long as I am occupied with the observed object in a particular way. (“See how it’s looking!”) — ‘I’d like to say’ — and *is* it so? — Ask yourself, “How long am I struck by a thing?” — How long is it *new* to me?

238. There is a physiognomy in the aspect, which then fades away. It is almost as if there were a face there which at first I *imitate*, and then accept without imitating it. — And isn't this really explanation enough? — But isn't it too much?

239. "I noticed the likeness between him and his father for a few minutes, and then no longer." — One might say this if his face were changing, and only looked like his father's for a short time. But it can also mean that, after a few minutes, I stopped being struck by the likeness.

240. "Once the likeness had struck you, how long were you conscious of it?" How might one answer this question? — "I soon stopped thinking about it", or "It struck me again from time to time", or "I several times had the thought, how like they are!", or "I marvelled at the likeness for at least a minute." — This is more or less what the answers would look like.

241. I'd like to put the question: "Am I *conscious* of the three-dimensionality, the depth of an object (of this cupboard, for instance), the *whole* time I see it?" Do I, so to speak, *feel* it the whole time? [211] — But put the question in the third person. — When would you say of someone that he was conscious of it the whole time? and when the opposite? — Of course, one could ask him — but how did he learn how to answer such a question? — He knows what it means "to feel pain continuously". But that will only confuse him here (as it confuses me).

If he now says that he is continuously conscious of the depth — do I believe him? And if he says that he is conscious of it only from time to time (for example, when talking about it) — do I believe *that*? These answers will strike me as resting on a false foundation. — It will be different if he says that the object sometimes seems to him flat, sometimes three-dimensional.

242. Someone tells me: "I looked at the flower, but was thinking of something else and was not conscious of its colour." Do I understand this? — I can imagine a significant context, say his going on: "Then I suddenly *saw* it, and realized it was the colour which . . ."

Or again: "If I had turned away then, I could not have said what colour it was."

"He looked at it without seeing it." — There is such a thing. But what is the criterion for it? — Well, there is a variety of cases here.

243. "Just now I looked at the shape rather than at the colour." Do not let such turns of phrase confuse you. Above all, don't wonder "What might be going on in the eyes or brain here?"

244. The likeness strikes me, and its striking me fades.

The likeness only struck me for a few minutes, and then no longer did.

What happened here? — What can I recall? My own facial expression comes to mind; I could reproduce it. If someone who knew me had seen my face, he would have said, "Something about his face struck you just now". — There further occurs to me what I say on such an occasion out loud or just to myself. And that is all. — And is this what being struck is? No. These are the manifestations of being struck; but they *are* 'what happens'.

245. Is being struck looking + thinking? No. Many of our concepts *cross* here.

246. ('Thinking' and 'talking in the imagination' — I do not say 'talking to oneself' — are different concepts.) |212|

247. The colour in the visual impression corresponds to the colour of the object (this blotting paper looks pink to me, and is pink) — the shape in the visual impression to the shape of the object (it looks rectangular to me, and is rectangular) — but what I perceive in the lighting up of an aspect is not a property of the object, but an internal relation between it and other objects.

248. Do I really see something different each time, or do I only interpret what I see in a different way? I'm inclined to say the former. But why? — To interpret is to think, to do something; seeing is a state.

* 249. Well, it is easy to recognize those cases in which we are *interpreting*. When we interpret, we form hypotheses, which may prove false. — "I see this figure as a . . ." can be verified as little as (or only in the same sense as) "I see a bright red". So there is a similarity in the use of "*see*" in the two contexts.

* 250. Just don't think you knew in advance what "*state of seeing*" means here! Let the use *teach* you the meaning.

251. We find certain things about seeing puzzling, because we do not find the whole business of seeing puzzling enough. [213]

252. Someone who looks at a photograph of people, houses and trees does not feel the lack of a third dimension in it. It would not be easy for us to describe a photograph as an aggregate of colour patches on a flat surface; but what we see in a stereoscope looks three-dimensional in a different way again.

253. (It is anything but a matter of course that we see ‘three-dimensionally’ with two eyes. If the two visual images were fused, one might expect a blurred image as a result.)

254. The concept of an aspect is related to the concept of imagination. In other words, the concept ‘Now I see it as . . .’ is related to ‘Now I am imagining *that*’.

Doesn’t it take imagination to hear something as a variation on a particular theme? And yet one does perceive something in so hearing it.

255. “Imagine this changed like this, and you have this other thing.” One can produce a proof in one’s imagination.

256. Seeing an aspect and imagining are subject to the will. There is such an order as “Imagine *this!*”, and also, “Now see the figure like *this!*”; but not “Now see this leaf green!”.

257. The question now arises: Could there be human beings lacking the ability to see something *as something* — and what would that be like? What sort of consequences would it have? — Would this defect be comparable to colour-blindness, or to not having absolute pitch? — We will call it “aspect-blindness” — and will now consider what might be meant by this. (A conceptual investigation.)

The aspect-blind man is supposed not to see the A aspects change. But is he also supposed not to recognize that the double cross contains both a black and a white cross? So if told “Show me figures containing a black cross among these examples”, will he be unable to manage it? No. He is supposed to be able to do that, but not to say: “Now it’s a black cross on a white ground!”

Is he supposed to be blind to the similarity between two faces? — And so also to their identity or approximate identity? I do not want to settle this. (He is supposed to be able to execute such orders as “Bring me something that looks like *this!*”)

258. Is he supposed to be unable to see the schematic cube as a cube? — It would not follow this that he could not recognize it as a representation (a working drawing, for instance) of a cube. But for him it [214] would not switch from one aspect to the other. — Question: Is he supposed to be able to *take* it as a cube in certain circumstances, as we do? — If not, this could not very well be called a sort of blindness.

The ‘aspect-blind’ will have an altogether different attitude to pictures from ours.

259. (Anomalies of *this* kind are easy for us to imagine.)

260. Aspect-blindness will be *akin* to the lack of a ‘musical ear’.

261. The importance of this concept lies in the connection between the concepts of seeing an aspect and of experiencing the meaning of a word. For we want to ask, “What would someone be missing if he did not *experience* the meaning of a word?”

What would someone be missing, who, for example, did not understand the request to pronounce the word “till” and to mean it as a verb — or someone who did not feel that a word lost its meaning for him and became a mere sound if it was repeated ten times over?

262. In a law court, for example, the question might be raised as to how someone meant a word. And this can be inferred from certain facts. — It is a question of *intention*. But could how he experienced a word — the word “bank”, for instance — have been significant in a similar way?

263. Suppose I had agreed on a code with someone; “tower” means bank. I tell him “Now go to the tower!” — he understands me and acts accordingly, but he feels the word “tower” to be strange in this use; it has not yet ‘absorbed’ the meaning.

264. “When I read a poem or narrative with feeling, surely something goes on in me which does not go on when I merely skim the lines for information.” — What processes am I alluding to? — The sentences have a different *ring*. I pay careful attention to intonation. Sometimes a word has the wrong intonation, stands out too much or too little. I notice this, and my face shows it. I might later talk about my reading in detail: for example, about the mistakes of intonation. Sometimes I visualize a

picture, an illustration, as it were. Indeed, this seems to help me to read with the correct expression. And I could mention more things of the same kind. — I can also give a word an intonation which makes its meaning stand out from the rest, almost as if the word were a portrait of the whole thing. (And this may, of course, depend on the structure of the sentence.) |215|

265. When I pronounce this word while reading expressively, it is completely filled with its meaning. — “How can this be, if meaning is the use of the word?” Well, what I said was intended figuratively. Not that I chose the figure: it forced itself on me. — But the figurative use of the word can’t come into conflict with the original one.

266. Why precisely *this* picture suggests itself to me could perhaps be explained. (Just think of the expression, and the meaning of the expression “mot juste”.)

267. But if a sentence can strike me as a painting in words, and even a single word in a sentence as a picture, then it is no more astonishing that a word uttered in isolation and without purpose can seem to carry a particular meaning within itself.

268. Think here of a special kind of illusion, which throws light on these matters. — I go for a walk in the environs of a city with a friend. As we talk, it emerges that I imagined the city to be on our right. Not only have I *no* reason that I am aware of for this assumption, but some quite simple consideration would be enough to make me realize that the city is a bit to the left ahead of us. I can at first give no answer to the question *why* I imagine the city in *this* direction. I have *no reason* to think so. But though I see no reason, still I seem to see certain psychological causes for it. In particular, certain associations and memories. For example, we were walking along a canal, and once before, in similar circumstances, I had followed a canal, and that time the city was on our right. — I might try, as it were psychoanalytically, to discover the causes of my unfounded conviction.

269. “But what a strange experience this is!” — Of course, it is not stranger than any other; it is simply of a different kind from those experiences which we regard as the most fundamental ones — sense impressions, for instance.

270. "I feel as if I knew the city was over there." — "I feel as if the name 'Schubert' fitted Schubert's works and Schubert's face."

271. You can say the word "march" to yourself and mean it at one time as an imperative, at another as the name of a month. And now say "March!" — and then "March *no further!*" — Does the *same* experience accompany the word both times — are you sure?

272. If careful attention shows me that when I am playing this game I experience the word now *this* way, now *that* way — doesn't it also show [216] me that in the stream of speech I often don't experience the word *at all*? — For the fact that I then also mean it, intend it, now like *this*, now like *that*, and maybe also explain it accordingly later, is, of course, not in question.

* 273. But the question then remains why, in connection with this *game* of experiencing a word, we also speak of 'the meaning' and of 'meaning it'. — This is a different kind of question. — It is a characteristic feature of this language-game that in *this* situation we use the expression "We pronounced the word with *this* meaning" and take this expression over from that other language-game.

Call it a dream. It does not change anything.

274. Given the two concepts 'fat' and 'lean', would you be inclined to say that Wednesday was fat and Tuesday lean, or the other way round? (I am strongly inclined towards the former.) Now have "fat" and "lean" some different meaning here from their usual one? — They have a different use. — So ought I really to have used different words? Certainly not. — I want to use *these* words (with their familiar meanings) *here*. — I am saying nothing about the causes of this phenomenon now. They *might* be associations from my childhood. But that is a hypothesis. Whatever the explanation — the inclination is there.

275. Asked "What do you really mean here by 'fat' and 'lean'?", I could only explain the meanings in the usual way. I could *not* point them out by using Tuesday and Wednesday as examples.

276. Here one might speak of a 'primary' and 'secondary' meaning of a word. Only someone for whom the word has the former meaning uses it in the latter.

277. Only to someone who has learnt to calculate — on paper or out loud — can one render intelligible, by means of this concept of calculating, what calculating in the head is.

278. The secondary meaning is not a ‘metaphorical’ meaning. If I say, “For me the vowel *e* is yellow”, I do not mean: ‘yellow’ in a metaphorical meaning — for I could not express what I want to say in any other way than by means of the concept of yellow.

279. Someone tells me: “Wait for me by the bank.” Question: Did you, *as you were saying the word*, mean this bank? — This question is of the same kind as “Did you, on the way to him, intend to say such-and-such to him?” It refers to a definite time (the time of walking, as the former question refers to the time of speaking) — but not to an [217] *experience* during that time. Meaning something is as little an experience as intending.

But what distinguishes them from an experience? — They have no experiential content. For the contents (images, for instance) which accompany and illustrate them are not the meaning or intending.

280. The intention *with which* one acts does not ‘accompany’ the action any more than a thought ‘accompanies’ speech. Thought and intention are neither ‘articulated’ nor ‘non-articulated’; to be compared neither to a single note which sounds during the acting or speaking, nor to a melody.

281. ‘Talking’ (whether out loud or silently) and ‘thinking’ are not concepts of a similar kind, even though they are in closest connection.

282. The *interest* of an experience one has while speaking and of the intention is not the same. (The experience might perhaps inform a psychologist about an ‘*unconscious*’ intention.)

283. “At that word, we both thought of him.” Let’s assume that each of us said the same words to himself silently — and surely it can’t mean MORE than that. — But wouldn’t these words too be only a *germ*? They must surely belong to a language and to a context, in order really to be the expression of the thought of that man.

284. If God had looked into our minds, he would not have been able to see there whom we were speaking of.

285. "Why did you look at me at that word, were you thinking of . . . ?"
— So there is a reaction at a certain moment, and it is explained by saying "I thought of . . ." or "I suddenly remembered . . ."

286. In saying this, you refer to the moment of speaking. It makes a difference whether you refer to this or to that moment.

Mere explanation of a word does not refer to an occurrence at the moment of speaking.

287. The language-game "I mean (or meant) *this*" (subsequent explanation of a word) is quite different from this one: "I thought of . . . as I said it." The latter is akin to "It reminded me of . . ."

288. "I have already remembered three times today that I must write to him." Of what importance is what went on in me then? — On the [218] other hand, what is the importance, the interest, of the report itself?
— It permits certain inferences.

289. "At these words he occurred to me." — What is the primitive reaction with which the language-game begins — which can then be translated into these words? How do people get to use these words?

The primitive reaction may have been a glance or a gesture, but it may also have been a word.

290. "Why did you look at me and shake your head?" — "I wanted to convey to you that you . . ." This is supposed to express not a symbolic convention but the purpose of my action.

291. Meaning something is not a process which accompanies a word. For no *process* could have the consequences of meaning something.

(Similarly, I think, it could be said: a calculation is not an experiment, for no experiment could have the special consequences of a multiplication.)

292. There are important characteristic processes accompanying talking, which are often missing when one talks without thinking. But *they* are not the thinking.

293. "Now I know!" What went on here? — So did I *not* know when I declared that now I knew?

You are looking at it in the wrong way.
(What is the signal for?)

And could the 'knowing' be called an accompaniment of the exclamation?

294. The familiar face of a word, the feeling that it has assimilated its meaning into itself, that it is a likeness of its meaning — there could be human beings to whom all this was alien. (They would not have an attachment to their words.) — And how are these feelings manifested among us? — By the way we choose and value words.

295. How do I find the 'right' word? How do I choose among words? It is indeed sometimes as if I were comparing them by fine differences of smell: *That* is too . . . , *that* is too . . . — *this* is the right one. — But I don't always have to judge, explain; often I might only say, "It simply isn't right yet". I am dissatisfied, I go on looking. At last a word comes: "*That's it!*" *Sometimes* I can say why. This is simply what searching, that is what finding, is like here. |219|

296. But doesn't the word that occurs to you 'come' in a somewhat special way? Just pay attention! — Careful attention is no use to me. All it could discover would be what is going on in *me, now*.

And how can I, precisely now, listen out for it at all? I would have to wait until another word occurs to me. But the curious thing is that it seems as though I did not have to wait for the occasion, but could display it to myself, even when it is not actually taking place . . . How? — I *act* it. — But *what* can I learn in this way? What do I imitate? — Characteristic accompaniments. Primarily: gestures, faces, tones of voice.

297. A *great deal* can be said about a subtle aesthetic difference — that is important. — The first remark may, of course, be: "*This* word fits, *that* doesn't" — or something of the kind. But then all the widespread ramifications effected by each of the words can still be discussed. That first judgement is *not* the end of the matter, for it is the *field* of a word that is decisive.

298. "The word is on the tip of my tongue." What is going on in my mind at this moment? That is not the point at all. Whatever went on

was not what was meant by that expression. What is of more interest is what went on in my behaviour. — “The word is on the tip of my tongue” tells you: the word which belongs here has escaped me, but I hope to find it soon. — For the rest, the verbal expression does no more than some kind of wordless behaviour.

- * 299. On this, James is really trying to say: “What a remarkable experience! The word is not there yet, and yet, in a certain sense, it is — or something is there, which *cannot* grow into anything but this word.” — But this is not an experience at all. *Interpreted* as an experience, it does indeed look odd. As does an intention, interpreted as an accompaniment of action; or again, like –1, interpreted as a cardinal number.

300. The words “It’s on the tip of my tongue” are no more the expression of an experience than “Now I know how to go on!” — We use them in *certain situations*, and they are surrounded by behaviour of a special kind, and also by some characteristic experiences. In particular, they are frequently followed by *finding* the word. (Ask yourself: “What would it be like if human beings *never* found the word that was on the tip of their tongue?”) |220|

301. Silent, ‘inner’ speech is not a half hidden phenomenon, seen, as it were, through a veil. It is not hidden *at all*, but the concept may easily confuse us, for it runs over a long stretch cheek by jowl with the concept of an ‘outer’ process, and yet does not coincide with it.

(The question of whether laryngal muscles are innervated concurrently with internal speech, and similar things, may be of great interest, but not for our investigation.)

302. The close relationship between ‘inner speech’ and ‘speech’ comes out in that what was said inwardly can be communicated audibly, and that inner speech can *accompany* outer action. (I can sing inwardly, or read silently, or calculate in my head, and beat time with my hand as I do so.)

303. “But inner speech is surely a certain activity, which I have to learn!” Very well; but what is ‘doing’ and what is ‘learning’ here?

Let the use of words teach you their meaning. (Similarly, one can often say in mathematics: let the *proof* teach you *what* was being proved.)

304. "So I don't *really* calculate, when I calculate in my head?" — After all, you yourself distinguish between calculating in the head and perceptible calculating! But you can only learn what 'calculating in the head' is by learning what 'calculating' is; you can only learn to calculate in your head by learning to calculate.

305. One can say things in one's imagination very 'distinctly', when one reproduces the intonation of one's sentences by humming (with closed lips). Movements of the larynx help too. But the curious thing is precisely that one then *hears* the talk in one's imagination and does not merely *feel* the skeleton of it, so to speak, in one's larynx. (For human beings could also well be imagined calculating silently with laryngal movements, as one can calculate on one's fingers.)

* 306. A hypothesis, such as that such-and-such goes on in our bodies when we talk silently to ourselves, is of interest to us only in that it points to a possible use of the expression "I said . . . to myself": namely, that of inferring the physiological process from the expression.

307. That what someone else says to himself is hidden from me is part of the *concept* of inner speech. Only "hidden" is the wrong word [221] here; for if it is hidden from me, it ought to be apparent to him, *he* would have to *know* it. But he does not 'know' it; only, the doubt which exists for me does not exist for him.

308. "What anyone silently says to himself is hidden from me" might, of course, also signify that I can for the most part not *guess* it; nor can I read it off from, for example, the movements of his larynx (which would be a possibility).

309. "I know what I want, wish, believe, feel, . . ." (and so on through all the psychological verbs) is either philosophers' nonsense or, at any rate, *not* a judgement a priori.

310. "I know . . ." may mean "I do not doubt . . ." — but does not mean that the words "I doubt . . ." are *senseless*, that doubt is logically excluded.

311. One says "I know" where one can also say "I believe" or "I suppose"; where one can satisfy oneself. (Someone who remonstrates with me that one sometimes does say "But I must know if I am in pain!",

“Only you can know what you feel”, and similar things, should consider the occasion and purpose of these phrases. “War is war” is not an example of the law of identity, either.)

312. It's possible to imagine a case in which I *could* satisfy myself that I had two hands. Normally, however, I *can't* do so. “But all you need do is to hold them up before your eyes!” — If I am *now* in doubt as to whether I have two hands, I need not believe my eyes either. (I might just as well ask a friend.)

313. This is connected with the fact that, for example, the sentence “The Earth has existed for millions of years” makes clearer sense than “The Earth has existed for the last five minutes”. For I'd ask anyone who asserted the latter: “What observations does this sentence refer to; and what observations would count against it?” — whereas I know to what context of ideas and what observations the former sentence belongs.

* 314. “A newborn child has no teeth.” — “A goose has no teeth.” — “A rose has no teeth.” — This last at any rate — one would like to say — is obviously true! It is even surer than that a goose has none. — And yet it is far from clear. For where should a rose's teeth have been? The goose has none in its jaw. And neither, of course, has it any in its [222] wings; but no one means that when he says it has no teeth. — Why, suppose one were to say: the cow chews its food and then dungs the rose with it, so the rose has teeth in the mouth of an animal. This would not be absurd, because one has no notion in advance where to look for teeth in a rose. ((Connection with ‘pain in someone else's body'.))

315. I can know what someone else is thinking, not what I am thinking.

It is correct to say “I know what you are thinking”, and wrong to say “I know what I am thinking”.

(A whole cloud of philosophy condenses into a drop of grammar.)

316. “Man's thinking goes on within the inner recesses of his mind in a seclusion in comparison with which any physical seclusion is a lying in full view.”

If there were people who always read the silent soliloquy of others — say by observing the larynx — would they too be inclined to use the picture of complete seclusion?

317. If I were to talk to myself out loud in a language not understood by those present, my thoughts would be hidden from them.

318. Let's assume that there was a man who always guessed right what I was saying to myself in my thoughts. (It does not matter how he manages it.) But what is the criterion for his guessing *right*? Well, I'm a truthful person, and I confess that he has guessed right. — But might I not be mistaken, can my memory not deceive me? And might it not always do so when — without lying — I express what I have thought to myself? — But now it does appear that 'what went on within me' is not the point at all. (Here I am drawing a construction line.)

319. The criteria for the truth of the *confession* that I thought such-and-such are not the criteria for a true *description* of a process. And the importance of the true confession does not reside in its being a correct and certain report of some process. It resides, rather, in the special consequences which can be drawn from a confession whose truth is guaranteed by the special criteria of *truthfulness*.

320. (Assuming that dreams can yield important information about the dreamer, what yielded the information would be truthful accounts of dreams. The question of whether the dreamer's memory deceives him when he reports the dream after waking cannot arise, unless we introduce a completely new criterion for the report's 'agreeing' [223] with the dream, a criterion which distinguishes a truth here from truthfulness.)

321. There is a game called 'thought guessing'. One variant of it would be this: I tell A something in a language that B does not understand. B is supposed to guess the meaning of what I say. — Another variant: I write down a sentence which the other person can't see. He has to guess the words or the sense. — Yet another: I am putting a jigsaw puzzle together; the other person can't see me, but from time to time guesses my thoughts and utters them. He says, for instance, "Now where is this bit?" — "Now I know how it fits!" — "I have no idea what goes in here." — "The sky is always the hardest part", and so on — but *I* need not be talking to myself either out loud or silently at the time.

