EDITORS’ NOTE

What appears as Part I of this volume was complete by 1945. Part II was written between 1946 and 1949. If Wittgenstein had published his work himself, he would have suppressed a good deal of what is in the last thirty pages or so of Part I and worked what is in Part II, with further material, into its place.

We have had to decide between variant readings for words and phrases throughout the manuscript. The choice never affected the sense.

The passages printed beneath a line at the foot of some pages are written on slips which Wittgenstein had cut from other writings and inserted at these pages, without any further indication of where they were to come in.

Words standing between double brackets are Wittgenstein’s references to remarks either in this work or in other writings of his which we hope will appear later.

We are responsible for placing the final fragment of Part II in its present position.

G. E. M. Anscombe
R. Rhees

PREFACE

The thoughts which 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, of logic, the foundations of mathematics, states of consciousness, and other things. I have written down all these thoughts as remarks, short paragraphs, of which there is sometimes a fairly long chain about the same subject, while I sometimes make a sudden change, jumping from one topic to another. It was my intention at first to bring all this together in a book whose form I pictured differently at different times. But the essential thing was that the thoughts should proceed from one subject to another in a natural order and without breaks.

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 were soon crippled if I tried to force them on in any single direction against their natural inclination. — And this was, of course, connected with the very nature of the investigation. For this compels us to travel over a wide field of thought criss-cross in every direction. —

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 involved journeyings.

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 uncharacteristic, marked by all the defects of a weak draughtsman. And when they were rejected a number of tolerable ones were left, which now had to be arranged and sometimes cut down, so that if you looked at them you could get a picture of the landscape. Thus this book is really only an album.

Up to a short time ago I had really given up the idea of publishing my work in my lifetime. It used, indeed, to be revived from time to time: mainly because I was obliged to learn that my results (which I had communicated in lectures, typescripts and discussions), variously
misunderstood, more or less mangled or watered down, were in circulation. This stung my vanity and I had difficulty in quieting it.

Four years ago I had occasion to re-read my first book (the *Tractatus Logico-Philosophicus*) and to explain its ideas to someone. It suddenly seemed to me that I should publish those old thoughts 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 old way of thinking.¹

For since beginning to occupy myself with philosophy again, sixteen years ago, I have been forced to recognize grave mistakes in what I wrote 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 certain and forcible—criticism I am indebted to that which a teacher of this university, Mr. P. Sraffa, for many years unceasingly practised on my thoughts. I am indebted to *this* stimulus for the most consequential ideas of this book.

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

I make them public with doubtful feelings. 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. This has not come about, but the time is past in which I could improve it.

CAMBRIDGE,

*January 1945.*

¹ But cf. G. H. von Wright, 'The Wittgenstein Papers', *The Philosophical Review* 78, 1969. It seems that Wittgenstein should have said 'two years'.

¹ It was hoped to carry out this plan in a purely German edition of the present work.

These words, it seems to me, give us a particular picture of the essence of human language. It is this: the individual 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 speak of there being any difference between kinds of word. If you describe the learning of language in this way you are, 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 marked "five red apples". He takes the slip to the shopkeeper, who opens the drawer marked "apples"; then he looks up the word "red" in a table and finds a colour sample opposite it; then he says the series of cardinal numbers—I assume that he knows them by heart—up to the word "five" and for each number 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 concept of meaning has its place in a primitive idea of the way language functions. But one can also 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 the stones, and that in the order in which A needs them. For this purpose they use 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 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 many cases where the question arises "Is this an appropriate description or not?" The answer is: "Yes, it is appropriate, but only for this narrowly circumscribed region, not for the whole of what you were claiming to describe."

It is as if someone were to say: "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 there are others. You can make your definition correct by expressly restricting it to those games.

4. Imagine a script in which the letters were used to stand for sounds, and also as signs of emphasis and punctuation. (A script can be conceived as a language for describing sound-patterns.) Now imagine someone interpreting that script as if there were simply a
correspondence of letters to sounds and as if the letters had not also completely different functions. Augustine's conception of language is like such an over-simple conception of the script.