* 322. All this would be guessing thoughts; and even if I don't actually talk to myself, that does not make my thoughts any more hidden than an unperceived physical process.

323. “What is *internal* is hidden from us.” — The future is hidden from us. — But does the astronomer think like this when he calculates an eclipse of the sun?

324. If I see someone writhing in pain with evident cause, I do not think: all the same, his feelings are hidden from me.

325. We also say of a person that he is transparent to us. It is, however, important as regards our considerations that one human being can be a complete enigma to another. One learns this when one comes into a strange country with entirely strange traditions; and, what is more, even though one has mastered the country’s language. One does not *understand* the people. (And not because of not knowing what they are saying to themselves.) We can’t find our feet with them.

326. “I can’t know what is going on in him” is, above all, a *picture*. It is the convincing expression of a conviction. It does not give the reasons for the conviction. *They* are not obvious.

327. If a lion could talk, we wouldn’t be able to understand it.

328. It is possible to imagine a guessing of intentions similar to the guessing of thoughts, but also a guessing of what someone is actually *going to do*.

To say “Only he can know what he intends” is nonsense; to say “Only he can know what he will do”, wrong. For the prediction contained in my expression of intention (for example, “As soon as it strikes [224] five, I’m going home”) need not come true, and someone else may know what will really happen.

329. Two points, however, are important: one, that in many cases someone else cannot predict my actions, whereas I foresee them in my intention; the other, that my prediction (in my expression of intention) does not rest on the same foundation as his prediction of my action, and that the conclusions to be drawn from these predictions are quite different.

330. I can be as *certain* of someone else’s feelings as of any fact. But this does not make the sentences “He is very depressed”, “ $25 \times 25 = 625$ ”, and “I am 60 years old” into similar instruments. A natural explanation is that the certainty is of a different *kind*. — This seems to point to a psychological difference. But the difference is a logical one.

331. “But if you are *certain*, isn’t it that you are shutting your eyes in face of doubt?” — They’ve been shut.

332. Am I less certain that this man is in pain than that $2 \times 2 = 4$? — Is the first case therefore one of mathematical certainty? — ‘Mathematical certainty’ is not a psychological concept.

The kind of certainty is the kind of language-game.

333. “Only he knows his motives” — that is an expression of the fact that we ask *him* what his motives are. — If he is sincere, he will tell us them; but I need more than sincerity to guess his motives. This is where the kinship with *knowing* is.

334. Let yourself be *struck* by the existence of such a thing as our language-game of confessing the motive of my action.

335. We don’t notice the enormous variety of all the everyday language-games, because the clothing of our language makes them all alike.

What is new (spontaneous, ‘specific’) is always a language-game.

336. What is the difference between motive and cause? — How is the motive *discovered*, and how the cause?

337. There is such a question as “Is this a reliable way of judging people’s motives?” But in order to be able to ask this, we must already know what “judging a motive” means; and we do not learn this by finding out what ‘motive’ is and what ‘judging’ is. [225]

338. One judges the length of a rod, and may look for and find some method of judging it more exactly or more reliably. So — you say — *what* is judged here is independent of the method of judging it. What length *is* cannot be explained by the method of determining length. — Anyone who thinks like this is making a mistake. What mistake? — To say “The height of Mont Blanc depends on how one climbs it” would be odd. And one wants to compare ‘ever more accurate measurement of length’ with getting closer and closer to an object. But in certain cases it is, and in certain cases it is *not*, clear what “getting closer and closer to the length of an object” means. What “determining the length” means is not learned by learning what *length* and *determining* are; rather, the meaning of the word “length” is learnt by learning, among other things, what it is to determine length.

(That's why the word "methodology" has a double meaning. A physical investigation may be called a methodological one, but also a conceptual investigation.)

- * 339. One would sometimes like to say of certainty and conviction that they are tonalities of thought; and it is true that they receive expression in the *tone* of voice. But do not think of them as 'feelings' which we have in speaking or thinking.

Don't ask: "What goes on in us when we are certain that . . . ?" — but: How is 'the certainty that this is so' manifested in people's action?

- 340. "While you can have complete certainty about someone else's state of mind, still it is always merely subjective, not objective, certainty." — These two words point to a difference between language-games.

- 341. A dispute may arise over the correct result of a calculation (say, of a rather long addition). But such disputes are rare and of short duration. They can be decided, as we say, 'with certainty'.

Mathematicians don't in general quarrel over the result of a calculation. (This is an important fact.) — Were it otherwise: if, for instance, one mathematician was convinced that a figure had altered unperceived, or that his or someone else's memory had been deceptive, and so on — then our concept of 'mathematical certainty' would not exist.

- 342. Even then it might still be said: "While we can never *know* what the result of a calculation is, for all that, it always has a quite [226] definite result. (God knows it.) Mathematics is indeed of the highest certainty — though we possess only a crude likeness of it."

- 343. But am I really trying to say that the certainty of mathematics is based on the reliability of ink and paper? No. (That would be a vicious circle.) — I have not said *why* mathematicians do not quarrel, but only *that* they do not.

- 344. It is no doubt true that one could not calculate with certain sorts of paper and ink, if, that is, they were subject to certain strange alterations — but still, that they changed could in turn be ascertained only through memory and comparison with other means of calculation. And how, in turn, are these tested?

345. What has to be accepted, the given, is — one might say — *forms of life*.

346. Does it make sense to say that people generally agree in their judgements of colour? — What would it be like if it were different? — One man would say that a flower was red, which another called blue; and so on. — But with what right could one then call these people's words "red" and "blue" *our* 'colour-words'? —

How would they learn to use these words? And is the language-game which they learn still the one we call the use of 'colour names'? There are evidently differences of degree here.

347. But this consideration must apply to mathematics too. If there weren't complete agreement, then human beings wouldn't be learning the technique which we learn either. It would be more or less different from ours, perhaps even up to the point of unrecognizability.

348. "But mathematical truth is independent of whether human beings know it or not!" — Certainly, the propositions "Human beings believe that $2 \times 2 = 4$ " and " $2 \times 2 = 4$ " do not have the same sense. The latter is a mathematical proposition; the other, if it makes sense at all, may perhaps mean: human beings have *arrived* at the mathematical proposition. The two propositions have entirely different *uses*. — But what would *this* mean: "Even though everybody believed that 2×2 were 5, it would still be 4"? — For what would it be like for everybody to believe that? — Well, I could imagine, for instance, that people had a different calculus, or a technique which we wouldn't [227] call "calculating". But would it be *wrong*? (Is a coronation *wrong*? To beings different from ourselves it might look extremely odd.)

349. Of course, in one sense, mathematics is a body of knowledge, but still it is also an *activity*. And 'false moves' can exist only as the exception. For if what we now call by that name became the rule, the game in which they were false moves would have been abrogated.

350. "We all learn the same multiplication table." This might, no doubt, be a remark about the teaching of arithmetic in our schools — but also an observation about the concept of the multiplication table. ("In a horse-race, the horses generally run as fast as they can.")

351. There is such a thing as colour-blindness, and there are ways of ascertaining it. There is, in general, complete agreement in the colour statements of those who have been diagnosed normal. This characterizes the concept of a colour statement.

352. There is in general no such agreement over the question of whether an expression of feeling is genuine or not.

353. I am sure, *sure*, that he is not pretending; but some third person is not. Can I always convince him? And if not, is there some mistake in his reasoning or observations?

354. “You don’t understand a thing!” — this is what one says when someone doubts what we recognize as clearly genuine — but we cannot prove anything.

355. Is there such a thing as ‘expert judgement’ about the genuineness of expressions of feeling? — Here too, there are those with ‘better’ and those with ‘worse’ judgement.

In general, predictions arising from judgements of those with better knowledge of people will be more correct.

Can one learn this knowledge? Yes; some can learn it. Not, however, by taking a course of study in it, but through ‘experience’. — Can someone else be a man’s teacher in this? Certainly. From time to time he gives him the right *tip*. — This is what ‘learning’ and ‘teaching’ are like here. — What one acquires here is not a technique; one learns correct judgements. There are also rules, but they do not form a system, and only experienced people can apply them rightly. Unlike calculating rules.

356. What is most difficult here is to express this indefiniteness correctly, and without distortion. [228]

357. “The genuineness of an expression cannot be proved; one has to feel it.” — Very well — but now, what happens further with this recognition of genuineness? If someone says “Voilà ce que peut dire un coeur vraiment épris” — and if he also brings someone else to the same view — what are the further consequences? Or are there none, and does the game *end* with its being to the taste of one but not of the other?

There are certainly *consequences*, but of a diffuse kind. Experience — that is to say, varied observation — can inform us of them; and one can’t formulate them in general terms; rather, only occasionally can one arrive at a correct and fruitful judgement, discover fruitful connection.

And the most general remarks yield at best what look like fragments of a system.

358. One can indeed be convinced by the evidence that someone is in such-and-such a state of mind: that, for instance, he is not pretending. But there is also ‘imponderable’ evidence here.

359. The question is: what does imponderable evidence *accomplish*?

Suppose there were imponderable evidence for the chemical (internal) structure of a substance; still, it would have to prove itself to be evidence by certain consequences which *are* ponderable.

(Imponderable evidence might convince someone that a picture was a genuine . . . But this *may* be proved right by documentation as well.)

360. Imponderable evidence includes subtleties of glance, of gesture, of tone.

I may recognize a genuine loving look, distinguish it from a pretended one (and here there can, of course, be a ‘ponderable’ confirmation of my judgement). But I may be quite incapable of describing the difference. And this not because the languages I know have no words for it. Why don’t I simply introduce new words? — If I were a very talented painter, I might conceivably represent the genuine and the dissembled glance in pictures.

361. Ask yourself: How does a man learn to get an ‘eye’ for something? And how can this eye be used?

* 362. Pretending to be in pain, for example, is, of course, only a special case of someone producing expressions of pain without being in pain. If this is possible [229] at all, why should it always be pretending that is taking place — this very special pattern in the weave of our lives?

363. A child has much to learn before it can pretend. (A dog can’t be a hypocrite, but neither can it be sincere.)

364. There might actually occur a case where we’d say: “This person *believes* he is pretending.” [230]

365. If concept formation can be explained by facts of nature, shouldn't we be interested, not in grammar, but rather in what is its basis in nature?

— We are, indeed, also interested in 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 is not thereby thrown back on to these possible causes of concept formation; we are not doing natural science; nor yet natural history — since we can also invent fictitious natural history for our purposes.

366. I am not saying: if such-and-such facts of nature were different, people would have different concepts (in the sense of a hypothesis). Rather: if anyone believes that certain concepts are absolutely the correct ones, and that having different ones would mean not realizing something that we realize — then let him imagine certain very general facts of nature to be different from what we are used to, and the formation of concepts different from the usual ones will become intelligible to him.

367. Compare a concept with a style of painting. For is even our style of painting arbitrary? Can we choose one at pleasure? (The Egyptian, for instance.) Or is it just a matter of pretty and ugly? [231]

368. When, on the basis of memory, I say: "He was here half an hour ago" — this is not the description of a present experience.

Memory *experiences* are accompaniments of remembering.

369. Remembering has no experiential content. — Surely this can be seen by introspection! Doesn't *it* show precisely that there is nothing there, when I look out for a content? — But it could only show this from case to case. And even so, it cannot show me what the word "remember" means, and hence *where* to look for a content!

I get the *idea* of a memory content only through comparing psychological concepts. It is like comparing two *games*. (Soccer has *goals*, volleyball doesn't.)

370. Would this situation be conceivable: for the first time in his life someone remembers something and says: "Yes, now I know what 'remembering' is, what it *feels like* to remember". — How does he know that this feeling is 'remembering'? Compare: "Yes, now I know what 'tingling' is" (he has perhaps had an electric shock for the first time). — Does he know that it is memory because it is caused by something past? And how does he know what the past is? After all, a person learns the concept of the past by remembering.

And how will he know again in the future what remembering feels like?

(On the other hand, one might, perhaps, speak of a feeling "Long, long ago", for there is a tone, a gesture, which go with certain tales of past times.) |232|

371. The confusion and barrenness of psychology is not to be explained by its being a “young science”; its state is not comparable with that of physics, for instance, in its beginnings. (Rather, with that of certain branches of mathematics. Set theory.) For in psychology, there are experimental methods *and conceptual confusion*. (As in the other case, conceptual confusion and methods of proof.)

The existence of the experimental method makes us think that we have the means of getting rid of the problems which trouble us; but problem and method pass one another by.

372. An investigation entirely analogous to our investigation of psychology is possible also for mathematics. It is just as little a *mathematical* investigation as ours is a psychological one. It will *not* contain calculations, so it is not, for example, formal logic. It might deserve the name of an investigation of the ‘foundations of mathematics’.

Endnotes

Philosophical Investigations

§1(a) n. 1 We have translated from Wittgenstein's German, not from Augustine's Latin text.

§1(d) 'Von einer solchen war hier gar nicht die Rede': Anscombe's very free translation can be justified in the light of Wittgenstein's modifications of Rhees's translation (TS 226). He changed the original translation 'There was no question of any here; only . . .' to read: 'There was no question of such an entity "meaning" here, only . . .' thus making it clear *what* conception of meaning is under attack here. This is an authorial modification rather than a translation of the text, but its spirit is captured by Anscombe's rendering.

§11(b) 'hear them in speech, or see them written or in print': this translation is based on Wittgenstein's corrections to TS 226.

§16(c) Double-bracketed sentences are notes for the author to insert or consider inserting specific remarks from his notebooks or a new observation. Here, the double-bracketed note may be a reference to MS 124, 60 (cp. *Lectures on the Foundations of Mathematics* (Harvester Press, Sussex, 1976), Lecture XXI, p. 208); see also MS 107, 226f. (cf. *Philosophical Remarks* (Blackwell, Oxford, 1975), pp. 207f.), which is comparable to *Zettel* (Blackwell, Oxford, 1967), §691.

§19(a) 'Und unzähliges Andere' is unclear. Wittgenstein altered Rhee's translation (TS 226, §22 (p. 10)), from 'And countless others' to 'And countless other things'. We have followed his translation.

§20(a) The translation of the penultimate line of this paragraph is based on Wittgenstein's alterations to Rhee's translation.

§20(b) The rather free rendering of the concluding German sentence of this paragraph is based on Wittgenstein's modification to Rhee's translation.

§22(a) Frege used the word *Annahme* ('assumption') to signify the content of a possible assertion (see 'Function and Concept', repr. in his *Collected Papers on Mathematics, Logic, and Philosophy* (Blackwell, Oxford, 1984), p. 149; pp. 21f. in the original German pagination).

§22(d) Frege's assertion sign is the 'turnstile', \vdash , which is composed of the sign of assertion or judgement-stroke ' \rceil ', and the content-stroke or horizontal ' $-$ ', which is a function sign denoting a function from objects (including contents of possible judgements (assertions) or thoughts) to truth-values. See *The Basic Laws of Arithmetic*, vol. i (1893), §5 (cp. *Begriffschrift* (1879) (*Conceptual Notation and Related Articles* (Clarendon Press, Oxford, 1972)), §2).

Boxed remark between §22 and §23 has been relocated from the bottom of p. 11 in the first two editions. Immediately derived from TS 228, §432, it was inserted into TS 227(a) and (b) as handwritten slips in another hand, with the note 'Insertion at the end of §22'. In TS 227(b) this note was deleted, apparently in yet another hand. It is possible that this paragraph was intended as paragraph (e) of §22.

§25 Wittgenstein corrected Rhee's translation 'Commanding, asking, recounting' to 'Giving orders, asking questions, describing', and we have followed his correction, while translating *erzählen* by 'telling stories', rather than 'describing'.

Boxed remark between §28 and §29 has been relocated from the bottom of p. 14 in the first two editions. These two paragraphs are cut from TS 228, §522, and inserted between pp. 24 and 25 of the final typescript. In both copies of TS 227, the inserted slip has written on it the words 'Insertion at end of §28'.

Boxed remark between §35 and §36, paragraph (b): square brackets are used to indicate Wittgenstein's handwritten addendum on the slip of paper, cut from TS 228, §36, and inserted between pp. 30 and 31 of TS 227(a).

§38(a) 'the word "this" has been called the *real name*': a reference to Russell; see, e.g., *Theory of Knowledge – The 1913 Manuscript*, in *The*

Collected Papers of Bertrand Russell, vol. 7, ed. E. R. Eames in collaboration with K. Blackwell (Allen and Unwin, London, 1984), pp. 39f., and even more emphatically in ‘The Philosophy of Logical Atomism’, repr. in *The Philosophy of Logical Atomism and Other Essays 1914–1919*, ed. J. G. Slater, in *The Collected Papers of Bertrand Russell*, vol. 8 (Allen and Unwin, London, 1986), p. 170.

§39 Wittgenstein used the name ‘Nothung’, which is the name of Siegfried’s sword in Wagner’s *Ring*, which was shattered. In TS 226, §46 (p. 27), Wittgenstein replaced the first occurrence of ‘Nothung’ by ‘Escaliber’ [sic], but not the subsequent occurrences — perhaps because it then occurred to him that Excalibur was not shattered and reassembled, and was therefore less apt to illustrate the point.

§46(b) ‘Socrates says in the *Theaetetus*’: see Plato, *Theaetetus* 201e–202b.

The quotation from the *Theaetetus* is translated from Preisendanz’s German translation (Diederichs, Jena, 1925), which Wittgenstein used, rather than from the original Greek. Note that Wittgenstein takes *Erklärung* and *erklärungsweise* to mean description and descriptive language — as is evident in the first sentence of §49. F. M. Cornford’s English translation of the *Theaetetus* uses the phrase ‘no account can be given of them’ where Preisendanz used ‘gebe es keine Erklärung’; and where Preisendanz had ‘so seien auch seine Benennungen in dieser Verflechtung zur erklärenden Rede geworden; denn deren Wesen sei die Verflechtung von Namen’, Cornford translated ‘so the names are combined to make a description, a description being precisely a combination of names’.

§46(c) Russell’s ‘individuals’: e.g. Russell, *Principia Mathematica*, Introduction to 2nd edn (Cambridge University Press, Cambridge, 1927), II, 1, and his *Introduction to Mathematical Philosophy* (Allen and Unwin, London, 1919), ch. 13.

‘and my “objects”’: see *Tractatus Logico-Philosophicus* 2.01–2.032.

§47(b) Wittgenstein illustrated what he meant by ‘an open curve composed of straight bits’ in Rhees’s translation (TS 226, §54 (p.32)),

namely:  , by contrast with a continuous curve, namely .

§49(b) ‘That was what Frege meant too, when he said that a word has a meaning only in the context of a sentence’: see Frege, *The*

Foundations of Arithmetic, tr. J. L. Austin, 2nd edn (Blackwell, Oxford, 1959), p. x, §§46, 60, 62, 106.

§51(b) Anscombe translated this as ‘we must focus on the details of what goes on; must look at them *from close to*’. Our rendering is based on Wittgenstein’s alteration to Rhees’s translation (TS 226, §60 (p. 38)).

§54(b) ‘aus der Praxis des Spiels’: in TS 226, §62 (p. 40), Wittgenstein deleted Rhees’s translation ‘from the practice of the game’ and replaced it with ‘from the way the game is played’.

§65(a) ‘Was allen diesen Vorgängen gemeinsam ist’: Rhees translated *Vorgängen* as ‘processes’, which Wittgenstein corrected to ‘procedures’ (TS 226, §72 (p. 47)). Although it is natural to use the German *Vorgang* for any ‘goings-on’, it is unnatural to use either ‘process’ or ‘procedure’ for linguistic activities. So we have retained Anscombe’s translation, but, for consistency’s sake changed the word ‘proceedings’ in the opening sentence of §66(a) to ‘activities’.

§66(a) ‘singing and dancing games’: this is Wittgenstein’s preferred version in TS 226, §73 (p. 48).

Boxed remark between §70 and §71: in TS 227(b) this slip, cut from TS 228, §545, was inserted between pp. 59 and 60, together with the inscription ‘On page 60’.

§71(b) ‘Frege compares a concept to . . .’: Wittgenstein is referring to *The Basic Laws of Arithmetic*, vol. ii (1903), §56. The German text runs as follows:

Wenn man sich Begriffe ihrem Umfange nach durch Bezirke in der Ebene versinnlicht, so ist das freilich ein Gleichnis, das nur mit Vorsicht gebraucht werden darf, hier aber gute Dienste leisten kann. Einem unscharf begrenzten Begriffe würde ein Bezirk entsprechen, der nicht überall eine scharfe Grenzlinie hätte, sondern stellenweise ganz verschwimmend in die Umgebung überginge. Das wäre eigentlich gar kein Bezirk; und so wird ein unscharf definierter Begriff mit Unrecht Begriff genannt.

P. T. Geach, in Peter Geach and Max Black, eds, *Translations from the Writings of Gottlob Frege* (Blackwell, Oxford, 1960), p. 159, translated this as follows:

If we represent concepts in extension by areas on a plane, this is admittedly a picture that may be used only with caution, but here it can do us good service. To a concept without sharp boundary there would correspond an area that had not a sharp boundary-line all round, but in places just faded away into the background. This would not really be an area at all; and likewise a concept that is not sharply defined is wrongly termed a concept.

However, *Bezirk* means not ‘area’, but ‘region’, as in ‘an administrative region marked on a map’.

§79(b) ‘The German original runs:

‘Unter “Moses” verstehe ich den Mann, der getan hat, was die Bibel von Moses berichtet, oder doch vieles davon. Aber wieviele? Habe ich mich entschieden, wieviel sich als falsch erweisen muß, damit ich meinen Satz als falsch aufgebe? Hat also der Name “Moses” für mich einen festen und eindeutig bestimmten Gebrauch in allen möglichen Fällen?’

Anscombe translated this as follows:

By “Moses” I understand the man who did what the Bible relates of Moses, or at any rate a good deal of it. But how much? Have I decided how much must be proved false for me to give up my proposition as false? Has the name “Moses” got a fixed and unequivocal use for me in all possible cases?

However Wittgenstein corrected Rhee’s translation (TS 226, §86 (pp. 55–6)) thus:

by “Moses” I ~~understand~~ <<mean>> the man who did what the Bible records of Moses, or at any rate ~~a lot~~ <<much>> of it. But how much? Have I ~~come to any~~ deci[son |ded] ~~as to~~ how much <<of it>> must ~~be shown~~ <<turn out>> to be false in order that I should ~~abandon~~ <<give up>> my ~~proposition~~ <<statement>> ~~as false?~~ <<So>> Has <<is my use of>> the name “Moses” ~~for me~~ <<them>> a fixed and ~~clearly~~ <<unambiguously>> determined ~~use in~~ <<for>> all possible cases?

We have been guided by Wittgenstein’s modifications to Rhee’s translation.

§81 ‘F. P. Ramsey once emphasized in conversation with me that logic was a “normative science”.’ I. A. Richards remarked in *Scrutiny* I, 408 (1933) that ‘a definition given by Charles Sanders Peirce . . . was a

favourite quotation of the late F. P. Ramsey: “Logic is the Ethics of thinking, in the sense in which Ethics is the bringing to bear of self-control for the purposes of realizing our desires.”’

§82 ‘was er unter “N” verstehe’: Anscombe translated correctly ‘What he understood by “N”’, but we have opted for ‘What he meant by “N”’ in order to preserve continuity with Wittgenstein’s preferred translation of §79(b), line 3.

§85 ‘Also kann ich sagen, der Wegweiser lässt doch keinen // einen // Zweifel offen’: in TS 227(a) Wittgenstein deleted the *k* in *keinen* — which makes much better sense. Hence we have changed the German text and Anscombe’s ‘the signpost does after all leave no room for doubt’ to ‘the signpost does after all leave room for doubt’.

§86(c) Anscombe translated the last sentence ‘Und sind es die andern Tabellen ohne ihr Schema?’ as ‘And are other tables incomplete without their schemata?’. But in TS 226, Wittgenstein added here the parenthesis ‘are the other (abnormal) tables . . .’, making it clear that he is referring to the examples of abnormal schemata just discussed — hence the addition of the definite article.

§88(b) ‘colour edge’: where two different coloured regions meet.

§89(a) ‘Is logic in some way sublime’ was Wittgenstein’s preferred translation (TS 226, §97 (p. 63)).

§89(b) ‘Sie liege, so schien es, am Grunde aller Wissenschaften’: Wittgenstein preferred ‘foundation’ to ‘basis’.

‘Denn die logische Betrachtung erforscht das Wesen aller Dinge’: Anscombe translated ‘For logical investigation explores the nature of all things.’ Rhees translated *Wesen* as ‘essence’, which Wittgenstein accepted. The matter is non-trivial. *Wesen* can do service both for ‘essence’ and for ‘nature’. Here, the conception of logical investigation under discussion is that which conceives of it as exploring the *essence* of all things. See note on §92 below.

§89(c) Augustine: ‘What, then, is time? I know well enough what it is, provided that nobody asks me; but if I am asked what it is and try to explain, I am baffled.’ *Confessions* (Penguin Books, Harmondsworth, 1961), Bk. XI, §14 (tr. R. S. Pine-Coffin).

‘ist etwas, worauf man sich *besinnen* muss’: Anscombe had here ‘is something that we need to *remind* ourselves of’. Wittgenstein changed a similar translation by Rhee (TS 226, §97 (p. 64)), substituting for ‘remind’ and ‘recollect’ the phrase ‘call to mind’. We have followed this.

§90(a) Anscombe translated ‘Erscheinungen *durchschauen*’ as ‘penetrate phenomena’. We have opted for ‘see right into’ in order to conform to Wittgenstein’s preferred translation of *durchschauen* in §92(a) (see end-note below).

‘call to mind’ (rather than ‘remind ourselves’) was Wittgenstein’s preferred translation of *besinnen* and *besinnt* (TS 226, §98 (pp. 64)).

§92(a) and (b) The fluidity of the German term *Wesen* is evident in this remark, making it singularly difficult to translate. For Wittgenstein is deliberately playing on the ambiguity of the German term. He himself changed Rhee’s translation of *Wesen* as ‘essence’ to ‘nature’ in the first two occurrences, but left it in the third. In the fourth occurrence in paragraph (b) Wittgenstein first changed Rhee’s ‘The essence is hidden from us’ to ‘The nature is hidden to us’. He then wrote an alternative draft to this above it: namely, ‘The essence is what’s hidden’. We have not followed all his changes, which we suspect were precipitate and not fully thought through.

We have chosen to retain ‘essence’ in the first occurrence, since the conception being subjected to critical scrutiny is that according to which the essence of things is to be revealed by depth analysis. The second sentence of (a) concedes that we *are* trying to understand the *nature* of language. The concept of a language being, in Wittgenstein’s view, a family-resemblance concept, language has no *essence*, i.e. defining characteristic marks (*Merkmale*); but it does not follow that it doesn’t have a *nature* — just as propositions or numbers have a specifiable nature but no essence. In the third occurrence, ‘essence’ is the appropriate translation, since what is again under discussion is the putative hidden essence that is to be dug out by analysis, and is not to be found by a surveyable ordering of familiar grammatical features of the uses of expressions. We have retained ‘essence’ for the fourth and final occurrence in paragraph (b), since the idea that the *Wesen* of language or of a proposition is hidden belongs to the conception that Wittgenstein is now criticizing, and is to be contrasted with the conception of the nature of language or proposition as being in full view, and to be rendered surveyable by an ordering of familiar features of usage.

§92(a) ‘durch Ordnen übersichtlich wird’: Anscombe had ‘becomes surveyable by a rearrangement’. For *Ordnen* Wittgenstein had ‘a process of ordering’ (TS 226, §100 (p. 64)). We have followed this.

‘was wir sehen, wenn wir die Sache durschauen’: Anscombe had ‘which we see when we look *into* the thing’. Wittgenstein corrected Rhee’s translation ‘which we see when we look through the thing’ to ‘which we see when we see *into* the thing’.

§94 ‘die Sublimierung / sublimieren’: Anscombe translated this as ‘the subliming’ and ‘to sublime’, but what Wittgenstein has employed here is a chemical trope: namely, ‘the sublimation’ and ‘to sublimate’.

‘der ganzen Darstellung’: strictly speaking, this means ‘of the whole (re)presentation’, but Anscombe’s translation: ‘our whole account of logic’ is a variant on Wittgenstein’s changes to Rhee’s translation (TS 226, §104 (p. 67)).

‘ein reines Mittelwesen anzunehmen zwischen dem Satzzeichen und den Tatsachen’: Wittgenstein changed Rhee’s translation to read ‘The tendency to assume a pure (immaterial) entity mediating between the propositional *sign* and the facts’.

§95 Unlike Anscombe, Rhee translated *Denken* as ‘Thinking’ (TS 226, §105 (p. 67)), which Wittgenstein retained. We have followed this translation.

§97 Rhee again translated *Das Denken* as ‘Thinking’ (TS 226, §107 (p. 68)), consistently with his translation of §95. Wittgenstein wrote ‘Thought’ above, but subsequently deleted this alteration, leaving Rhee’s translation intact.

§98 ‘every sentence in our language “is in order as it is”’: a reference to *Tractatus* 5.5563 — ‘In fact, all the propositions of our everyday language, just as they stand, are in perfect logical order.’

§100 ‘vollkommenes’: Anscombe, following Rhee (TS 226, §111 (p. 70)), translated this as ‘perfect’, but in the 3rd edition changed it to ‘complete’. We have retained ‘perfect’ (which Wittgenstein did not delete in TS 226), since completeness is not at issue, and ‘vollkommene Sprache’ and ‘vollkommene Ordnung’ were translated as ‘perfect language’ and ‘perfect order’ in §98 by both Rhee (with Wittgenstein’s approval) and Anscombe.

‘die Rolle, die das Ideal in unsrer Ausdrucksweise spielt’: *Ausdrucksweise*, strictly speaking, means ‘mode of expression’ or ‘speech’, but

Wittgenstein tentatively corrected this to ‘language’ in Rhees’s translation (TS 226, §111 (p. 70)), and, like Anscombe, we have followed him.

Boxed remark between §104 and §105: its location is indicated by an asterisk after the first sentence of §104 and associated asterisk in a note in another’s hand in TS 227(b). The reference is to M. Faraday, *The Chemical History of a Candle* (Hutchinson, London, 1907), p. 44.

Boxed remark between §108 and §109: printed in the first two editions as paragraphs (b)–(d) of §108, these three remarks (and the marginal note printed in square brackets) are from a handwritten note on a slip of paper, inserted between pp. 82 and 83 of TSS 227(a). Their proximate source is TS 228, §503. There is no clear indication as to where exactly to place it.

§109 ‘It was correct that our considerations must not be scientific ones’: an allusion to *Tractatus* 4.111: ‘Philosophy is not one of the natural sciences. (The word “philosophy” must mean something whose place is above or below the natural sciences, not beside them.)’

‘The feeling “that it is possible, contrary to our preconceived ideas, to think this or that” . . . could be of no interest to us’: perhaps an allusion to Frank Ramsey’s remark ‘but it just *is* possible to think of such a thing’ (MS 116, 51); see also MS 152, 93–5; *Philosophical Remarks* 304 (= MS 105, 23); *Zettel*, §272.

§122 ‘Übersicht’, ‘übersehbar’, ‘Übersichtlichkeit’, ‘übersichtliche Darstellung’: we have tried to preserve the reference to *view* and *survey* in translating *Übersicht* and its cognates, hence ‘overview’, ‘surveyability’, ‘surveyable’, and ‘surveyable representation’ as opposed to Anscombe’s ‘perspicuous representation’.

§124(d) ‘A “leading problem of mathematical logic”’: Wittgenstein associated this phrase with Frank Ramsey (see MS 110, 189; *The Big Typescript* (Blackwell, Oxford, 2004), pp. 417f.; MS 115, 71).

§127 *Erinnerungen* can mean ‘reminder’, but in this context it signifies things remembered — not something that will *remind* one of the things one has learnt and knows full well, but those very things themselves. *The Big Typescript*, p. 419 (cp. MS 115, 164), just after a draft of an early version of *Investigations* §128 and before one of §129 has the remark ‘Learning philosophy is *really* recollecting. We remember that we really

used words in this way.' Cf. MS 110, 131f., where he associates this with Socrates.

Boxed remark between §133 and §134: in previous editions, this was printed as paragraph (d) of §133. But it is in fact a slip cut from TS 228, §140, inserted on p. 91 of TS 227 with the editorial inscription 'p. 91 Footnote' in TS 227(a) and 'Note to p. 91' in TS 227(b).

§134 'Satz': this remark exemplifies all the problems that arise in translating the German *Satz* (see 'Editorial Preface', p. xiv). Although we have replaced most of Anscombe's uses of 'proposition' here by 'sentence', we have not done so in the cases of 'general propositional form', 'propositional schema', 'propositional variable' and 'our concept of a proposition', especially in view of the sequel in §§135–6.

Boxed remark between §138 and §139: this is the content of one of four slips inserted at this point in TS 227. A handwritten note in the margin makes it clear that the boxed remark is connected with §138. Originally, the printed remark was preceded by another version of PI §500 and followed by what are now the boxed remarks between §549 and §550. Presumably the lost copy of TS 227 contained instructions to the effect that only the present remark was to be printed at this point. The proximate source of this remark is TS 228, §82.

Boxed remarks between §139 and §140: these two remarks were written on a separate sheet of paper inserted between pp. 95 and 96 of the TS. The proximate source of (a) is TS 228, §363; that of (b) is TS 228, §335.

Boxed remark between §142 and §143: inserted on a slip of paper marked 'p. 99' between pp. 98 and 99 of TS 227(a), with a marginal handwritten note on the left of §142 reading 'Footnote: Slip attached'. The proximate source is TS 228, §357.

§144 'Indian mathematicians: "Look at this!"': *Zettel*, §461, and MS 142, §146 (corrected numeration; §144 in Wittgenstein's numeration) clarify: 'I read somewhere that Indian mathematicians are (sometimes) content to use a geometrical figure accompanied by the words "Look at this!" as a proof of a theorem. This looking too effects an alteration in one's way of seeing (*Anschaungsweise*).'¹ Cf. MS 161, 6; MS 110, 152.

Boxed remarks between §149 and §150: in TS 227(a) this pair of remarks, typed on separate slips of paper, was inserted between pp. 103 and 104. In TS 227(b) the remarks are inserted between pp. 102 and 103. Their proximate sources are TS 228, §79 and §86.

Boxed remark between §165 and §166: in TS 227(a) this remark occurs between pp. 115 and 116. The first paragraph is a handwritten addition above the typed paragraph (b). Paragraph (b) was cut from TS 228, §395.

§169 The sequence of typographical symbols that were typed into TS 227 (and hence printed in earlier editions) were evidently a substitute for a series of arbitrary squiggles, as in *Eine Philosophische Betrachtung* (Suhrkamp, Frankfurt, 1970), p. 182. We have accordingly reproduced those.

§226(a) ‘working out the series $2x - 1$ ’: Wittgenstein wrote ‘ $x^2 + 1$ ’, which is a slip. Anscombe changed this to read ‘ $2x + 1$ ’, but the correct formula for this series is ‘ $2x - 1$ ’.

§228 ‘A series presents us with *one* face . . . read the lips of a rule . . .’: Anscombe clearly disliked Wittgenstein’s metaphor of the facial physiognomy of a rule of a series and accordingly suppressed it. This is unwarranted, and we have restored it. This conceit links up with his subsequent discussion of the physiognomy of word meaning (§568; see also PPF §§38, 238, 294).

§§272–4 ‘Rotempfindung’, ‘Empfindung von Rot’, ‘die eigene Empfindung’: Anscombe translated these words by the phrase ‘sensation of red’ and ‘the private sensation’ (§274). However, there is no such thing as a *sensation* of red (that is, no use of ‘sensation’ in ‘sensation of red’ that is analogous to its use in ‘sensation of pain’). The German *Empfindung* is more pliable than the English ‘sensation’, although even it is being stretched here. The sense of the passages is better conveyed by ‘impression of red’, which is suggested by Wittgenstein’s use of *Farbeindruck* (‘colour impression’) in §275 and §276, and both *Farbeindruck* and *visueller Eindruck* (‘visual impression’) in §277.

§273 The quoted phrase ‘uns Allen Gegenüberstehendes’ is taken from Frege’s discussion of colour predicates in *The Basic Laws of Arithmetic*, vol. i, preface, p. xviii.

§312 ‘Gesichtsempfindung’ / ‘Schmerzempfindung’: as noted above, ‘Empfindung’ is more accommodating than ‘sensation’, but *Gesichtsempfindung* is stretching things to the limits, and perhaps beyond. We have opted for ‘sensation of pain’ / ‘visual impression’ for the sake of clarity, since there are no such things as visual sensations (save for sensations of glare).

§336 ‘A French politician . . .’: MS 109, 177, suggests that the politician was Briand.

§339(a) ‘the Devil took the shadow of Schlemihl from the ground’: see Adelbert von Chamisso’s tale *Peter Schlemihls wundersame Geschichte*. English-speaking readers will be more familiar with the similar conceit in James Barry’s *Peter Pan*.

§339(b) ‘numerals are actual, and numbers are non-actual, objects’: a reference to Frege’s *Basic Laws of Arithmetic*, vol. i, Introduction, p. xviii, where he argues that numerals are actual objects, whereas numbers are objective but not actual objects.

§342 William James’s discussion of Ballard’s reminiscences occurs in *The Principles of Psychology* (Holt, New York, 1890), vol. i, p. 266.

§351 ‘I can reply: “These words . . .”’: we have added the quotation marks here to match the previous quoted sentence.

§365 ‘Do Adelheid and the Bishop . . .’: a reference to Goethe’s *Götz von Berlichingen*, Act II, scene 1, in which the scene opens towards the end of a game of chess between Adelheid and the Bishop.

§370 ‘Frage nach dem Wesen der Vorstellung’: Anscombe translated this, perfectly correctly, as ‘the question as to the nature of the imagination’ (for Wittgenstein is not claiming that ‘the imagination’ is defined by a set of necessary and sufficient conditions). But the price was to lose contact with the next remark (§371): ‘Das Wesen is in der Grammatik ausgesprochen’, which she translated as ‘Essence is expressed by grammar’. To keep the continuity between §370 and §371, we have translated ‘Frage nach dem Wesen der Vorstellung’ in §370 as ‘question of what imagination essentially is’.

§371 We have retained ‘Essence’ for *Wesen*, since one could hardly say ‘Nature is expressed by grammar’. But it must be borne in mind that

Wesen does service for both ‘essence’ and ‘nature’ — thus leaving the question of whether the concept of the imagination is a family-resemblance concept wide open (see note to §92 above).

§373 ‘(Theology as grammar)’: an allusion to a remark Wittgenstein attributed to Luther, who, he says, wrote somewhere that theology is the grammar of the word ‘God’; see Alice Ambrose, ed., *Wittgenstein’s Lectures, Cambridge, 1932–1935* (Blackwell, Oxford, 1979), p. 32, and ‘Movements of Thought: Diaries 1930–1932, 1936–1937’, repr. in translation in James C. Klagge and Alfred Nordmann, eds, *Ludwig Wittgenstein – Public and Private Occasions* (Rowman & Littlefield Publishers Inc., Lanham, Md., 2003), p. 211 (under 23 Feb. 1937).

§400 ‘und man könnte auch sagen, eine neue Empfindung: to repeat, *Empfindung* has a far broader extension than ‘sensation’. Anscombe translated this as ‘it might even be called a new sensation’. But this makes no sense. For what the proponent of ‘the world as representation’ has ‘discovered’ is a new way of conceiving, characterizing, his *experience of reality* (cf. §401). So we have opted for ‘experience’, rather than ‘sensation’ (cf. MS 120, 46v–47r, where ‘neue Empfindung’ and ‘neue Erfahrung’ appear to be used interchangeably in this context).

§402(a) “Ich sage zwar ‘Ich habe jetzt die und die Vorstellung’”: Anscombe translated this as “It’s true I say ‘Now I am having such-and-such an image’”, and she translated ‘die Vorstellungswelt ist ganz in der Beschreibung der Vorstellung dargestellt’ as ‘the description of the image is a *complete* account of the imagined world’. However, this remark is not concerned with an imagined world, but rather with the ‘world as idea’ or the ‘world as experience’ — the ‘visual room’ introduced in §398 and discussed in §§399–401. To make this clear, we have opted for ‘visual image’ (to avoid confusion with mental images that one may have when one imagines visibilia), and ‘the ‘visual world’, which is the phrase Wittgenstein himself employed in his English lectures on this very theme. See ‘Notes for Lectures on “Private Experience” and “Sense Data”’, repr. in James C. Klagge and Alfred Nordmann, eds, *Ludwig Wittgenstein – Philosophical Occasions 1912–1951* (Hackett, Indianapolis, 1993), pp. 258–9, 272; cp. p. 275.

§436(a) ““are evanescent, and, in their coming to be and passing away, tend to produce these others””: We have not been able to identify this ostensible quotation. In MS 146, 27, this has no quotation marks.

§436(b) ‘No words could be plainer or more commonly used. Yet their true meaning is concealed from us. We have still to find it out.’ Augustine, *Confessions*, Bk XI, §22 (tr. R. S. Pine-Coffin).

§437 (“The hardness of the logical must”): here Wittgenstein is quoting himself from TS 221, p. 228 (= TS 222, p. 97); *Remarks on the Foundations of Mathematics* (Blackwell, Oxford, 1978), Part I, §121, see also Part VI, §49).

§441(b) ‘“For wishes themselves are a veil between us and the thing wished for”’: a quotation from Goethe’s *Hermann und Dorothea*, Canto V, line 69, tr. D. Coogan in Goethe, *Hermann and Dorothea* (Frederik Ungar, New York, 1966).

§441(c) ‘“Do I know what I long for before I get it?”’: Anscombe’s mistranslation may be what Wittgenstein meant. The German is “Weiß ich, wonach ich lange, ehe ich es erhalte?”, which means “Do I know what I reach for before I get [or grasp] it?”. This single-sentence paragraph does not occur in MSS but only in the final TS. So it may have been dictated, and an error may have occurred in the typing. For what Wittgenstein may have dictated was ‘wonach ich verlange’ — ‘what I long for’. We have therefore hesitantly stayed with Anscombe’s version.

§454(a) ‘“Everything is already there in . . .”’: this is not a quotation, but an exclamation that Wittgenstein thought peculiarly characteristic of the situation in which we find ourselves when we ‘hit bedrock’. See MS 124, 140 and 184f.; MS 127, 143 and 145.

§458 Wittgenstein’s punctuation here is confusing. We have changed the quotation marks and added italics in the translation.

§480 Wittgenstein has *Meinung* twice in the first sentence. Translating it by ‘opinion’, as Anscombe did, is perfectly correct, but renders the continuity of the remark with the preceding one less clear than in the German, so we have translated *Meinung* here by ‘belief’.

§518(a) ‘Socrates to Theaetetus’: Plato, *Theaetetus* 189a. Schleiermacher’s translation of the *Theaetetus*, which Wittgenstein apparently used here, has *vorstellt* (‘imagines’) here. The usual English translation is ‘thinks’, but *vorstellt* is Wittgenstein’s term, and ‘imagines’ preserves continuity with §517.

§524(c) The note in double parentheses is apparently a reminder to insert a remark apropos this theme (which is an inversion of §464).

§534(c) The double parentheses suggest that Wittgenstein was undecided whether this remark should occur here or in §525.