3. If we look at the example in §1, we may perhaps get an inkling how much this general notion of the meaning of a word surrounds the working of language with a haze which makes clear vision impossible. It disperses the fog to study the phenomena of language in primitive kinds of application in which one can command a clear view of the aim and functioning of the words.

A child uses such primitive forms of language when it learns to talk. Here the teaching of language is not explanation, 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 points to that shape. (I do not want to call this "ostensive definition", because the child cannot as yet ask what the name is. I will 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 association between the word and the 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 series 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 helps to attain the actual purpose.)

But if the ostensive teaching has this effect,—am I to say that it effects an understanding of the word? Don't you understand the call "Slab!" if you act upon it in such-and-such a way?—Doubtless the ostensive teaching helped to bring this about; but only together with a particular training. With different training 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. 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 to the stone.—And there will be this still simpler exercise: the pupil repeats the words after the teacher—both of these being processes resembling language.

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 much of the use of words in games like ring-a-ring-a-roses.

I shall also call the whole, consisting of language and the actions into which it is woven, the "language-game".

8. Let us now look at an expansion of language (2). Besides the four words "block", "pillar", etc., let it contain a series of words used as the shopkeeper in (1) used the numerals (it can be the series of letters of the alphabet); further, let there be two words, which may as well be "there" and "this" (because this roughly indicates their purpose), that are used in connexion 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 says "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 indicated by A.—On other occasions A gives the order "this—there". At "this" he points to a building stone. And so on.

9. When a child learns this language, it has to learn the series of numerals' a, b, c, . . . by heart. And it has to learn their use.—Will this training include ostensive teaching of the words?—Well, people
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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 numerals that serve not to count but to refer to groups of objects that can be taken in at a glance. Children do learn the use of the first five or six cardinal numerals in this way.

Are “there” and “this” also taught ostensively?—Imagine how one might perhaps teach their use. One will point to 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?—What is supposed to show what they signify, if not the kind of use they have? And we have already described that. So we are asking for the expression “This word signifies this” to be made a part of the description. In other words the description ought to take the form: “The word . . . . signifies . . . .”.

Of course, one can reduce the description of the use of the word “slab” to the statement that this word signifies this object. This will be done when, for example, it is merely a matter of removing the mistaken idea that the word “slab” refers to the shape of building-stone that we in fact call a “block”—but the kind of ‘referring’ this is, that is to say the use of these words for the rest, is already known.

Equally one can say that the signs “a”, “b”, etc. signify numbers; when for example this removes the mistaken idea that “a”, “b”, “c”, play the part actually played in language by “block”, “slab”, “pillar”. And one can also say that “c” means this number and not that one; when 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 assimilating the descriptions of the uses of words in this way cannot make the uses themselves any more like one another. Nor, as we see, they are absolutely unlike.

11. Think of the tools in a tool-box: there is a hammer, pliers, a saw, a screw-driver, 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 spoken or meet them in script and print. For their application is not presented to us so clearly. Especially when we are doing philosophy.

12. It is like looking into the cabin of a locomotive. We see handles all looking more or less alike. (Naturally, 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 effective positions, it is either off or on; a third is the handle of a brake-lever, the harder one pulls on it, the harder it brakes; a fourth, the handle of a pump: it has an effect only so long as it is moved to and fro.

13. When we say: “Every word in language signifies something” we have so far said nothing whatever; unless we have explained 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 “Lilliburlero” in songs.)

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

15. The word “to signify” is perhaps used in the most straightforward way when the object signified is marked with the sign. Suppose that the tools A uses in building bear certain marks. When A shews his assistant such a mark, he brings the tool that has that mark on it. It is in this and more or less similar ways that a name means and is given to a thing.—It will often prove useful in philosophy to say to ourselves: naming something is like attaching a label to a thing.

16. What about the colour samples that A shews to B: are they part of the language? Well, it is as you please. They do not belong among the words; yet when I say to someone: “Pronounce the word ‘the’”, you will 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, to reckon the samples among the instruments of the language.

((Remark on the reflexive pronoun “this sentence”.)
17. It will be possible to 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 from which one can classify tools or chess-men.