§537 ‘Then perhaps I say, “I don’t know what it would mean if this is a courageous face”: the German runs ‘Ich sage dann etwa: “Ich weiß nicht was das hieße, wenn dieses Gesicht ein mutiges Gesicht ist.” Anscombe translated the cited remark as “I don’t know what it would be for this to be a courageous face”. But in MS 115, 23, Wittgenstein added parentheses to this sentence as follows ‘[Diesen Satz kann man nicht richtig stellen indem man statt “wenn” “daß” setzt, oder statt “ist” “wäre”]’. That is, Wittgenstein explains that this sentence is not tantamount to either ‘I don’t know what it would mean to say that this is a courageous face’ or ‘I don’t know what it would mean if this were a courageous face’.

Boxed remarks between §549 and §550: these two remarks do not occur in the two surviving typescripts of the *Investigations*. They occur in the first two editions at the foot of p. 147, which runs from §548 to §552. (a) derives from MS 110, 103 and 106 (BT 162); (b) from MS 110, 133 (also MS 114, 157).

§559 ‘((Meaning-bodies.))’: this is apparently a note for Wittgenstein to insert a remark concerning the ‘meaning-body’ conception of significant combinatorial possibilities of words. The idea was that we are inclined to think that the use of a word *flows from its meaning*, that because it has the meaning it has, it can enter into just *these* significant combinatorial possibilities and not others. It is as if each word presented a single coloured surface, behind which was a colourless glass geometrical solid (cube, pyramid, etc.) that enabled the word to combine with certain words but not others, so that we could make a visible and significant picture only by means of words the meaning-bodies of which fit together. See *The Big Typescript*, p. 166; *Philosophical Grammar* (Blackwell, Oxford, 1974), p. 54; F. Waismann, *The Principles of Linguistic Philosophy* (Macmillan and St Martin’s Press, London and New York, 1965), pp. 234–9; TS 302, 4f.; Gordon Baker, ed., *Voices of Wittgenstein* (Routledge, London, 2003), pp. 133–41. For examples of such a conception see Waismann *Principles of Linguistic Philosophy*, p. 234 n., where he cites Frege’s *Basic Laws of Arithmetic*,

vol. ii, §§91, 158. This citation is derived from Wittgenstein's dictation to Waismann in *Voices of Wittgenstein*, p. 135, where *Basic Laws*, vol. ii, §207, is also cited. Other passages in Frege which Wittgenstein would not have known, but which bear out his remarks, are to be found in 'Logic in Mathematics', repr. in *Posthumous Writings* (Blackwell, Oxford, 1979), p. 225, and 'Foundations of Geometry I', repr. in *Collected Papers on Mathematics, Logic, and Philosophy*, p. 281.

§560 ‘“The meaning of a word is what an explanation of its meaning explains”: this is a self-quotation — see *The Big Typescript*, p. 34, where it occurs as the title of ch. 9, and where the first remark runs: ‘“Meaning: what an explanation of meaning explains”, that is: Let's not ask what meaning is, but instead let's examine what is called “an explanation of meaning”.’

§568(b) ‘((Meaning — a physiognomy))’: a note for Wittgenstein to insert here a remark about the physiognomy of word meaning. In MS 133, 39r, he noted: ‘In the use of a word we see a physiognomy’, and in MS 137, 4b, he cites (in quotation marks) ‘The concept is not only a technique, but also a physiognomy’.

§571(b) ‘and the psychologist observes the *utterances* [Äusserungen] (the behaviour) of the subject’: Anscombe here translated Äusserungen as ‘external reactions’. This is unsatisfactory. She translated a comparable passage in PPF, §28(b) (PI Part II, p. 179) ‘What do psychologists record? — What do they observe? Isn't it the behaviour of human beings, in particular their utterances [Äusserungen]?’ We have opted for ‘utterances’ here too, in order to ensure consistency between these two, related remarks.

§589 ‘(Luther: “Faith is under the left nipple.”)’: This, as suggested by Eike von Savigny (*Wittgensteins Philosophische Untersuchungen — Ein Kommentar für Leser*, 2nd edn (Klostermann, Frankfurt am Main, 1996), vol. 2, p. 273), is probably a reference to Luther's sermon of 27 Dec. 1533: ‘Es liegt nicht am euserlichen leben, sed unter dem lincken zitzen, das man wisse Christum esse Salvatorem’ (*Dr Martin Luther's Werke, Kritische Gesamtausgabe* (H. Böhlaus Nachfolger, Weimar), vol. 37 (1910), p. 248), or his fourth sermon on Christmas Day 1544: ‘Denn das du ein Christ seyst und Gott wolgefallest, solches ist nicht am eusserlichen leben gelegen, sonder unter dem lincken zuzen und im hertzen . . .’ (*ibid.*, vol. 52 (1915), pp. 63f.)

§606(b) ‘((“A quite particular expression”))’: which of the many remarks on this theme Wittgenstein had in mind here is unclear. The theme is discussed in *The Blue and Brown Books* (Blackwell, Oxford, 1958), pp. 170–7 (see also MSS 120, 253; 130, 45; 150, 2f.).

§609(b) Wittgenstein discussed the idea of understanding as ‘an atmosphere’, and its apparently indescribable character *in extenso* in *The Blue and Brown Books*, pp. 144–85 (see especially pp. 155–7); see also MS 162(b), 56(r)ff. Which part of these extensive discussions he had in mind here is unknown. The quoted phrase ‘An indescribable character’ is probably an allusion to James, *The Principles of Psychology*, e.g. vol. i, pp. 251ff.

§610(b) ‘((I should like to say: “These . . .”))’: It is unclear why this remark is enclosed in double parentheses. The reference to James is probably to *The Principles of Psychology*, vol. i, p. 251, where he remarks, ‘our psychological vocabulary is wholly inadequate’, to capture the indescribable difference between trying to recall A’s name and trying to recall B’s name.

§611(a) ‘“Willing — wanting — too is merely an experience”’: the German reads ‘“Das Wollen ist auch nur eine Erfahrung”’, which Anscombe translated as ‘“Willing too is merely an experience”’. *Wollen*, however, serves both for ‘willing’ and for ‘wanting’, and to translate it and its cognates (in the sequel) uniformly by ‘will’ and ‘willing’ (as Anscombe did) can be misleading. By inserting ‘— wanting —’ we have tried to make it clear that Wittgenstein is speaking of wanting to do something (as in §613), as well as about philosophical conceptions of will and idea. The idiom of ‘will’ and ‘idea’ referred to in parentheses in the first sentence is Schopenhauer’s, although Schopenhauer, unlike the British empiricists, insisted on the categorial distinctness of will and idea (representation).

§618(a) The reference to Augustine is to *Confessions*, Bk VIII, §8.

§621(b) It is unclear what this parenthetical note refers to. Note that neither James nor Russell argued that the *kinaesthetic sensations* are the willing, but, if anything, the *idea* of the normally associated kinaesthetic sensations — which allegedly causes the appropriate muscular contractions involved in a voluntary movement.

§639 ‘Meaning something, one wants to say, *develops*’: the German runs: ‘Die Meinung, möchte man sagen, *entwickelt sich*.’ Strictly speaking,

Anscombe's translation, 'One would like to say that an opinion develops,' is correct. But it is clear from the MS source (MS 129, 166f.) that what Wittgenstein had in mind was that *meaning* (something) develops, evolves or unfolds. His Anglicized misuse of *Meinung* is quite common (cf. §§186, 666; also MSS 128, 7; 116, 266).

§654 'as "proto-phenomena":' a reference to Goethe's *Urphänomen*, or 'primal phenomenon' — conceived of as bedrock that does not call for explanation (see Goethe, *Theory of Colours*, tr. C. L. Eastlake (MIT Press, Cambridge, Mass., 1970), §§174–7.

Philosophy of Psychology — A Fragment
[previously known as 'Part II']

§5 Following MS 144, we have run the third sentence on after the second.

§9 In the light of MS 144, 5–6, we have amalgamated remark (c) and (d) of p. 175 in the first two editions into a single remark.

§32, line 6 We have italicized 'as' to capture the emphasis given by 'eben'.

§34 The translation of the first sentence as 'There is a similarity here to the way in which "physical object" and "sense impressions" stand to each other' is warranted on the grounds that the colon after 'Es ist hier wie mit dem Verhältnis' is meant to introduce two classes of expressions, not two classes of things. This interpretation is supported by *Remarks on the Philosophy of Psychology* (Blackwell, Oxford, 1980), vol. i, §289, which runs: 'It is here just as with talk of physical objects and sense impressions. We have here *two* language-games, and their mutual relations are complicated.'

§35 It is evident from the context that 'die *Intention*' here should be translated as '*intentionality*' and not as Anscombe had it: '*intention*'. Wittgenstein often used the German 'Intention' thus.

§82 'for all that, does the service of a description': the German runs 'tut gleichwohl den Dienst einer Beschreibung'. Anscombe translated 'for all that serves as a description'. But the occurrence of the noun *Dienst*

is not coincidental. A cry does not *serve* as a description, but it does the same *service* as one, since both the cry and the utterance of a description are criteria for ascribing pain to the person in question.

§108 We have added Wittgenstein's illustration here, which makes clear what he had in mind. See also *Last Writings on the Philosophy of Psychology* (Blackwell, Oxford, 1982), vol. i, §88.

§118 'derived from Jastrow': see J. Jastrow, *Fact and Fable in Psychology* (Houghton Mifflin, Boston, 1900). Wittgenstein refers to it as the 'duck–hare', but following Anscombe we have abided with the more usual name of 'duck–rabbit'.

'And I must distinguish between the "continuous seeing" of an aspect and an aspect's "lighting up".' Anscombe translated the latter phrase as 'the "dawning" of an aspect'. The German is *Aufleuchten*, which means 'lighting up' (as when a building is lit up by spotlights or a Christmas display of lights is turned on). Lighting up is an instantaneous event, whereas dawning is a gradual process; a thought cannot dawn on one in a flash. Moreover, 'dawning' is overly intellectual — as in 'it gradually dawned on me that things were thus-and-so'.

§136 As it stands, this remark is altogether misleading, since 'organization' is not compared with shape and colour in the visual impression; rather, 'organization' of the visual impression is compared with colour and shape. In MS 137, 127a, Wittgenstein wrote:

Und das allein eliminiert für uns den Vergleich der 'Organisation des Gesichseindrucks' mit Farbe und Form. // Und das allein tut den Vergleich der 'Organisation' ~~des Gesichtseindrucks~~ mit ~~der~~ Farbe & Form im Gesichtsausdruck für mich ab. //

And this suffices to eliminate for us the comparison of the 'organization of the visual impression' with colour and form. // And this suffices to dispose of the comparison of the 'organization' ~~of the visual impression~~ with form and colour in the visual expression for me.//

The attempted redraft is evidently poor (writing 'visual expression' instead of 'visual impression'), and has made matters more rather than less obscure. Although the confusion of 'impression' with 'expression' was eliminated in MS 144, and presumably in the missing TS 234, the remaining confusion of 'form and colour in the visual impression' persisted.

§151 ‘Compare a remark of Lewis Carroll’s’: MS 137, 135a, says that the remark is in *Alice Through the Looking Glass*. The reference is to ch. 1 in which writing in the Looking Glass world is reversed, and can be read only in a mirror, exemplified in the text by reproducing the hand-written first verse of ‘Jabberwocky’ in reverse. Of this Alice initially remarks ‘It’s all in a language I don’t know.

§153 we have amplified ‘in a figure (1) for another figure (2)’ to read ‘in a certain figure (call it Figure 1) for another figure (call it Figure 2)’ in order to avoid the impression that Wittgenstein is referring to two numbered figures somewhere in his text. We have adjusted §154 accordingly.

§§164 and 165 Anscombe translated ‘eine Form’ in both remarks by the same word, ‘form’. But the two remarks come from separate contexts, §164 from MS 135, 176, and §165 from MS 135, 42. In the first of these remarks, ‘eine Form’ means *a mould*, but in the second it means *a logical form* (see *Remarks on the Philosophy of Psychology*, vol. 1, §1026).

§180(c) The reference to Köhler’s figure of interpenetrating hexagons may be to his *Gestalt Psychology* (G. Bell and Sons Ltd, London, 1930), ch. 6.

§205 amalgates two remarks in the first two editions. The two paragraphs are a single remark in MS 137, 33a–b (cf. *Remarks on the Philosophy of Psychology*, vol. 2, §535), the latter being an elaboration on the former.

§§220–1 In the first two editions §221 was printed *before* §220. But Wittgenstein’s instruction in MS 144 indicates that their order should be reversed — a change that makes better sense.

§231 ‘We react to the facial expression’. The printed German text here had *Gesichtseindruck* (‘visual impression’), but it is a misprint, and should read *Gesichtsausdruck* (‘facial expression’), as is evident from MS 138, 6b (under 21 Jan. 1949) — cf. *Last Writings on the Philosophy of Psychology*, vol. 1, §744: ‘We react to a hesitant facial expression differently from someone who does not recognize it as hesitant (in the full sense of the word).’ We have accordingly corrected both German and English.

‘a modified concept of *sensing*’: Anscombe had here ‘a modified concept of *sensation*’ (*Empfindungsbegriff*), but that is wrong. To recognize a facial expression as timid is not to have a *sensation* of any kind, but to *sense* something — to sense the timidity in the person’s face.

§§235–6 were originally printed after §247 (as p. 212(b)–(c)) in the first two editions). Wittgenstein’s instructions in MS 144 unequivocally indicate that they should occur after §234.

§§249–50 were run into one remark in the first two editions (p. 212(e)). We have separated them, as in MS 138, 10a–b, and MS 144, 74–5. This is the more cogent arrangement.

§273, third sentence In place of Anscombe’s addition of ‘we say’ (in the first two editions, p. 216(a)), we have added quotation marks to Wittgenstein’s text.

§299 James: the reference is perhaps to *The Principles of Psychology*, vol. i, p. 253: ‘And has the reader never asked himself what kind of mental fact is his *intention of saying a thing* before he has said it? It is an entirely definite intention, distinct from all other intentions, an absolutely distinct state of consciousness, therefore; and yet how much of it consists of definite sensorial images, either of words or of things? Hardly anything! Linger and the words and things come into the mind; the anticipatory intention, the divination is there no more. But as the words that replace it arrive, it welcomes them successively and calls them right if they agree with it, it rejects them and calls them wrong if they do not. It has therefore a nature of its own of the most positive sort, and yet what can we say about it without using words that belong to the later mental facts that replace it? The intention to *say so-and-so* is the only name it can receive.’ See also vol. i, pp. 673f.: ‘That nascent cerebral excitations can effect consciousness with a sort of sense of the immanence of that which stronger excitations would make us definitely feel, is obvious from what happens when we seek to remember a name. It tingles, it trembles on the verge, but does not come.’

§306 We have here changed the German text from ‘beim innerlichen Rechnen’ to ‘beim innerlichen Reden’, which corresponds to MS 144, 92 (cp. *Last Writings on the Philosophy of Psychology*, vol. 1, §865). This also accords better with the adjacent remarks, all of which concern saying things silently to oneself, and not specifically mental arithmetic.

§314, last line ‘((Connection with “pain in someone else’s body”.))’ In the 1930s, Wittgenstein toyed with the idea of the intelligibility of feeling pain in another person’s body (*Wittgenstein and the Vienna Circle* (Blackwell, Oxford, 1967), p. 49; *Philosophical Remarks* (Blackwell Oxford, 1975), p. 92; *The Blue and the Brown Books*, pp. 49ff.), on the grounds that the criterion for pain location is where the sufferer points, and it is conceivable that when asked where one has a pain, one might (perhaps with eyes closed) point to someone else’s body. It is unclear what reminder this note is meant to be, in particular whether Wittgenstein wished to reaffirm the intelligibility of pain in another’s body (see §302) or, arguably better, to put the supposition on the same level as the statement that a rose has teeth in the mouth of an animal.

§322 The reference of ‘es’ in ‘wenn es tatsächlich nicht geschieht’ is unclear. What is probably intended is the ‘talking to myself’ specified in the last line of the previous remark. So we have added the elucidating phrase ‘and even if I don’t actually talk to myself’.

§339 ‘One would sometimes like to say of certainty and conviction . . .’: the German has ‘Von der Sicherheit, vom Glauben möchte man manchmal sagen . . .’, which Anscombe translated ‘We should sometimes like to call certainty and belief . . .’. But here *Glauben* means ‘conviction’, not ‘belief’.

§362 ‘Verstellung ist natürlich nur ein besonderer Fall davon, . . .’: In the context from which this remark is drawn, namely MS 137, 52a–b, it is evident that what is being asserted is not that pretending is a special case of someone’s producing (say) . . . (as in Anscombe’s translation), but rather that pretending to be in pain, for example, is a special case of . . .

Index

Numbers refer to numbered remarks; ‘brf n’ is a boxed remark following remark n. ‘PPF n’ refers to *Philosophy of Psychology – A Fragment*, remark n. ‘Pr’ signifies a reference to Wittgenstein’s Preface.

ability

- to ask a thing’s name, 6, 31
 - asking a name presupposes –ies, 30
 - to calculate in one’s head, 385
 - criterion of an –, 182, 385; PPF 36
 - is not a feeling, PPF 36
 - to go on, 151, 154, 179, 183–4, 324–5, 660
 - grammar of ‘able to’ related to that of ‘know’, 150
 - is grammatically a state, 572
 - knowing that one is able to, 388
 - to learn, may come to an end, 143–4
 - to play chess, brf 149; PPF 36
 - ies required for the possibility of certain experiences, PPF 224
 - to walk, 183
- above/beneath, 351
- accompaniment
- of a chess move, 33, 200
- mental attitude doesn’t accompany
- words like a gesture, 673
- thought as – of speech, 330, 332
- of understanding, 152–3, 321
 - of utterance, 20, 34, 35, 51, 56, 321

- accord with a rule, *see* rule, accord with a
- accuracy, 58, 158, 171, 254; PPF 112, 142, 338
- act/action, 1, 7, 36, 612–25, 627
- active/passive voice, 47
- activity, 7, 23, 36, 156, 693; PPF 79, 349; *see also* mental act/activity
- Adelheid, 365
- aesthetics, 77; PPF 178, 297
- affinities, 65–7, 76
- agent, *doing* seems the real –, 620
- agent/observer, 631
- agreement, 61, 134, 208, 234, 241–2, 386, 429; PPF 346–7, 351–2
- alphabet, 8, 137, 148, 160
- analogy, 75, 83, 90, 140, 308, 494, 613, 669; *see also* likeness
- analysis, 39, 60, 61, 63–4, 90–1, 92, 383, 392
- and so on, 208, 229
- animal
- belief, PPF 1
 - s can’t be hopeful, PPF 1
 - s don’t talk, 25
 - s don’t talk to themselves, 357

- animal (*cont'd*)
 evolution of higher -s and man,
 PPF 55
 picture of an – transfixed by an
 arrow, PPF 180, 184, 187, 193, 196
see also cat, cock, cow, dog, lion
 anticipating reality, 188
 apple, 1
 wanting an –, 440
 application
 – of an algebraic formula, 146–8
 – of an arrow as a pointer, 454
 – of brackets, 557
 – comes before the mind, 141
 – is the criterion of understanding,
 146
 – forced on one by a picture, 140
 – of imaginary numbers, PPF 165
 – of a picture, 140–1, 349, 374,
 422–5
 – of a rule, *see* rule, application of a
 – of a schema, 141
 – of a sentence-like formation, 520
 – of a word, *see* word, application
 of a
 a priori, 97, 158, 251, 617; PPF 309
 arbitrary, 372, 497, 508, 520; PPF 367
 architectural requirement, 217
 arm, movement of, 612, 614, 621–2,
 624–5, 627, 630
 arrow, how it comes about that it
 points, 454
 artichoke, 164
 ashamed, 643–4
 asking what something is called,
see name, asking for the
 aspect, PPF 111–261
 – blindness, PPF 257–60
 – change, PPF 124, 128, 129, 130,
 135, 152, 166, 179, 185, 189, 213,
 220, 257
 concept of an – related to concept
 of imagination, PPF 254
 continuous seeing of an –, PPF 118
 –s of a double cross, PPF 212–15,
 218, 236
- aspect (*cont'd*)
 duck-rabbit –, PPF 152, 215, 216
 interpretation of an –, PPF 116–17
 knowing, rather than seeing, an –,
 PPF 192, 196
 lighting up of an –, PPF 118, 140,
 207, 209, 237, 247
 noticing an –, PPF 113
 organizational –s, PPF 220
 physiognomy of an –, PPF 238
 seeing an – demands imagination,
 PPF 217, 254, 256
 seeing an – and experiencing the
 meaning of a word, PPF 261
 seeing an – is subject to the will,
 PPF 256
 –s of a triangle, PPF 162, 211–12,
 217
 assertion, 21, 22, 447
 of hesitancy, PPF 110
 assertion-sign, 22
 assertoric sentence, *see* sentence,
 assertoric
 associative connection between word
 and thing, 6, 53, 256, 257
 assumption, 187, 299; PPF 106–7
 assumption (Fregean *Annahme*), 22,
 brf 22
 astronomer, PPF 323
 atmosphere, brf 165, 173, 213, 594,
 596, 607, 609; PPF 35, 42, 50
 attention/attend, 275
 concentrating one's –, 33, 34, 258,
 263, 667
 – to one's consciousness, 412
 directing –, 6, 33, 268, 275, 277,
 411–12, 666, 669
 divided –, 666–7, 674, 678, 682
 –ing to a sensation, 258, 268, 668
 attitude
 – to a drawing, PPF 192
 mental – does not accompany
 words, 673
 – to proverbs as opposed to
 theorems, PPF 195
 – of receptivity, 672

- attitude (*cont'd*)
 - towards a soul, PPF 22
 - struggle to maintain an –, 575
 Augustine, 1–4, 32, 89, 90, 436, 618
 Augustine's picture/conception of language, 1–4
 automaton, 420; PPF 19–21
- baby
 - babble of a –, 282
 - smile of a –, 249
 balance, 259
 Ballard, 342
 bang, expecting a –, 442
 baptism, 38
 barometer, 354
 bearer of a name, *see* name, bearer of a because, 487
 experiencing the –, 176–7
 see also cause; motive; reason(s)
 bedrock, 217
 Beethoven, PPF 51
 beetle, 293
 behaviour
 - change in the – of a reader, 157
 - characteristic of someone
 - correcting a slip of the tongue, 54
 - as criterion for someone's talking to himself, 344
 - as criterion for understanding, misunderstanding and not understanding, 269
 description of –, PPF 32
 dog simulating pain –, 250
 don't say I am talking to myself on the basis of my –, 357
 – and doubt, 288
 – as expression of something mental, PPF 32
 fine shades of –, PPF 180, 192, 210
 – of a human being, 281, 283, 288
 pain –, 244, 246, 281, 300, 302, 304; PPF 324
 – of a point on a screen, PPF 27
 psychologists study –, 571
 psychology treats of –, PPF 28
- behaviour (*cont'd*)
 - report about – or state of mind, PPF 29–30
 - shared human –, 206
 behaviourism, 308
 behaviourist, 307
 being/non-being, 50; *see also* existence/exist
 belief, PPF 86–110
 acting –, PPF 78
 cannot mistrust one's own –, PPF 91
 holding fast to a –, 575
 – and Moore's paradox, PPF 87, 98, 105
 reasons for –, 475, 477–81, 578
 – in uniformity of nature, *see* uniformity of nature, belief in unsatisfied –, 439
 to believe
 - ing that another isn't an automaton, PPF 19
 - ing that another is in pain, 303, 310; PPF 19
 - assertion of 'I believe' contrasted with supposition, PPF 88, 101
 - assuming one –s, PPF 106–7
 - ing the chair will bear me, 575
 - ing Goldbach's conjecture, 578
 - how one knows one –s, 587
 - 'I believe' throws light on my state, PPF 96–7
 - introduction of 'I believe', PPF 95
 - knowing what one –s, PPF 309
 - ing man has a soul, 422
 - ing one believes, 260
 - ing one is pretending, PPF 364
 - seeming to –, PPF 99, 103
 - ing and state of mind, PPF 102
 - ing is not thinking, 574–5
 - ing that twice two is four, PPF 348
 - use of 'I believe', PPF 86–90
 - verb 'believe', PPF 93
 - verb 'to believe falsely', PPF 92
 belonging, *see* fitting/belonging
 benzene, PPF 54
 blindness, 424

- blood-pressure, 270
blurred, 71, 76, 77, 253
body, 36, 283, 286, 359, 364, 391, 411
boiler, 466, 469
boundary, of a concept, *see* concept,
 boundary of
boundary line, 62, 69, 88, 163, 499
 purpose of a –, 499
 rigid/sharp –s, 68, 71, 76, 77, 99
box, 293, 425; PPF 116
boxer, brf 22
brain, 158, 412, 427
bridge, justifying choice of dimensions
 for, 267
bring about, 611, 613, 614
broomstick, 60
builder, and assistant, 2, 8, 21, 41, 42
building stones, 2, 7, 8, 10, 19–21, 86
 words for –, 2, 6, 7, 8, 9, 17, 21
bumps, 119
butter, rising in price, 693
- calculate, 233–4, 236, 385–6; PPF 348
 –ing in the head/in the imagination,
 364, 366, 369, 385–6; PPF 277, 304
calculation, correct result of a –,
 PPF 341–5
calculus, brf 28, 81, 136, 559, 565;
 PPF 348
- call
 – someone, 27, 691
 – someone to mind, 691
- carefulness, 173
- Carroll, Lewis, 13; PPF 151
- cat, 647
- categorial difference, PPF 111
- category, PPF 132
- causal connection, 89, 195, 198, 613
 – irrelevant to logical investigation,
 89
 – seen from inside/outside, 631
- cause
 –s of concept formation, PPF 365
 – contrasted with object of emotion,
 476
 – established by experiment, 169
- cause (*cont'd*)
 experience of –, 169–70
 feeling the –, 169, 170, 175–7
 – of following a rule, 217
 –s are of interest to psychologists,
 PPF 114
not interested in –s/our problems
 not causal, 217, 466; PPF 170, 183
main – of philosophical diseases, 593
–s of memory-feeling, PPF 370
motive and –, PPF 336
- physical –s and cock call, 493
 – and prediction in expression of
 intention, 631–2
psychological –s, PPF 228
 – and reason, 325, 475
 –s of unfounded conviction, PPF 268
- certainty, 246, 320, 324–5, 474, 607,
 679; PPF 330–2, 339–43, 353;
 see also uncertainty
- chair, 1, 35, 47, 59, 80, 253, 361, 368,
 486
- chart
- colour, *see* colour-chart
- different ways of reading a –, 86
 – taking over the role of memory,
 53
- check, 136
- checkmate, 316
- cheese, weighing lump of, 142
- chemical possibility, 521
- chemical reaction, 56–7
- chemistry, symbolism of, 18
- chess
 ability to play –, brf 149; PPF 36
 –board, 47, 58
 – is a custom, 199
 – defined by its rules, 197, 205, 567
 intending to play –, 197, 205, 337
 – king, 31, 35, 136, 563, 567
 learning to play –, 31
 meaning of – pieces, 563
 – move, 33, 49, brf 108
 – pieces, 17, 33, 35, brf 108, 565
 real game of –, 365
 – rules, 197

- chess (*cont'd*)
 skill in –, 66
 – translated into yelling and stamping,
 200
 chief, 419
 child
 –'s ability to think, 32
 –ren's drawings, oddity of, PPF 148
 –ren give names to dolls, 27
 – learning language, 5, 6, 7, 9, 32
 – learning names of sensations, 244,
 257
 – playing with a ball, 66
 –ren playing with a chest as a
 house, PPF 205–7
 –ren playing at trains, 282
 – and pretending, 249; PPF 363
 –ren seen as automata, 420
- chimeras, 94
 choice, 219
 church mode, 535
 circle, 34
 not all lines are –s, PPF 108
- circumstance
 – of asking what time it is, 607
 – that we call ‘playing chess’, 33
 – in which a concept loses its
 purpose, 385
 – under which a definition is given,
 29
 – dependence of criteria for reading,
 164
 – dependence of possibility of doubt,
 213
 – determine interpretation, 539
 – of drawing a line, 177
 – of the if-feeling, PPF 41
 – justifying claim of ability, 182–3
 – of an ostensive definition, 29, 35
 – of pointing, 35
 – in which a sample changes colour,
 56
 – in which a signpost is in order, 87
 – in which a supposition makes
 sense, 349
 – of the use of ‘This is here’, 117
- circumstance (*cont'd*)
 –s warrant my saying I can go on,
 154–5, 179
 –s warrant saying that he meant,
 557
 – of a wish, 441
- city, ancient – compared with
 language, 18
- civic life, 125
- clarity, 81, 133
- classification, aim of, 17; PPF 202
- clock, 266, 363, 607
- clockwork, 318
- clothing of our language, PPF 335
- cock, 493
- coffee, aroma of, 610
- cogwheel, 136
- colour
 attending to the –, 33, 72
 – blindness, PPF 351
 –chart, 1, 53, 73
 common –, 72
 consciousness of –, PPF 242
 defining – words, 28–30, 33, brf 28
 – edge, 88
 – ‘exists’, 58
 explaining the meaning of a – word,
 1, 16, 28, brf 28, 29, 30, 33, 35,
 brf 35, 50, 51, 73
 immersing oneself in a –, 277
 – impressions, 272–7; PPF 247
 indestructibility of –, 56–7
 judgements of –, PPF 346
 knowing from one's mental image
 what a – looks like, 388
 knowing what – to pick out, 239
 matter of course to call this – . . . ,
 238–9
 – names, 1, 26, 28, 29, 30, 33, 49,
 50, 51, 57, 58, 64; PPF 346
 – and private experience, 272–9
 sameness of –, 33, 56, 72, 208
 – samples, 1, 8, 16, 50, 53, 56, 57
 shades of –, 73
 simple or composite –, 47–8
 – statements, brf 35, 50; PPF 350

- command, *see* orders/commands
common
 - colour in pictures, 72
 - feature, 71, 72, 73
 - order of possibilities in both world and thought, 97
 - something – to, 65, 67communicate, 363
communication, 2, 3, 242, 491; PPF 81
 - point of –, 363
 - possibility of –, 143comparison
 - of images, 376–7
 - of impressions in recognition, 604–5
 - mode of –, PPF 127
 - of musical phrase with a sentence, 527
 - object of –, 50, 130
 - possibility of –, 104
 - of words, to find the right one, PPF 295complaint, PPF 84
complete/incomplete, 18
completeness, not aiming at, PPF 202
complex, 45, 48, 49, 53
compositeness, 47, 48, 59
composition
 - out of elements, 46, 47
 - of forces, 48compositionism, PPF 37
compulsion, logical/psychological, 140
concept
 - analysing –s, 383
 - blurred/sharp –s, 68, 71, 77
 - boundary of –, 68, 69, 70, 71, 76; PPF 219
 - compared with a region, 71
 - compared with a style of painting, PPF 367
 - determination, PPF 191
 - explaining the significance of a –, brf 142
 - extending a –, 67
 - s are expressions of our interest, 570
 - forces itself upon one, PPF 191concept (*cont'd*)
 - formation, PPF 365–7
 - s are instruments, 569
 - modified – of experience, PPF 222–6
 - of the past, PPF 370
 - purely visual –, PPF 225
 - purpose of a –, 385
 - sameness of –, 76
 - s sometimes shade into one another, 544
 - s suitable for psychology, 577
 - super-, 97
 - s touch and run side by side, PPF 108, 301
 - usability of –, 69conceptual (boundaries, confusions, differences, investigations, justifications, statements, unclarities), PPF 67, 181, 183, 202, 219, 230, 257, 338, 371
confession, PPF 318–19
confidence, 325, 579; *see also* certainty
confronting, something – us all, 273
confusions, 16, 38, 132, 140, 339
conjuring trick, 308
connection, making a –/reporting a –, 487, 682–5, 689
conscious act/activity, 156, 159
conscious of, 20, 156; PPF 240–2
consciousness, 358, 390, 412–21, 426
 - awakening of –, PPF 55
 - state of –, 148–9, 421
 - of a stone, 390, 418conscious/unconscious, 149, 156, 281, 418; PPF 282
conspicuousness, 600
constancy, 242; *see also* regularity
construction line, PPF 318
context, 156, 161, 403, 525, 539, 584, 595, 638, 652, 665, 686; PPF 35, 41, 47, 74, 75, 79, 235, 242, 283, 313
 - of a sentence, 38, 49, 558; PPF 8, 19, 38, 39, 249continuing a series, *see* series, continuing a

contradiction, 58, 125
 convention, 41, 355
 conviction/convinced, 287, 333;
 PPF 100, 326, 339
 feeling of –, 607
 copula, 20
 corbel, sham, 217
 coronation, 584; PPF 348
 corpse, 284
 correct/incorrect, 54, 145–6, 258
 correctness, criterion of, 258
 correspond, 20, 31, 36, 39, 40, 51, 53,
 55, 366, 521
 court of appeal, final/highest, 56, 230
 cow, 120, 449; PPF 314
 criterion/criteria
 – for ability, 182
 – for being able to calculate in the
 head, 385
 – for being able to play chess,
 PPF 36
 – for being certain, PPF 339
 – for a body’s changing weight, 182
 – for a body’s fitting, 182
 – for colour of a mental image, 239
 – of correctness for remembering,
 258
 different kinds of – for method of
 projection before the mind, 141
 fluctuation of – with symptoms,
 354
 – for guessing thoughts right,
 PPF 318
 – for having had *that* experience,
 509
 – for how a formula is meant, 190
 – for identifying a sensation, 290
 – of identity for experiences of
 understanding, 322
 – of identity for mental images,
 376–8
 – of identity for pain, 253, 288
 – of identity of a person, 404
 – for the inner, 142
 – for inner states, PPF 36
 – for intention, 641

criterion/criteria (*cont’d*)
 – for knowing *qua* state of mind,
 149
 – for later saying, 542
 – for looking at something without
 seeing it, PPF 242
 – for having mastered rule of a
 series, 185
 – for meaning someone to continue
 a series, 692
 – for being in mental state, 572
 – for mistake, 51
 – for being of an opinion, 573
 outward –, 580
 physiological – for seeing, PPF 236
 – for reading, 159–60, 164
 – for recognizing the feeling of
 moving one’s arm, 625
 – for remembering right, 56
 – for report’s agreeing with a dream,
 PPF 320
 – for sameness of pain, 253
 – for saying the ABC to oneself, 376
 – for seeing a drawing three-
 dimensionally, PPF 180
 – for a sense-impression apprising
 one of shape and colour, PPF 60
 – for something’s being a matter of
 course, 238
 – for talking to oneself, 344
 – for a thought’s already having
 been completed, 633
 – for truth of a confession, PPF 319
 – for understanding/not
 understanding, 146, 182, 269
 – for visual experience, PPF 146
 cry/crying, 24, 244, 296, 317, 543, 546;
 PPF 73, 82–5, 138, 145
 crystal/crystalline, 97, 107–8
 cube, drawing/picture of, 74, 140–1;
 PPF 218–19, 258
 ‘cube’, the word, 139
 curse, 680–1
 curve, continuous/open, 47
 custom, 198, 199, 205, 337, 556;
 PPF 168

- cylinder, 182, 439
 Cyrillic, 159, 162
- darkness of this time, Pr
 deaf-mutes, 342, 348
 debt, 294
 decision, 31, 186, 588–9, 627, 631, 632
 definition
 –s in aesthetics and ethics, 77
 agreement in –s, 242
 – of exactness, 69
 – inadequate to resolve paradoxes, 182
 –s inessential, 70
 – of number two, 28
 ostensive –, 28–30, 33, 38, 258, 362
 – of plant, 70
 – of proper names, 28, 79
 – of ‘S’, 258
 scientific –s, 79
 – of ‘two’, 28–9
 unformulated –, 75
 deity/God, 234, 346, 352, 426; PPF 284, 342
- demonstratives, *see* indexicals
 dependence, causal vs. logical, 220
 depth, 89, 111, 594
 depth-grammar, 664
 derive, brf 35, 162–4, 193, 479
 description/describe
 – of alternating aspects, PPF 213
 – an aroma, 610
 a copy is an incomplete – of a visual experience, PPF 156
 a cry does the service of a –, PPF 82–3
 –s used to define proper names, 79
 exclamation is a – of a perception, PPF 139
 – of an impression, PPF 173
 language yields –s, 240
 multiplicity of kinds of –, 24, 290–2
 must be possible to give a – of destruction
 mythological – of the use of a rule, 221
- description/describe (*cont'd*)
 – of a new aspect, PPF 153
 – of an object in a picture, PPF 169
 –ing a private picture, 294
 – a representation of a distribution in a space, PPF 70
 –ing not on the same level as naming, 49
 – of a state of mind/mental state, 180, 577, 585, 588; PPF 72–9, 82–5, 90
 – of an unfamiliar object, PPF 142
 – of what is seen, PPF 158, 160, 184, 186–7
 see also indescribability
 destruction, 50, 55–8
 determination
 by an act of meaning, 188, 190
 by algebraic formula, 189
 by a rule, 201, 218–21
 of what is not yet there, 437
 device, 492; *see also* instrument of language; tools
 diary, about recurrence of a sensation, 258, 260, 270
 dice, brf 70
 dictionary, 265
 discovery, 119, 124, 125, 133, 400
 diseases, philosophical, 593; *see also* bumps; houses of cards; illness; therapy; treatment
 disposition, 149; PPF 102
 disputes, 53, 240, 402, 424; PPF 341
 do/doing, 612, 620
 dog, 250, 357, 650; PPF 1, 363
 dogmatism, 131
 doing the same, 34, 62, 226–7; *see also* rule and doing the same
 doll, 27, 282, 360; PPF 119
 double cross, PPF 212, 215–18, 257
 doubt
 – which exists for me does not for him, PPF 307
 –ing has an end, PPF 33
 imaginability of –, 84
 possibility of –, 213

- doubt (*cont'd*)
senselessness of –, PPF 310
shutting one's eyes in the face of –,
PPF 331
signpost leaves room for –, 85
–ing what we recognize as genuine
–, PPF 354
–ing whether another is in pain,
303
–ing whether one has two hands,
PPF 312
–ing whether one meant, 679
–ing whether one is in pain, 246,
288
–s about who Moses was, 87
draughts, 562
dreams, 160, 448; PPF 52–3, 219,
320
duck–rabbit, PPF 118, 120, 125–8, 137,
152, 201, 208, 215–17
- Earth has existed for the last
5 minutes, PPF 313
echo of a thought in sight, PPF 235
electric shock, 409
elliptical, 19, 20
emotion, manifestations of, 321;
PPF 96
entertaining a proposition, 22
entertainment, 66
error, *see* mistake
essence, 1, 46, 65, 89, 92, 97, 113, 116,
239, 370–4, 547; *see also* nature
essential/inessential, 62, 168, 173, 562,
564, 568
ethics, 77
everyday, 81, 106, 116, 134, 197, 235,
412; PPF 161, 335; *see also*
normal; ordinary
evidence, 488, 638, 641
imponderable –, PPF 358–60
evolution, PPF 55
exactness/inexactness, 28, 69, 70, 88,
91
examples, as explanation, *see*
explanation by examples
- exclamation, 27, 231, 586; PPF 126,
138–9, 293
excluded middle, 352
exhibit/exhibition, 201, 311–13;
see also manifestation; utterance
exist/existence, 39, 41, 46, 50, 79
necessary, 50
existence attributions, 46, 58
existing in and of itself, 46, 58
expectation, 576–7, 581–3
an act of –, 586
expression of an –, 452–3, 465, 574
and its fulfilment/satisfaction, 442,
444–5, 465
– is grammatically a state, 572
– and its object, 452–3
– sometimes not a state of mind,
577
unsatisfied –, 438–9
- experience
–ing the because/cause, 170, 176–7
characteristic/particular –, 34–5, 155,
157, 165, 167, 171, 174
– and expert judgement, PPF 355
– of guidance, 172–3, 176
inner private –, 243, 256–315
intending, understanding, etc. are
not –s, 34–5, 59, 165–6, 172–8,
232, 322, 591, 645
justification by –, 480, 485
language-dependent –, 649;
PPF 222–4
meaning of an expression not an –,
509
–ing the meaning of a word,
PPF 234, 261–7, 271–4
– as a super concept, 97
– of a tending, 591
understanding, as an indefinable –,
322
visual –, *see* visual experience
what – occasions saying “I'm
conscious”, 417–18
willing, wanting, merely an –, 611
word on the tip of one's tongue,
not an –, PPF 299

- experiment
 calculation not an –, PPF 291
 – establishes causal connections, 169
 psychological –, PPF 32
 result of an imagined –, 265
 experimental method, PPF 371
 expert judgement, PPF 355
 explanation/explain
 accompaniments of –, 34
 – averts misunderstandings, 87
 – comes to an end, 1, 87, 654
 demand for –, 217
 effect of – depends on reaction, 145,
 288
 every – can be misunderstood,
 brf 28
 exact/inexact –, 88
 – by examples, 71, 75, 208–10
 grammar does not –, 496
 last/final –, 29, 87
 – of meaning, 1, 533, 560; PPF 286
 – of the meaning of a word, *see*
 word, explanation of a
 – of a musical theme, 527
 ostensive –, 28–36
 private –, *see* private explanation,
 and private ostensive definition
 –ing a proper name, 79, 82, 87
 rectification of –, 3
 – not training, 5
 – and understanding, *see*
 understanding and explanation
 –ing what a game is, *see* game,
 explaining what it is
 –ing what ‘pain’ means, *see* ‘pain’
 explorer, 206, 243
 explosion, 576, 581–2
 expression, facial, *see* face/facial
 expression
 expression, form of, *see* form of
 expression
 face/facial expression, 21, 285, 536–7,
 539, 583; PPF 17, 112–13, 119,
 150, 231–2
 fact, 89, 95, brf 142, 471; PPF 365–6
 Fahrenheit, 508
 fairy tale, 282
 faith, 589
 familiarity/unfamiliarity, feelings of,
 129, 167, 596; PPF 35, 142;
 see also recognition/recognize
 family
 – of cases, 164
 – of language-games, 179
 family resemblance, 67–77, 108
 Faraday, M., brf 104
 fat/lean, PPF 274–5
 fear
 – of being burned, 473, 480
 cry of –, PPF 74, 82–3, 85
 doubting someone else’s –, 303
 expression of –, 142, 537
 object of –/cause of –, 476
 – utterance, PPF 5
 verbal expression of –, PPF 72–7
 feeling
 ascribing –s to others, 283
 attending does not consist in –s, 34
 – a cause/an influence, 169–70, 234
 – of conviction/doubt, 607
 deep –, 583
 description of a –, PPF 63–6
 expression of expectation does not
 describe a –, 582
 –s of familiarity/unfamiliarity, 596
 genuineness of expressions of –s,
 PPF 355–62
 – gives the words ‘meaning’/truth,
 544
 hidden –, PPF 324
 hypostatizing –s to explain thoughts,
 598
 if-feeling, PPF 39–44
 intention is not a –, 588, 645
 knowing what one feels, PPF 309,
 311
 – of a link between thoughts, 640
 making a chess move does not
 consist in –s, 33
 reading does not consist in –s,
 159–60

- feeling (*cont'd*)
 report of emotion not learnt from
 –s, PPF 5–6
 – of satisfaction, 460
 tactile –s, 626
 see also genuineness of feelings;
 kinaesthetic sensations
 fibres, overlapping, 67
 fiction, 22, 307
 fingers, crossing one's, 617
 finite/infinite, *see* infinite/ininitely/
 infinity
 fire, certainty that – will burn, 325,
 472–4, 477, 480
 fit
 associated things seem to –,
 PPF 50–1
 everything –s into its shape, 216
 grammar of –, 182
 –ing is grammatically a state, 572
 meaning –s use, 139
 name –s a face, PPF 270
 pin –s socket, 194
 solid cylinder –s hollow one, 182
 ‘true’ –s a proposition, 137
 fitting/belonging, 136–9
 flower, 53
 fly
 in fly-bottle, 309
 a wriggling –, 284
 follow/following a rule, 185–242
 – is analogous to obeying an order,
 206
 – blindly, 219
 – definite rules, 83
 how am I able to –, 217
 – not intimation, 222–3, 230
 one person, once in a lifetime –s a
 rule, 199
 physiognomy of –, 235
 – is a practice, 202
 – ‘privately’, 202
 – of a series, 143–7, 185–92, 213–38
 when we – things don't turn out,
 125
 what we call ‘–’, 201
 foreign country, 32
 foreigner, 20
 foreknowledge, 629–32; PPF 329;
 see also prediction
 forgetting which colour this is the
 name of, 57
 formation rule, 143
 form of expression, 90, 94, 334, 356,
 398, 402, 409, 426, 513
 form of life, 19, 23, 241; PPF 1, 345
 forms of our language, 111, 112
 formula, 146, 151, 152, 154, 179, 183,
 185–90, 226, 320; PPF 34
 foundations, 87, 89
 four consecutive sevens, 352, 516
 Frege, G., 22, brf 22, 49, 71
 French adjective, 538
 French politician, 336
 friction, 107
 full-stop, 22
 function, 5, 11, 17, 22, 27, 208, 260,
 304, 556, 559; *see also* language,
 function of; sentence, function
 of a; word, function(s) of
 gambling, brf 70
 game
 ball –, 83
 – a blurred concept, 71
 board –, 3, 31, 66
 card –, 66
 comparing –s, PPF 369
 concept of a –, 66–71, 75, 135
 definition of –, 3
 – determined by its rules, 567
 essential/inessential part of a –,
 562–8
 explaining what a – is, 69, 71, 75
 false moves in a –, 345
 – a family resemblance concept, 66,
 68, 69
 inventing a – that is never played,
 204
 knowing what a – is, 74
 learning to play a –, 31, 54
 perfect –, 100

- game (*cont'd*)
 piece in a –, 17, 31, 33, 35
 playing a –, 3, 200, 282
 rules of a –, 3, 31, 54, 84, brf 108,
 125, 205, 567–8; PPF 349
 something common to all –s, 66
 still playing a –, 200
 use of words compared with –s, 7,
 81, 83, 182
- gaps, 84, 87
 gaze, 412
 general propositional form, *see*
 proposition, general form of
 genuineness of feelings, 606;
 PPF 352–61
- Germanisms, 597
- gesture, 1, 174, 208, 288, 310, 330, 335,
 433–4, 528, 529, 550, 590, 610,
 673; PPF 6, 26; *see also* pointing
- ghost, 360
- gift, right hand to left hand, 268
- given, the, PPF 345
- glasses, pair of, 103
 frame of –, 114
- globe, 351
- God, *see* deity
- Goethe, PPF 51
- going on in the same way, 185,
 215–16, 223–8
- going to, 631–2, 635–9, 641, 645, 660;
 PPF 7, 328
- Goldbach's conjecture, 578
- 'good', 77
- goose, PPF 314
- grammar
 aim of –, 497
 arbitrariness of –, 497, 520
 basis of –, PPF 365
 comparison with a paradigm in –,
 20
 – deficient in surveyability, 122
 – describes rather than explains, 496
 drop of –, PPF 315
 – expresses essence, 371–3
 oscillation/fluctuation between
 natural science and –, 79, 392
- grammar (*cont'd*)
 pictorial representation of –, 295
 place/post in –, 29, 257
 purpose of –, 497
 surface/depth –, 664
 theology as –, 373
 – tries to force itself on us, 304
 – and verification, 353
 what – permits, 520
- grammatical
 – difference, 149
 – fiction, 307
 – illusion, 110
 – inquiry, 90
 – joke, 111
 – movement, 401
 – proposition, *see* proposition,
 grammatical
 – question, 47
 – remark, 232, 574
- grasping the meaning of a word,
 see understanding, at a stroke
- grief, PPF 2–4, 67, 68
- groan, 404, 406–7; PPF 30
- grounds/well-grounded, 320
- guess, 32, 33, 210, 266, 340, 607, 652;
 PPF 308, 318, 321–2, 328
- guidance, 143–4, 170, 172–3, 175,
 177–8, 234, 237
- gun, 442
- hail/hailstones, PPF 9
- hand, 268; PPF 312
- handles, 12
- hardness, state of, 572
- hardness of the logical 'must', *see*
 logical 'must', hardness of
- harmony, between thought and reality,
 429
- hatred, 642
- 'having' experience/pain, *see* ownership
 of experience
- headache, studying, to clarify problem
 of sensation, 314
- hearing/sensing a plaintive/solemn
 melody, PPF 229–30, 233

- hearing something as a variation on a theme, PPF 254
- heptagon, construction of, 517
- hexagon, two interpenetrating –s (Köhler), PPF 180, 184–6, 189, 194
- hidden, 60, 91, 92, 102, 126, 129, 153, 164, 435, 559; PPF 301, 307, 317, 322–6
- highway, 426
- hocus-pocus, 454
- hope, 545, 574, 583–6; PPF 1, 78
- horror, PPF 5–6
- house, last, 29
- houses of cards, 118
- human being, 6, 26, 241, 243, 257, 281–8, 360, 361, 415, 416, 418, 466–8, 495, 656; PPF 19–23, 25
- human being, behaviour of, *see* behaviour, of a human being
- human being, living, 281, 420, 430
- hunch, 469, 607
- hypothesis, 82, 109, 156, 325; PPF 249, 306
- I, 398, 404–10
- idea, 73
- ideal, 81, 88, 98, 100–1, 103, 105
- idealists, 402–3
- identity
- criterion of –, 253–4, 288, 322, 404
 - law of –, 215–16; PPF 311
 - numerical/qualitative –, 253–4
 - /self-identity, 215–16
 - see also* same
- if-feeling, PPF 39–44
- illness, 255
- illusion, 80, 96, 97, 110; PPF 268
- image-mongery, 390
- images, *see* mental image
- imaginability, as guarantor of sense, 251, 395–7, 449, 451, 517
- imagination
- concept of – related to concept of an aspect, PPF 254
 - experiments in the –, 265, 267
 - imagination (*cont'd*)
 - intentionality of the –, 518
 - keyboard of the –, 6
 - language of – excludes nonsense, 512
 - looking at a clock in one's –, 266
 - looking up a table in the –, 265
 - nature of –, 370
 - needed to hear something as, PPF 254
 - object of –, 443
 - pain in the –, *see* pain, in the imagination
 - powers of –, 251
 - proof producible in the –, PPF 255
 - rehearsing a tune in the –, 184
 - seeing aspects of a triangle
 - demands –, PPF 217
 - talking in the –, *see* talking to oneself in the imagination
 - 'imagination', ask how – is used, 370
 - imagine
 - Beethoven writing . . . , PPF 51
 - can't – anything senseless, 512
 - can't – the opposite, 251
 - ing a colour, 382, 386
 - content of experience of –ing, PPF 10
 - describing what one –s, 367–8
 - experience of –ing, PPF 14
 - grammar of –ing, brf 35
 - ing pain, 300–2, 311, 391–4
 - a painted picture of how one –s something, 280
 - ing red, 443, 451
 - ing something is not necessary for understanding a sentence, 396, 449
 - ing is subject to the will, PPF 256
 - when I – something goes on, 363
 - when I – something I have got
 - something . . . , 398
- imponderable, PPF 358–60
- impression
- auditory –s, 671
 - of a balance, 259
 - of colour, 272–8

- impression (*cont'd*)
 - comparing -s and recognition, 604
 - deep -, 167
 - of inconspicuousness/ordinariness, 600
 - of a picture-duck, PPF 157
 - private – of a picture, 280
 - of a room, 368
 - of a rule, 259
 - tangled -, PPF 160
 - of timidity, 536
 - of unfamiliarity, 596
- see also* sense impression; visual impression
- impressionistic picture, 368
- inarticulate sound, 261
- incorporeal process, 339
- indefinable word, 182
- independent, 57, 92, 157, 265, 620; PPF 102, 338, 348
- indescribability
 - of aroma of coffee, 610
 - of simples, 46, 49
- indexicals ('this', 'that'), 8, 9, 16, 38, 44, 45, 117, 410, 514
- Indian mathematicians, 144
- individuals, Russellian, 46
- induction, 324–5, 472–85
- inference, 486, 599; PPF 96
- infinite/ininitely/infinity, 147, 218, 229, 344, 427
 - expansion of π , 352
- infinitesimal calculus, 18
- influence, 169–70, 175, 177, 491
 - feeling/experiencing an -, 169–70, 171, 176
- information/informs, brf 35, 280, 481; PPF 20
- inner
 - activity of listening, 671
 - clock, 607
 - experience, 174, 243, 256, 645
 - (internal) is hidden
 - life, 24
 - object, PPF 134
 - ostensive definition, 380
 - inner (*cont'd*)
 - picture, PPF 133, 158
 - process, 305, 580; PPF 36
 - speech, PPF 301–3, 307, 301; *see also* talking to oneself
 - states, PPF 36
 - voice, 213, 232–3
 - inquiry, turning the – round, 108
 - insignificant, boundaries of the -, 79
 - inspiration, 232
 - institution, 199, 337, 380, 540, 584
 - instrument of language, 50, 57, 291, 360, 421, 569; *see also* device; tool
 - intangible, 175, 358, 421, 607–8
 - intend
 - act of -ing, 197
 - ing construction of a sentence in advance, 337
 - ing to deceive, 638
 - ing not an experience, PPF 279
 - guessing what I -, 210
 - only you/he can know what you/he -, 247; PPF 328
 - ing to play chess, 197, 205
 - rules contained in act of -ing, 197
 - ing to say something, 591–2
 - ing to write to a person, 681
 - see also* mean (meinen)
 - intention
 - not an accompaniment of intended act, PPF 280, 299
 - accompaniments of an -, 646
 - actions foreseen in -, 629–31; PPF 329
 - apparent independence of custom/technique, 205
 - ashamed of my -, 644
 - certainty of/evidence for -, 641
 - embedded in a situation, 337
 - evidence for -, 641
 - and experience of tending, 591
 - and expression of uncertainty, 247
 - and feeling, 588
 - guessing -s, 210; PPF 328
 - and inner experience, 645

- intention (*cont'd*)
 – and knowing what one was going to do, 633–60
 – and mental process, 205
 natural expression of –, 647
 nature of –, 174
 – and prediction, 631–2; PPF 98, 328–9
 remembering an –, 635, 648, 653, 660
 reporting a past –, 656
 – and as it were saying to oneself, 658
 – and self-revelation, 659
 unconscious –, PPF 282
 intentionality, 428–65; PPF 35
 intermediate links, 122, 161
 internal relation, PPF 247
 interpretation/misinterpretation, 28, 32, 34, 85, 111, 160, 170, 194, 198, 201, 210, 213, 215, 506, 536, 539, 634, 637–8, 656; PPF 116–17, 164, 248, 299
 intimation, 171, 222, 230, 232, 237
 introspection, 413, 551, 587, 677; PPF 369
 intuition, 186, 213–14, 659
 ‘is’, 558, 561
 ‘is’, sign of identity, PPF 9
 is/is called, 27–31, 33–5, brf 35, 38
- James, William, 342, 413, 610; PPF 299
 Jastrow, J., PPF 118
 jigsaw puzzle, PPF 321
 joy
 characteristic expression of –, 142
 pattern of –, PPF 1–2
 judgement, 242; PPF 297, 309, 346, 355, 356, 357, 360
 justification, 155, 169, 182, 217, 261, 265, 267, 289, 320, 324, 325, 378, 485, 486, 527; PPF 161, 171;
see also reason(s); warrant
- kinaesthetic sensations, 621, 624; PPF 56–62, 66
 knife and fork, PPF 122
- knob, 270
 know
 –ing the ABC, 148–9
 –ing the application of the rule of a series, 147–8, 187
 –ing the future, 461
 –ing is grammatically a state, 572
 –ing how one's finger is moving, PPF 57
 –ing how to go on, 151, 179, 180–1, 183–4, 211–14, 323, 324; PPF 300
 –ing I must, PPF 311
 –ing a language, 20
 –ing and not being able to say, 75, 78
 not – what one wishes for, 441
 –ing one is in pain, 246
 –ing one's way about, 203
 only he can – what he intends, PPF 328
 only he –s, 156
 only you can – if you had that intention, 247
 –ing rather than seeing, an aspect, PPF 192
 –ing something that happens, 20
 –ing a state of consciousness, process or ability, 148–9
 –ing a tune, 184
 –ing what one believes, PPF 309
 –ing what one feels, PPF 309
 what one has to – before one can ask for a name, 30
 –ing what one is going to do, 629, 631–2
 –ing what one was going to say, 633–7
 –ing what one wants, PPF 309
 –ing what one wishes for, 441; PPF 309
 –ing what pain is from one's own case, 293, 295
 –ing what someone looks like, 450
 –ing what a word means, 75, 78
 –ing whether another has experience, 272

- 'know'
- ' means expression of uncertainty
is senseless, 247
 - grammar of – related to 'can', 'is able to', 'understands', 150
 - "I can't know what is going on in him" is a picture, PPF 326
 - "I know . . ." does not mean that "I doubt" is senseless, PPF 310
 - "I know . . ." said where one can also say "I believe" or "I suppose", PPF 311
 - ', use as exclamation ("Now I know"), 151
 - ', used as normal, 246
- knowledge, 363
- exclamation of –, PPF 293; *see also* understanding, exclamation of expression of –, 75
 - of other people, PPF 355
 - temporal character of –, 148
- Köhler, W., PPF 180
- lamp, 62
- language
- agreement in –, 241
 - and analogy with games, 83; *see also* language-game
 - animals don't use –, 25
 - Augustine's description of –, 1–3, 32
 - clothing of our –, PPF 335
 - completeness/incompleteness of –, 18
 - consisting only of orders, reports, questions, 2, 18, 19
 - contains the possibility of different forms of sentences, 20
 - as correlate of the world, 96
 - a dream of –, 358
 - essence of/nature of –, 1, 65, 92, 97
 - everyday –, 81, 120, 134; *see also* language, ordinary
 - excluding a form of words from –, 500
 - expectation and fulfilment meet in –, 445
 - is a family of structures, 108
- language (*cont'd*)
- forms of –, 5, 25, 65, 111, 112, 132
 - is founded on convention, 355
 - function of –, 2, 92, 304
 - how can one wish to interpose – between pain and its expression, 245
 - ideal/perfect –, 81, 98
 - idling, 132
 - of imagination, 512
 - imagining a –, 19
 - innate knowledge of –, 495
 - is an instrument, 569
 - instruments of –, 16, 50
 - interpreting an unknown –, 206–7
 - is interwoven with activities, 7
 - invention of –, 492
 - a labyrinth of paths, 203
 - lack of formal unity, 108
 - learning a foreign –, 32
 - learning/teaching of –, 1, 5, 6, 7, 9, 26, 32, 77, 495
 - is like ancient city, 18
 - limits of –, 119, 499, 540
 - logic of our –, 38
 - new types of –, 23
 - only in – can I mean something by something, brf 35
 - is in order as it is, 98
 - an order in our knowledge of –, 132
 - ordinary –, 98, 105, brf 108, 132, 243, 402, 436, 494
 - primitive –, 2, 5, 7, 25
 - private, *see* private language
 - problems solved through an insight into the workings of –, 109
 - purpose of –, 363, 491, 496–8, 501
 - reform of –, 132
 - regimentation of –, 130
 - and regularity, 207
 - samples are part of –, 16
 - seas of –, 194
 - of sense-impressions, 355
 - sign, *see* sign-language
 - something common to all –, 65

- language (*cont'd*)
 - spatio-temporal phenomenon of -, brf 108
 - suggests a body, 36
 - tools of -, 16, 23
 - of a tribe, 6
 - understanding a -, 199
 - uniqueness of -, 110
 - use of -, 1, 7, 25, 58, 81, 124, 132
 - as vehicle of thought, 329
 - what words in this - signify, 10, 13, 15
 - working of -, 5, 109
- 'language'
- grammar of, 492
 - has a humble use, 97
- language-game
- abrogation of the normal -, 288
 - beginning of a -, 290; PPF 289
 - of confessing one's motive, PPF 334
 - essence of a -, 65
 - everyday - has to be accepted, PPF 161
 - explanation of concept of a -, 7
 - with the expression of sensation, 288
 - with 'he is in pain', 300
 - image of pain enters the -, 300
 - instruments of a -, 50, 53, 55, 57
 - kind of certainty is kind of -, PPF 332
 - s losing their point, 142
 - lying is a -, 249
 - move in a -, 22, 49
 - multiplicity of -s, 24; PPF 335
 - names in a -, 41, 42, 44, 49, 55, 57
 - new kinds of -s, 23
 - s as objects of comparison, 130
 - with 'pain' begins with utterance, 290
 - with 'physical object' and 'sense impression', PPF 34
 - playing our - always rests on tacit presupposition, PPF 31
- language-game (*cont'd*)
 - s not preliminary studies for future regimentation, 130
 - primitive - needs no justification, PPF 161
 - as proto-phenomenon, 654-6
 - of reporting dreams, PPF 52
 - for *Theaetetus*, 48
 - varieties of -, 23, 24; PPF 335
 - of writing down a series, 143-7
- law of excluded middle, 352, 356
- leaf, 73-4
- learn
- ability to -, 143
 - expert judgement, PPF 355
 - a game, 31, 54
 - "I have -ed English", 381
 - language, *see* language, learning/teaching of
 - mental arithmetic, 385
 - to talk, 5
- length, 29, 47, 69; PPF 338
- lever, 6, 12
- light, point of, PPF 27
- likeness, *see* noticing a likeness
- lion, if a - could talk, PPF 327
- listening, 669, 671
- living beings, 281, 284, 357, 420, 430
- locked in a room, 99
- locomotive, cabin of, 12
- logic
- crystalline purity of -, 107-8
 - the essence of thought, 97
 - of our expressions, 345
 - of our language, 93
 - a normative science, 81
 - philosophy of -, brf 108
 - proposition and word - deals with, 105
 - rigour of -, 108
 - seems abolished, 108, 242
 - is something sublime, 89
 - sublimating - of our language, 38, 94
 - for a vacuum, 81
 - no vagueness in -, 101

- logical
 - circle, 208
 - construction, 366
 - ‘must’, hardness of, 437
 - possibility, 512, 520–1, 566
- logicians, 23, 81, 377
- look
 - and see, 66, 340
 - see how it’s –ing, PPF 201
 - ing plus seeing, PPF 245
 - for someone, 462–3
 - way of –ing at things, 144
 - ing without seeing, PPF 242
- loom, 414
- Luther, M. 589
- lying, 249, 668
- machine
 - could a – think, 359–60
 - the human body a –, 359
 - as symbol, 193–4
- major/minor, concepts of, in music, PPF 226
- man, old, brf 139
- manifestation (*Äusserung*), 149, 152, 453, 582, 585; PPF 1, 96, 244;
 - see also* exhibition; utterance
- manometer, 270
- map, 653
- Martian, brf 139
- mastery
 - of a game, 31
 - of a language, 33, 338
 - of a technique, 150, 199, 692; PPF 224
 - of use of language, PPF 1
- mathematical
 - certainty, PPF 330, 332, 341–3
 - conjecture, 578
 - discovery 124–5
 - facts, 254
 - investigation, PPF 372
 - problems, 334
 - proof, 517, 578; PPF 255, 303, 371
 - proposition, PPF 348
- mathematical (*cont’d*)
 - sense of a – proposition, 544
 - truth, PPF 348
- mathematicians, 208, 240, 254; PPF 341, 343
- mathematics
 - agreement in –, PPF 347
 - is a body of knowledge, PPF 348
 - changes in –, 23
 - feeling of dizziness in –, PPF 224
 - foundations of –, PPF 372
 - and philosophy, 124–5, 254
- matter of course, 238, 260, 524; PPF 93, 253
- meaning (*Bedeutung*)
 - Augustine’s picture of –, 1–2, 5
 - not an aura, 117
 - body, 559
 - and compositionality, PPF 9, 15–16, 37
 - conceived as object corresponding to a word, 1, 2, 5, 39–40, 42, 120, 316
 - cry is full of –, 543
 - not determined by interpretations alone, 198
 - displaying the –, PPF 15–16
 - experiencing the – of a word, PPF 234, 261–7, 271–4
 - explanation of –, 560
 - family of –, 77
 - and feeling, 544–5
 - fixed/fluctuating –, 79
 - is not hidden, 60, 164, 435
 - and interpretation, *see* interpretation/misinterpretation
 - keeping hold of understanding a –, PPF 11
- let the use teach you the –, PPF 250, 303
- metaphorical –, PPF 278
- myth of –, brf 549
 - of a name and destruction of bearer, 55
 - a physiognomy, 568; PPF 294
- primary/secondary –, PPF 275–8

- meaning (*Bedeutung*) (cont'd)
- of a proper name, 79
 - sameness/difference of -, 19, 140, 154, 183, 551, 552–3, 555–6, 558, 561; *see also* sense, sameness of
 - of a sentence, *see* sentence, meaning of
 - and significance/being full of meaning, 543–5
 - of 'this', 45
 - and use, 1, 9, 10, 20, 30, 35, 40, 41, 43, 120, 138, 139, 197, 247, 532, brf 549, 556–7, 561; PPF 7, 9, 14, 265, 303
 - of a word, *see* word, meaning of words without -, 13
 - word has a – only in the context of a sentence, 49
- mean (*meinen*)
- ing and aiming, 689, 691
 - ing an analysed sentence, 60
 - ing as a condition of sense, 507, 509, 511, 513
 - depth grammar of -ing, 664
 - ing and directing one's attention, 666–7, 674
 - ing, doubt and certainty, 679
 - ing emphatic negation, 557
 - grammar of -ing, brf 35, 693
 - ing *him*, 661, 663, 680–1, 686–91
 - how can one –, 19–20, 665
 - how an order is –t, 186–8
 - how someone –t a word, 504, 557; PPF 262
 - "I didn't – that sort of game", brf 70
 - "I – my words to quieten him", 648
 - ing and intending, PPF 279
 - knowing what one –s, 147, 274, 504
 - making sense because one –s it, 357
 - mental act of -ing, 454, 592, 665, 693
 - ing the pain or the piano tuning, 666–9, 674, 678, 682
 - ing by pointing, 670–1
 - remember having –t, 661

- mean (*meinen*) (cont'd)
- ing a senseless sequence of words, 358, 508, 512, 540–1
 - seriously –ing something, 590, 677
 - ing someone, 663, 680, 686
 - ing something, concept of, 125, 513
 - ing something determining steps in advance, 190
 - ing something develops, 639
 - ing something like going towards someone, 455–7
 - ing something not an activity, 675
 - ing something not an affection of the mind, 676
 - ing something not an experience, PPF 279
 - ing something privacy of, 358
 - ing something not a process, 34–5, 675; PPF 291
 - ing something by a sentence, 19, 20, brf 35, 95, 102, 125, 358, 507–14, 540
 - ing something not thinking of it, PPF 287
 - ing something by a word, 33, brf 35, 276, 665
 - ing such-and-such contrasted with thinking of such-and-such, 686–7, 692, 693; PPF 287
 - ing – thinking – a sentence, 22, 81, 540, 692–3
 - trying to –, 510
 - ing and wanting to say, 334
 - 'meaning' and 'vouloir dire', 657
 - measure/measurement, 50, 69, 242, 328, 330, 553, 569; PPF 94, 338
 - melody, plaintive, PPF 229–30
 - membrane, 276
 - memory
 - a –, 265, 343
 - chart taking over role of –, 53
 - commit to – the connection between sign and sensation, 258
 - content of –, PPF 369
 - correct –, 265

- memory (*cont'd*)
criterion for remembering right, 56
– of a dream, PPF 52–3
– experiences, PPF 368
–image, 56, 166, 239; PPF 58
linguistic –ies, 649
– conceived as agent of comparison, 604
– reaction, 343; PPF 289
– report, importance of, PPF 288
strange – phenomenon, 342
what does my – show me, 648, 651
see also remember
- mental accompaniments, *see*
 accompaniment
- mental act/activity
of inner speech, PPF 303
– of listening, 671
- meaning something as a –, 592, 665, 693
- naming as a –, 38
- negating as a –, 547
- pointing as a –, 36
- reading as a special –, 156
- mental image
 asking what –s are, 370
– of a colour, what it looks like, 386, 388
 comparing –s, 376–82
– of a cow, 449
 description of a –, 367
either a – floats before his mind or it does not, 352
– evoked by words, 6, 139–41, 239
experiencing a –, PPF 10
intentionality of –, PPF 17
keeping hold of a –, PPF 11
picture of a –, 280
–s are private, 251
– as representation of signs, 366
– as super-likeness, 389
table of –s in the imagination, 265
using words to evoke –s, 6
what makes my – of him a – of *him*, PPF 17
see also impression; visual image
- mental process, 20, 152–4, 167, 303, 305–8, 332, 361, 363, 366, 452
- mental state
 description of a –, 24, 180
 intangibility of –, 608
 isolating one minute of a –, 584–5
 philosophical problem of –s, 308
 understanding is not a –, 146, brf 149
 see also state of mind
- message, 356
- metaphor, 356, 439; PPF 278
- metaphysical, 58, 116
- method
 experimental –, PPF 371
– in philosophy, 133
– of projection, *see* projection,
 method of
– of proof, PPF 371
- methodology, PPF 338
- microscope, 645–6
- mimic, 450
- mind
 apparatus of the –, 149
call to –, *see* recollect/recollections/
 call to mind
–'s eye, 56, 57
having an idea in –, 73
having a picture/sample/ before the –, 6, 37, 56, 73
meaning staying before the –, PPF 11
– an odd kind of being, 196
one doesn't say "his – is in pain", 391
if one sees the behaviour of a living being, one sees its –, 357
does psychology treat of behaviour, not of the –, PPF 28
– seems to be able to give a word meaning, PPF 54
- state of –, 149; PPF 29; *see also*
 mental state
- what has a – to do with a stone, 283
- mistake, 51, 54, 140, 143, 270, 288
- misunderstanding, 10, 29, 48, 71, 87, 90, 91, 93, 111, 120, 143, 201, 314

- model, 141
 money, 120, 265
 monologue, 243
 Mont Blanc, 78; PPF 338
 mood, manifestations of, PPF 96
 Moore's paradox, PPF 87, 95, 98, 105
 morning paper, 265
 Morse-code, 167
 Moses, 79, 87
 motion, relative/absolute, brf 138
 motive, PPF 333–7
 motor imagery, PPF 18
 mourn, PPF 81
 mouse, 52
 multiplication table, PPF 350
 music, playing with/without thought,
 341
 musical
 – ear, PPF 260
 – phrase and the feeling it gives,
 PPF 45–9
 – theme, 531; PPF 209–10
 – theme tells me itself, 523
 understanding a – theme, 527
- name
 asking for the –, 6, 27, brf 28, 30–1
 bearer of a –, 40, 43, 44, 45, 55
 diversity of category of –s, 28, 38
 explanation of use of/meaning of –s,
 38, 43, 410
 –s and faces, 171
 inventing a –, 27
 meaning of a –, 1, 6, 10, 39–43,
 55–8, 79
 model of object and –, 293
 –s of objects, 1, 6, 7, 15, 26, 27, 39
 personal – ostensively defined, 28,
 40
 proper –, 28, 39, 40, 41, 55, 87;
 PPF 15, 50–1
 proper –, definition of, 79
 real –, 38, 39
 – relation, 37–8, 244, 259
 –s of sensation, 243–4, 256, 270–1,
 275
- name (*cont'd*)
 –s of simples/indestructibles, 39, 46,
 48, 49, 50, 55, 57–9
 –tag, 15, 26
 use of a –, 1, 6, 7, 8, 9, 11, 26, 27,
 28, 30, 31, 383
 words conceived as –s, 1–2, 383
 naming, 7, 15, 26, 27, 38, 46, 49, 257
 naming the non-existent, 41, 42, 50
 naming vs. describing, brf 35, 46, 49,
 50
 natural history, 25, 415; PPF 365
 natural law, 54
 nature, 92
 nature, general facts of, brf 142;
 PPF 365–6
 nature of, 58, 89, 92, 101, 105, 114,
 brf 142, 174, 183, 308, 399,
 brf 549; *see also* essence
 necessity, objective, 372
 negation, 447–8, 547–57
 – and intentionality, 446–8
 nervous system, 158
 nominalism, 383
 nonsense/senseless, 39, 40, 79, 119,
 247, 252, 282, 464, 498–500,
 511–13, 524; PPF 19, 22, 309
 normal/abnormal
 – cases, 141–2
 – learner, 143
 normative science, 81
 Nothing, a –, 304
 Nothung, 39, 44
 noticing
 an aspect, PPF 113
 causes of –, PPF 114
 – a likeness, PPF 112–13, 239–40,
 244, 257
 noughts and crosses, 66
 number
 concept of a –, 68, 135
 – a family resemblance concept,
 67–8
 –s imaginary and real, PPF 165
 naming –s, 26
 and numerals, 143, 339; PPF 133

- number (*cont'd*)
 - one, 553–4
 - 1 interpreted as a cardinal -, PPF 299
 - ostensive definition of -, 28–9
 - pointing to a -, 33, 35
 - two, 28–9
 - word, 1, 8, 9, 10, 28
- nuts, 28
- obey an order, 206, 345
- object-name model, 293
- objects of comparison, 130–1
- objects in *Tractatus*, 46
- objective certainty, PPF 340
- observation, 417, 659; PPF 67–9, 76, 86, 313
- opining, grammatically a state, 572–3
- opinion, 241; PPF 22
- order, in our knowledge of our use of language, 132
- order, perfect, 98, 105
- ordering (arranging), 92
- orders/commands, 2, 8, 18, 19, 20, 21, 23, 25, 60, 61, 62, 199, 206, 207, 208, 212, 345, 431, 433, 449, 451, 458–61, 498, 505–6, 519
- ordinariness, 600
- ordinary, *see* language, ordinary
- ornament, 270
- ornamental pattern, 208, 211
- orthography, 121
- ostensive definition, 6, 28, 29, 30, 33, 38, 362
- ostensive definition, private -, *see* private ostensive definition
- ostensive explanation, 6, 27, brf 28, 30, 32, 34, 38, 380
- ostensive teaching, 6, 9, 49
- ownership of experience, 253, 294, 398–403
- pace, definition of a -, 69
- pain
 - absence of -, 448
 - another person can't have my -, 253
- pain (*cont'd*)
 - bearer of -, 253, 283, 286, 302
 - behaviour, 244, 246, 257, 281, 288, 296, 302, 304; PPF 30, 324
 - concept of -, 384
 - criteria of -, 350–1
 - and cry of complaint, PPF 84
 - and doubt, 246, 288, 303, 408
 - duration of -, brf 149
 - exhibiting -, 311, 313
 - expression of -, 142, 244–5, 288, 317; *see also* pain behaviour
 - feeling – in another's body, PPF 314
 - grammar of – must be prepared, 257
 - having -, 253, 261
 - having the same -, 253, 350
 - identity of -, 253, 288, 350
 - in the imagination/imagining, 300–2, 315, 391–4
 - inanimate -, 282–4
 - knowing whether I am in -, 246, 251, 288, 303, 408; PPF 311
 - knowing who is in -, 404
 - location, 253, 626; PPF 58–9, 66
 - of a machine, 359
 - meaning the -, 665–8
 - and mental process, 154
 - momentary -, PPF 3
 - my -, 246, 251, 253, 289, 310, 403–9; PPF 84
 - naming, 256–7, 262–3
 - of others, 302–3, 350, 391; PPF 324, 332
 - patches, 312
 - picture of -, 300
 - secondary concept of -, 282
 - simulation/pretence, 249–50; PPF 362–4
 - of a stone, 283–4, 288, 390
 - of a stove, 351–2
 - symptoms of -, 271
- 'pain', 244, 271, 288, 300, 315
- painting, 295, 401, 518, 520; PPF 35, 38, 51, 168, 195, 267, 367
- style of, PPF 367

- paradigm, in grammar/language-game, 20, 50, 51, 55, 57; *see also* sample paradox, 95, 182, 201, 304, 412, 421 Paris, 50 parrot, 344, 346 parts of speech, 1 passive voice, 47 past, concept of the, 656; PPF 370 paths, familiar, leading off, 525, 534 patience (game of), 66, 248 pattern in the weave of our lives, PPF 2, 362 perceive/perception, 92, 104, 170, 229, 417, 453; PPF 121, 128–30, 137–9, 226, 233, 247, 254, 322, 341; *see also* observation person, 404–6 criteria of identity of a –, 404 – may be transparent to us, PPF 325 phenomena, possibilities of, 90 philosopher –’s metaphysical use of words, 116 –’s nonsense, PPF 309 work of the –, 127 philosophical – diseases, 593 – investigation, importance of, 118 – paradoxes, 182 – problems, 109, 110–11, 123, 125, 133, 308, 314 – proposition/statement, 85, 90 – superlative, 192 – treatment, 254–5 – understanding, 122 philosophy aim in –, 309 become insensitive by doing –, 348 cloud of – condensed into drop of grammar, PPF 315 – contrasted with science, 109 dead-end in –, 436 depth of –, 111 no discoveries in –, 109, 125 – and dogmatism, 131 no explanations in –, 126 give – peace, 133 philosophy (*cont’d*) no hypotheses in –, 109 no inferences in –, 599 – leaves everything as it is, 124 – and mathematics, *see* mathematics and philosophy method of –, 133, brf 133 – must not interfere with use of language, 124 nothing hidden in –, 126 – is prior to all inventions, 125 – is purely descriptive, 109, 124 raw material of –, 254 – and recollections, 126 results of –, 119 no second-order –, 121 – only states what everyone concedes, 599 – struggles against bewitchment, 109 – and surveyability, 122, 125 no theory in –, 109 theses in –, 128 when doing –, 11, 15, 52, 81, 131, 194, 254, 261, 274, 295, 303, 393, 520, 592, 598 photograph, 71, 486; PPF 59, 90, 171, 197, 198, 252 physical object, 58, 253 explaining the concept of – in terms of ‘what is really seen’, PPF 161 ‘physical object’ and ‘sense-impression’, PPF 34 physics, 410, 571; PPF 371 physiology, 376, 632; PPF 177, 183, 236, 306 π, 208, 352, 516 pianola, 157 piano-tuning, 666, 678, 682 pictorial likeness, PPF 17 picture affinity of –s, 76 application of a –, 349, 374, 422–7 choosing words compared with choosing –s, brf 139 – compared with mental image, 389 – and description, 291

- picture (*cont'd*)
 – duck-rabbit –, PPF 118, 120, 125–9,
 137, 152, 157
 – forcing a use on one, 140
 – of a galloping horse, PPF 175
 genre –s, 522
 –s give pleasure, 524
 “I can't know what is going on in
 him” is a –, PPF 326
 – illustration to a story, 663
 impressionistic –, 368
 indistinct –, 71
 inner –, PPF 133
 – of an inner/mental process, 305–8
 – of a mental image, 280
 – in the mind, 6, 37, 139, 141
 multicoloured –s, 72
 – object, PPF 119
 – and its object, 518
 – of pain, 300
 puzzle –, PPF 131
 role of –s in our lives, PPF 195
 – and sentence-radical, brf 22
 sharp/blurred –, 71, 76–7
 – of the soul, PPF 23–5
 understanding a –, 526
 upside-down –, PPF 150
 – and use of a word, 139, brf
 139–40
 – viewed as the object it represents,
 PPF 197
 – and visual impression, PPF 166–75
 – and what it tells me, 523
 pigment, 57
 pity, 287, 403
 place in language/grammar, 29, 31
 plaint, PPF 229
 plan, 438; PPF 12–13
 plant, definition of, 70
 poem, 531, 533
 point, movement of, PPF 27
 pointing
 arrow's –, 454
 – with one's attention, 275, 411
 – to the bearer of a name, 43–5
 characteristic experience of –, 35
 pointing (*cont'd*)
 – to a chess piece, 31, 35
 – at a/the colour, brf 28, 33, 35–6,
 73, 429
 – doesn't explain what ‘imagination’
 means, 370
 –gesture, 8, 44–5, 71, 185, 398
 – and indexicals, 9, 38, 117
 listening/looking compared with –,
 669, 671–2
 – at a mental image, 382
 – at a/the number, 9, 28, 29, 33
 – at objects, 6, 7, 8, 9, 33, 34, 35,
 117, 669, 670
 – to a paradigm, 51
 – is part of the language-game, 669
 – to a place, 8, 9, 71, 208
 – at a sensation, 258, 275, 298, 411,
 669
 – at a/the shape, 33, 34, 35, 36
 – to what is in common, 72
 when I say “I am in pain”, I don't
 point to a person, 404
 – while telephoning, 670
 see also ostensive definition;
 ostensive explanation
 point of, 62, 142, 564–7
 politician, French, 336
 portrait, PPF 199–200
 possibility/possible
 a priori order of –ies, 97
 – of having the same pain, 253
 logical –, *see* logical possibility
 – of movement, 194
 – of phenomena, 90
 – state of affairs, 520
 posture, PPF 225
 pot, 282, 297
 pot, boiling, 297
 practice
 following a rule is a –, 202
 in –, 54, 132, 323, 556, 607
 linguistic –, 21
 – of playing, 197
 – of the use of language, 7, 51
 practice/practising, 54

- prediction, 193, 243, 629–32; PPF 98, 328–9, 355
 prefix “I think”, “I believe”, 24
 prejudice, 340
 preparation, 26, 31, 49
 presupposition, PPF 31–4
 pretence/pretending, 156, 159, 249–50; PPF 353, 358, 362–4
 primary element, 46, 48–51, 53, 59
 primitive
 - explanation, 339
 - expression of sensation, 244
 - forms of language, 2, 5, 7, 25
 - language-game, 1–21, 146; PPF 161
 - logic, 554
 - mode of thought, 597
 - people, 194
 - reaction, PPF 289
- private
 - definition, 262, 268, 380
 - exhibition of pain, 311
 - experience, 272, 274
 - explanation, 262, 268
 - impression, 272–8, 280
 - language, 243–315
 - map, 653
 - mental image, 251, 280
 - object, 374; PPF 214
 - ostensive definition, 258, 262–3, 380
 - picture, 294
 - sensations/mental images/
 - impressions, 243–8, 251, 256, 272, 275–7, 280, 294
 - transition, 380
- ‘private’/‘privately’, 202, 256
- probable, 158, 482, 484
- process
 - incorporeal –, 339
 - inner –, 305; *see also* mental process
 - inner – stands in need of outward criteria, 580
 - intending is not a –, 34, 205
 - interpreting is not a mental –, 34
 - knowing is not a mental –, 148, 363
- process (*cont’d*)
 - looking like a statement of a mental –, 303
 - meaning something is not a mental –, PPF 291
 - mental – corresponding to multiplication on paper, 366
 - es in the mental sphere, 571
 - momentary –, 638
 - naming is not an occult –, 38
 - odd –, 196
 - outer –, PPF 301
 - philosophical problem of mental –es, 308
 - reading is not a particular –, 165, 167
 - remembering is not a mental –, 305–6
 - thinking is not a –, 330–2, 427
 - understanding is not a mental –, 152, 154; PPF 36
- projection
 - lines of, 141
 - method of, 139, 141, 366
- promise, 226
- proof, PPF 303, 354
- proper name, *see* name, proper prophecy, 21, 461
- proposition
 - concept of a –, 135
 - equivalent to language, thought, world, 96
 - essence of a –, 92
 - fits ‘true’ and ‘false’, 137
 - general form of –, 65, 95, 114, 134–6
 - grammatical –, 251, 295, 360, 458
 - lack of formal unity of –, 108
 - negation of a –, 447
 - negation of an a priori –, 251
 - as a picture, 96, 520, 522
 - is a remarkable thing, 93–4
 - and truth, 136, 225
 - and what makes it true, 437
- propositional schema/variable, 134
- proto-phenomenon, 654

- proverbs, hung on the wall, PPF 195
 psychological
 causes, PPF 268
 concepts, PPF 202
 experiment, PPF 32
 psychologists, 571; PPF 28, 114, 282
 psychology
 concepts suitable for –, 577
 confusion and barrenness of –, PPF 371
 subject matter of –, 571
 purpose, 2, 5, 6, 8, 62, 87, 88, 109, 127, 132, 208, 220, 257, 263, 304, 317, 345, 385; PPF 80, 290, 311
 quality, transition from quantity to –, 284
 question, 19, 21–5
 rails, 218
 rain, 22, brf 35, 354, 356, 540; PPF 89, 105, 107, 109
 rainbow, 47
 Ramsey, F. P., Pr, 81
 react/reaction, 6, 143, 145, 198, 206, 284, 343, 495, 659; PPF 167, 289
 reading, 22, 156–71
 – expressively, PPF 264–7
 – silently, how taught, 375
 reading-machine, 156–7
 realists, 402
 reason(s), 169, 211–12, 217, 325, 326, 477–85; PPF 268, 326
 – and causes, 475–85, 487–90, 493
 receptivity, 232
 recognition/recognize, 35, 270, 285, 378–81, 388, 448, 596, 602–5, 625; PPF 141–5, 149–50, 152
 recollect/recollections/call to mind, 89, 90, 127, 335, 342; PPF 159
 red/'red', 1, 20, brf 28, 51, 53, 57, 58, 239, 272–3, 377, 380–1, 386, 429, 443, 446
 referring/reference, 10, 27, 243–4, 273–4, 669, 685; PPF 7, 286
 region, 71, 88
 regularity, 189, 207–8, 223, 237, 242
 relation, *see* internal relation; name relation
 religion, PPF 23
 remember, 35, 56, 271, 305–6, 601, 634–7, 645, 648, 660–1; PPF 369, 370; *see also* memory
 report, 19, 21, 23, 144, 199, 207, 270, 386, 421, 525, 585–6, 656–7, 683; PPF 5–6, 94, 138
 represent
 how a sentence –s, 435
 what a drawing –s, 683, 691
 representation
 means of –, 50
 medium of –, 397
 – and mental image, 280, 366; PPF 18
 – and method of projection, 366
 mode of –, 50, 104, 403
 – of what is seen, PPF 146–7
 ring-a-ring-a-roses, 7
 rod, every – has a length, 251
 role, of pictures, *see* pictures, role of
 role, of a word, *see* word, role of a rose
 – is red in the dark, 514–15
 – has no teeth, PPF 314
 rule
 accord with a –, 198, 201, 217, 224
 application of a –, 147–8, 201, 218, 292, 380
 – for application of a rule, 84, 86
 changing –s, 83–4
 – and choice, 219
 compulsion by a –, 231
 in conflict with a –, 201
 – for construction of a proposition, 102
 – contained in the act of intending, 197
 correct –, brf 549
 definite –, 81, 83
 – and doing the same, 189, 223, 225–7
 entanglement in –s, 125

rule (*cont'd*)

- essential/inessential -s, 562, 564, 567–8
- and exception, 142
- following, *see* following a rule
- in the form of a chart, 53, 86
- in the form of a table, 162
- formulating the -s, 31
- of a game, *see* game, rules of a grasping a -, 201
- guidance by a -, 234, 237, 292; *see also* guidance
- impression of a -, 259
- interpreting -s, 85–6, 198
- for interpreting a map, 653
- knowing the -, 31
- learning a -, 31, 54, 162
- making the -s up as we go along, 83
- mythological description of the use of a -, 221
- nod of a -, 223
- point of a -, 567
- and practice, 202
- present in the mind, 102, 197, 205
- by which he proceeds, 82
- produces its consequences, 238
- read the lips of the -, 228
- and regularity, 208, 223, 237
- roles of a -, 53
- as tool of a game, 54
- traces the lines to be followed, 219
- vagueness of -s, 69–70, 75, 79–80, 83, 88, 98, 100
- 'rule'
- related to 'accord', 224
- related to 'same', 225; *see also* regularity; rule, and doing the same
- Russell, B., 46, 79
- Russian, 20, 159
- sadness, PPF 227–8
- same, 20, 61, 62, 140, 208, 215, 223–6, 253–4, 350, 377–8, 551, 552, 556; PPF 194; *see also* identity

sample

- is a means of representation, 50, 53
- at the mercy of a -, 56
- in the mind, 56, 57, 73
- as part of language, 16, 50, 55, 56
- of shape, 74
- shape of -, 73
- use of a -, 1, 8, 74
- satisfaction/non-satisfaction, 429–65
- satisfaction, feeling of, 440–1, 460
- satisfy oneself that things are so, PPF 311–12
- savages, like – when we do philosophy, 194
- saw off the branch, 55
- saying things to oneself, 346–8
- as it were -, 658; *see also* talking to oneself
- scaffolding, 240
- schema, 73, 86, 134, 141, 163
- Schlemihl, 339
- Schubert, F., PPF 270
- scientific definitions, *see* definitions, scientific
- Scot, Mr, PPF 15
- scruples, 120
- secondary meaning, *see* meaning, primary/secondary
- seduce, *see* temptation
- 'see', two uses of, PPF 111
- seeing
- concept of -, PPF 160, 224
- contrasted with merely knowing,
- an aspect, PPF 192, 196
- and interpreting, PPF 116–17, 163–4, 248–9
- a likeness, PPF 111
- an object in a picture, PPF 169, 175
- a physiological criterion for -, PPF 236
- and seeing as, PPF, 121–2, 137, 166, 167, 169, 171–6, 181–3, 185–7, 189–222, 254–61
- is a state, PPF 248, 250
- and thinking, PPF 140, 144, 163, 180, 187

- seeing (*cont'd*)
 – three-dimensionally, PPF 148, 171,
 173–4, 179–80, 241, 252, 253
 way of –, 74
 – what is in common, 72
 whole business of – is puzzling,
 PPF 251
- self, 413
- self-observation, 586, 659; *see also*
 introspection
- sensation, 243–315
 absurd to say that a body has –, 286
 criterion of identity for a –, 253, 290
 diary about recurrent –s, 258
 directing one's attention on a –, 263,
 268, 283, 298
 doubting whether one has a –, 246,
 288
 having –s, 246, 281, 283–4
 I don't identify my – by means of
 criteria, 290
 kinaesthetic, *see* kinaesthetic
 sensations
- language-game begins with
 expression of –, 290
- my –, 246, 253, 256, 258, 263, 270,
 283, 288–90, 293, 295, 302–3,
 310–13, 411
- names of –s, 243–4, 256
- naming –s, 257
- natural expression of –, 256, 288, 293
- private –s, 243, 246, 248, 257
- recognizing a –, 270
- reference to –s, 243–4
 – S, 258, 260–1, 270
- sign for –, 261
- stone having –s, 283–4, 288
- words for –s tied up with natural
 expressions of, 256
- sense
 analysing the –, 39
 – and application, 319
 circumstance dependence of –, 117
 determinate/indeterminate –, 99
 determining the –, 352
 disintegration of –, PPF 9, 16
- sense (*cont'd*)
 lacking –, 499, 500
 making –/no –, 40, 44, 47, 117, 157,
 357–8, 395, 498–500, 511, 513
 – of a mathematical proposition, 544
 sameness of –, 20, 61, 183
 seeming to fix the –, 426
 – isn't senseless, 500
 – of a sentence, 39, 44, 60, 98–9,
 138, 358, 395, 421, 500, 502, 513,
 685; PPF 37
 – and use, 20, 421–2; PPF 55, 89
- sense data, 366, 401
- sense impression, 354–5, 486; PPF 34,
 60–1, 69, 90, 129, 269; *see also*
 visual impression
- senseless, senselessness, *see*
 nonsense/senseless
- sensing the emotion in a melody,
 PPF 228–30, 233
- sentence
 assertoric –, 22, 24
 – as combination of names, 1
 degenerate –, 19
 elliptical –, 19, 20
 every – is in order as it is, 98
 – as expression of thought, 317, 501
 function of a –, 21, 27
 grammatical form of a –, 21
 how a – represents, 435
 – as instrument, 421
 kinds of –s, 23
 – that logic deals with, 105
 – makes sense, 513
 meaning a –, 81
 meaning of a –, 19, 20, 544
 sense of a –, *see* sense, of a sentence
 understanding a –, *see*
 understanding, a sentence
- use of a –, 20, 27, 117, 278, 449
- vague –, 98
- word has a meaning only in the
 context of a –, 49
- sentence-radical, brf 22
- sentential context, *see* context, of a
 sentence, 38

- series
beginning of a -, 218
continuing a – correctly, 143,
145–6, 151–2, 185–90, 214, 226,
324
face of a -, 228
pattern in the segment of a -, 229
set theory, 412, 426; PPF 371
‘sew a dress’, 195
shadow, 194, 339, 448
shame, 643–4
shape, 26, 33–6, 48, 73
sharpness, of concepts, 71, 76–7
shopkeeper, 1, 8
Siamese twins, 253
sight, objects of, PPF 111
sign
arbitrary –s, 508
– for a broken tool, 41–2
– of emphasis, 4
every – by itself seems dead, 432
– given by a rule, 82, 86
idea of a -, 105
kinds of use of –s, 23
life of a -, 432
– may sometimes be a word,
sometimes a sentence, 49
propositional –, 94, 102
real –, 105
use of –s explained by paradigms,
51, 53
– is what is given in giving an order,
503–4
what –s signify, 10
signal, of being able to go on, 180
signify, 10, 13, 15, 39, 51, 55, 56, 196,
239, 256, 264
signify sensations/impressions, 243–5,
256, 273–4
sign-language, 348
signpost, 85, 87, 198
similarities, in the large/in the small,
66
simile, 112
simple constituent parts, 47
simples, 39, 46–8
singing
– from sheet music, 22
– a tune from memory, 333
situation, 49, 57, 166, 172, 218, 393,
417, 448, 552, 539, 581, 587, 591,
592, 633, 637, 645, 662; PPF 207,
273, 300, 370
sketches of a landscape, Pr
skill, 66
sky, 275
slip of the tongue, 54
smile, 249, 539, 583; PPF 149, 150
Socrates, 46, 518
solipsism, 24, 402–3
solution, 140
Something/a Something, 261, 293, 296,
304, 358
sorrow, pattern of, PPF 2
soul, 422, 573, 589; PPF 22–5
of words, *see* words, soul of
sound, direction of, PPF 57
sound-sample, 16
spade, my – is turned, 217
speaking with tongues, 528
speak of someone, 344, 687–9; PPF 17,
283–4
speech, in the imagination, *see* talking
to oneself in the imagination
speech and thought, *see* thought, and
speech
sphere, 251; PPF 169, 171
spider’s web, repair with our fingers,
106
spirit, 36
spiritual activity, 36
spontaneous generation, 52
Sraffa, P., Pr
standard metre, 50
state, 36, 91, 146, 148, 149, brf 149,
157, 183, 388, 413, 421, 448, 572,
573, 589; PPF 248, 250, 371
state of mind, 149, 290, 577, 585,
588, 607–8, 652, 653, 661, 662;
PPF 29, 72, 73, 79, 85, 90, 96–7,
102, 340, 358; *see also* mental
state

- stereoscope, PPF 171, 252
 stipulation, 88
 stone
 – having consciousness, 390, 418
 – having sensations, 284
 turning to –, 283, 288
 stove, has the same experience as I, 350–1
 strive, 623; PPF 123
 style of painting, PPF 367
 subjective certainty, PPF 340
 sublime, 38, 94
 sublime, 89
 sun, five o'clock on the –, 350–1
 super-expression, 192
 superlative, philosophical, *see*
 philosophical superlative
 super-likeness, 389
 super-order, 97
 superstition, brf 35, 49, 110
 supposition, 349; PPF 87; *see also*
 assumption; presupposition
 surface grammar, 664
 surprise, PPF 152, 183
 surprise, absence of, 628
 surroundings, 250, 412, 540, 583, 584,
 603; *see also* circumstance;
 context; situation
 surveyable representation, 122
 surveyable/surveyability, 92, 122, 125
 symbolic logic, 134
 symptom, 321, 354
- table of correlation, 1, 62, 86, 162–3;
 see also chart
 table in the imagination, 265
 table that wobbles, 79
 tailor, 195
 taking something as something,
 PPF 123
 talk
 – about things, 27
 animals don't –, 25, 357
 child learns to –, 5
 –ing to oneself aloud, 243, 260;
 PPF 246
- talk (*cont'd*)
 –ing to oneself in the imagination,
 32, 168, 243, 344, 346–8, 357, 361,
 376; PPF 246, 301–3, 305–8
 pot –s to itself, 282
 thinks quicker than one –s, 318
 –ing without thought, 330; PPF 292
 tall, 279
 tapestry of life, PPF 2
 teacher, 6, 7, 49, 143–5, 156–7, 362
 teaching, 5, 9, 53–4, brf 70, 143, 185,
 190, 197, 208–11, 361–2; PPF 221,
 355
 teaching, ostensive, *see* ostensive
 teaching
 technique, 125, 150, 199, 205, 232, 262,
 337, 520, 557, 692; PPF 348, 355
 telling stories, 23, 25
 temptation, 254, 277, 288, 294, 299,
 345, 374, 520
 tending, experience of, 591
 tennis, 66, 68
 testimony, 386, 594
 'that', *see* indexicals
Theaetetus, 46, 48, 518
 theology, as grammar, 373
 therapy, brf 133
 theses, 128
 think
 –ing aloud, 331
 analysing concept of –ing, not
 phenomenon, 383
 animals do not –, 25
 –ing apparently unique, 95, 110
 believing is not –ing, 574
 chair is –ing to itself, 361
 as if the child could – but not
 speak, 32
 concept of –ing unlike concept of
 talking, PPF 281
 –ing different from talking in the
 imagination, PPF 246
 explanation of –ing requires a
 feeling, 598
 –ing not an incorporeal process,
 339

- think (*cont'd*)
- is one infallible in saying one is –ing, 328
 - to interpret is to –, PPF 248
 - interrupting –ing, 328
 - knowing what someone else is –ing, PPF 315
 - location of –ing, 361
 - machine –ing, 359–60
 - pneumatic conception of –ing, 109
 - privacy of –ing, PPF 316–22
 - processes accompanying talking are not –ing, PPF 292
 - purpose of –ing, 466–70
 - ing a sentence, 19, 22, 511
 - ing of someone, 686–90; PPF 283–9
 - ing surrounded by a nimbus, 97
 - ing not talking in the imagination, PPF 246
 - ing and thought-schema, 597
 - what –ing is, 327–32
 - ing what is not the case, 95
 - ing of what one sees, PPF 139–40
 - why does man –, 466–70
 - word order of –ing, 336
 - ing in words, 329
 - see also* thought, and speech
- ‘think’
- grammar of, 339
 - meaning of –, 316, 328, 332, 339
 - the word – is an instrument, 360
- ‘this’, *see* indexicals
- thought
- not an accompaniment of speech, PPF 280
 - conveying –s, 304, 317, 501
 - as correlate of the world, 96
 - the echo of a – in sight, PPF 235
 - essence of –, 92, 97
 - expression of –, 317–18, 335, 501, 531; PPF 139–40
 - feelings seem to explain our –s, 598
 - finding the right expression for one’s –s, 335
 - guessing –s, PPF 318, 321–2
- thought (*cont'd*)
- harmony between – and reality, 429
 - s in the head/mind/soul, PPF 24
 - hidden –s, PPF 317, 322
 - lightning-like –, 318–20
 - links between –s, 640
 - neither articulated nor non-articulated, PPF 280
 - s occupying us, 577
 - process, 427
 - seems an accompaniment of speech, 330, 332
 - speaking/writing with –, 318
 - and speech, 327, 330, 335–6, 338, 341–2, 540
 - speed of –, 318–19
 - strangeness of/uniqueness of –, 95, 97, 110, 428, 430
 - tonalities of –, PPF 339
 - wordless –s, 342
 - ‘thought’, 332
 - ‘till’, ambiguity of, PPF 8, 261
 - time, 88, 89, 90, 196, 266, 363, 607; PPF 7
 - timelessness, 58
 - timetable, 265
 - tingling, PPF 370
 - tip (hint), PPF 355
 - tone of voice, 21, 578, 582; PPF 74, 98, 264, 339
 - tool-box, 11
 - tools, 11, 14, 15, 16, 17, 23, 41–2, 53, 54
 - toothache, 257, 665
 - Tractatus Logico-Philosophicus*, Pr, 23, 46, 97, 114
 - training, 5, 6, 9, 27, 86, 189, 198, 206, 223, 630
 - trains, children playing at, 282
 - translation, 243, 265, 342, 459, 597; PPF 7
 - treatment, 254
 - tree, 47, 418
 - triangle, aspects of, PPF 162, 167, 211, 222
 - tricolor, 64

- trisecting an angle with compass and rule, 334, 463
- 'true', interwoven with 'proposition', 136, 225
- true/false, 136–7, 241
- truism, 95
- truth, 136
- functions, calculus of, 136
 - and truthfulness, 544; PPF 319–20
 - value, 22
- try, 618–19, 622; PPF 123; *see also* strive
- turn to stone, *see* stone, turning to
- type/token, 48
- uncertainty, 24, 97, 247; PPF 66, 95
- unconscious, *see* conscious/unconscious
- understanding
- apparently reaches deeper than examples, 209–10
 - as atmosphere, 609
 - compared with mental processes, 154
 - compared with mental states, brf 149
 - concept of –, 513, 532
 - concomitants of –, 152–3, 321
 - criterion of –, 146, 182, 269
 - deeper –, 209–10
 - duration of –, brf 149
 - effecting an –, 6
 - exclamation of –, 151, 179, 183, 323; PPF 293
 - and explanation, 28–34, 71–3, 87, 141, 145, 185, 208–10, 257, 516
 - a further analysed sentence, 60
 - grammar of –, 150, 182
 - a grammatical proposition, 251
 - grounds for saying one –s, 147
 - idea of – smells fishy, 348
 - as indefinable experience, 322
 - not an inner process, 152–4, 321, 396; PPF 36
 - interruption of –, brf 149
 - knowing one understands, 138
- understanding (*cont'd*)
- a language, is to have mastered a technique, 199
 - manifestations of –, 152
 - the meaning of a word, 138, 197
 - medium of –, 102
 - as a mental process, 153–4
 - mere signs, 503–4
 - a musical theme, 527, 533
 - "Now I understand", 151
 - in one's heart, PPF 26
 - only I can understand, 256
 - an order, 6, 431, 433, 451, 505–6
 - ostensive definition will help me understand, 30
 - people in a strange country; PPF 325
 - a picture, 526
 - a poem, 531, 533
 - as a process, 431; PPF 36
 - a question, 516–17
 - the rule of a series, 146
 - a sentence, 60, 81, 138, 199, 332, 396, 513, 514, 525, 527, 531
 - as source of correct use, 146
 - as a state, 146
 - at a stroke, 138–9, brf 138, 151–2, 154–5, 320–1; PPF 13
 - sudden –, *see* understanding, at a stroke
 - the system of natural numbers, 143, 146
 - thinking one understands, brf 138, 517
 - a thought in a flash, 319–20
 - utter a sentence with –, 332
 - in what signs do we understand, 433
 - a word, 6, 10, 29–30, 33, 87, 102, 117, 122, 138–9, brf 149, 196–7, 257, 264, 269, 288; PPF 40
 - the word 'pain', 256–7, 264, 269, 293–5, 315
- 'understand'
- closely related to 'know', 150
 - meaning of –, 532–3

- uniform, 208
 uniformity of nature, belief in, 472–82
 unlimited, 209
 unsatisfied, *see* satisfaction/non-satisfaction
 unverifiable, *see* verifiable/unverifiable
 usage, 198, 199
 use
 – of the assertion sign, 22
 – and depth/surface grammar, 664
 describing the –, 82, 124, 156, 242, 496
 – is extended in time, 138
 figurative –, PPF 265
 grasping the –, 138–9, 179, 191, 195, 197, 274
 – of language, *see* language, use of
 – and meaning, 30, 40–3, 117, 120, 138, 139, 190, 197, 532, 552, 556, 561; PPF 250, 265, 303
 – of money, 120
 – of a person's name, 27, 79
 primitive kinds of –, 5
 sameness of –, 20, 35, 565
 – of a sentence, 20–1, 23, 117, 397, 435
 – of a sign its living breath, 432
 – and understanding, 29, 146 288
 can the whole – come before my mind, 139
 use of a word
 compare – with games and calculi, 81
 everyday/ordinary –s, 116; PPF 15, 106
 – not everywhere regulated by rules, 68
 failure to understand the –, 196
 kinds of –, 10, 23, 38
 know the use when you know what the word stands for, 264
 –s laid out in advance, 142
 look at the – to know how word functions, 340
 misunderstandings about –, 90, 196
 naming is preparatory for the –, 26
 use of a word (*cont'd*)
 ostensive definition explains the –, 30
 overview of –, 122
 philosophical –, 116
 teaching the –, 6–10, 16
 utterance (Äusserung), 310, 440, 571, 631, 632, 656–7; PPF 7, 17, 28, 76, 87, 96, 98, 102, 122, 177, 224;
 see also manifestation
 vacuum, logic for a, 81
 vague, 98, 100, 101; *see also* blurred; boundary line, rigid/sharp
 vase, 33
 vehicle, 329
 verifiable/unverifiable, 272, 353; PPF 249
 visual experience, PPF 117, 138–41, 146, 153, 156, 188–90; *see also* visual impression
 visual image, 47, 402; PPF 253; *see also* mental image; visual impression
 visual impression, 272–7, 312, 354; PPF 131–6, 151, 170–5, 187, 211, 247
 visual room, 398–402
 visual world, 402
 vocal expression, 606
 voluntariness, 611–31
 vowels, and colours, PPF 177, 278
 walk, 183
 want, knowing what one –s, PPF 309
 wanting, 611–29
 war, PPF 311
 warrant, 154–5, 378, 481, 557
 water, falling/jumping into, 187
 weaving, 414
 weight/weighing, 142, 182, 572
Weltanschauung, 122
 wheel, idle, 271
 will, the, 174, 176, 617–19; PPF 256
 willing, 611–29
 willing subject, 618

- winning and losing, 66
 wish
 – and its fulfilment, 437–41, 461
 knowing what one –es, PPF 309
 –ing not a means to bring about movement, 614
 –ing that something should/shouldn't happen, 548
 –ing and voluntary action, 616
 word
 – absorbs/assimilated its meaning, 508–9; PPF 263, 294
 application of a –, 80, 84, 100, 140–1, 264, 340, 349, 383
 apt –, brf 139
 one calculates, operates, with –s, 449
 choosing between –s, brf 139
 choosing the right –, PPF 294–5
 –s are also deeds, 546
 description of use of a –, 10
 dissatisfaction with what are called ‘–s’, 105
 every – signifies something, 13
 everyday use of –s, 116
 –s and exclamations, 27
 explanation of a –, 28, brf 28, 29, 30, 31, brf 35, 288, 560
 face of a –, PPF 38
 function(s) of –s, 1, 5, 11, 17, 274, 280, 340, 556, 559
 grasping the meaning/use of a – at a stroke, 138–9, 191, 195, 197
 hearing a – as having this meaning, 534
 – as instrument, 360
 kinds of –, 1, 17, 23, 45
 knowing the meaning of a –, 139; PPF 14
 – in the language-game in which it is at home, 116
 learning the meaning of a –, 1, 7, 9, brf 28, 35, 77
 meaning of a –, 1, 2, 5, 13, 30, 40, 41, 43, 49, 55, 57, 80, 140, 257, 560; PPF 8–16, 37
 word (*cont'd*)
 meaning of a – determined by use, 139
 meaning of a – fitting another, 138
 meaning of a – not an accompaniment, 120
 meaning of a – not an aura, 117
 meaning of a – not a Something we have in mind, brf 139
 metaphysical use of –s, 116
 one – sentence, 19–20
 operating with –s, 1, 449
 ostensive teaching of –s, *see* ostensive teaching
 physiognomy of –s, PPF 38, 294
 place of a – in grammar/language, post at which stationed, 29
 playing with a –, 67
 preparation for the use of a –, 26
 purpose of a –, 4, 6
 role of a –, 16, brf 28, 30, 156, 182
 soul of –s, 530
 sound or shape of a –, 31
 teaching of a –, 6, 7, 9
 – on the tip of one's tongue, PPF 298–300
 uniform appearance of –s, 11
 unregulated use of a –, 68
 use of –s, 6, 7, 8, 9, 10, 11, 20, 21, 29, 30, 38, 41, 43–5, 49, 58, 82, 90, 116, 133, 142, 196, 556, 561, 565–6, 664
 use of a – before the mind, 139, PPF 35
 use of a – extended in time, 138
 use of a – stands in need of justification, 261
 use of a – without a justification, 289
 what is a – really, brf 108
 what –s signify, 10
 –s without meaning, 13, 39, 41
 word/sentence distinction, 19, 27, 49
 word–thing association, 6
 world, 96–7, 342, 402; PPF 55