18. Do not be troubled by the fact that languages (2) and (8) consist only of orders. If you want to say that this shews them to be incomplete, ask yourself whether our language is complete,—whether it was so before the symbolism of chemistry and the notation of the infinitesimal calculus were incorporated in 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 seen as an ancient city: a maze of little streets and squares, of old and new houses, and of houses with additions from various periods; and this surrounded by a multitude of new boroughs with straight 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 innumerable others.—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 be appropriately called a "degenerate sentence" (as one speaks of a degenerate hyperbola); in fact it is an 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 should I not on the contrary have called the sentence "Bring me a slab" a lengthening of the sentence "Slab!"?—Because if you shout "Slab!" you really mean: "Bring me a slab"—But how do you do this: how do you mean that while you say "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 what someone means by it? And if they mean the same thing,—why should I not say: "When he says 'Slab!' he means 'Slab!'." Again, if you can mean "Bring me the slab", why should you not be able to mean "Slab!"?—But when I call "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 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 shall be inclined to say: we mean the sentence as four words when we use it in contrast with other sentences such as "Hand me a slab", "Bring him a slab", "Bring two slabs", etc.; that is, in contrast with sentences containing the separate words of our command in other combinations.—But what does using one sentence in contrast with others consist in? Do the others, perhaps, hover before one's mind? 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 going astray 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 series 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 should 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?—Either the same thing may go on in him, or something different. For 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 have a mastery of this language,—which contains those other sentences as well—but is this having a mastery something that happens while you are uttering the sentence?—And I have admitted that the foreigner will probably pronounce a sentence differently if he conceives it differently; but what we call his wrong conception need not lie in anything that accompanies the utterance of the command.
The sentence is 'elliptical', not because it leaves out something that we think when we utter it, but because it is shortened—in comparison with a particular paradigm of our grammar. Of course one 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 the fact that sentences have the same sense consist in their having the same use?—(In Russian one says "stone red" instead of "the stone is red"; do they feel the copula to be missing in the sense, or attach it 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 statement "Five slabs" and the order "Five slabs!"?—Well, it is the part which uttering these words plays in the language-game. No doubt the tone of voice and the look with which they are uttered, and much else besides, will also be different. 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 expressions of face—the difference being only in the application. (Of course, we might use the words "statement" and "command" to stand for grammatical forms of sentence and intonation; we do in fact call "Isn't the weather glorious to-day?" a question, although it is used as a statement.) We could imagine a language in which all statements had the form and tone of rhetorical questions; or every command 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 the technique of using the language. (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 idea 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 statement 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—so far it is not 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 statement in the form of a question followed by a "Yes"; for instance: "Is it raining? Yes!" Would this show that every statement contained a question?

Of course we have the right to use an assertion sign in contrast with a question-mark, for example, or if we want to distinguish an assertion from a fiction or a supposition. It is only a mistake if one thinks that the assertion consists of two actions, entertaining and asserting (assigning the truth-value, or something of the kind), and that in performing these actions we follow the propositional sign roughly as we sing from the musical score. Reading the written sentence loud or soft is indeed comparable with singing from a musical score, but 'meaning' (thinking) the sentence that is read is not.

Frege's assertion sign marks the beginning of the sentence. Thus 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, so far this sentence does not serve to tell me anything.

23. But how many kinds of sentence are there? Are there assertion, question, and command?—There are countless kinds; countless different kinds of use of what we call "symbols", "words", "sentences". And this multiplicity 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.) Here the term "language-game" is meant to bring into prominence the fact that the speaking of language is part of an activity, or of a form of life.

Review the multiplicity of language-games in the following examples, and in others:

Giving orders, and obeying them—
Describing the appearance of an object, or giving its measurements—
Constructing an object from a description (a drawing)—
Reporting an event—
Speculating about an event—

Imagine a picture representing a boxer in a particular stance. Now, 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 proposition-radical. This will be how Frege thought of the "assumption".
Forming and testing a hypothesis—
Presenting the results of an experiment in tables and diagrams—
Making up a story; and reading it—
Play-acting—
Singing catches—
Guessing riddles—
Making a joke; telling it—
Solving a problem in practical arithmetic—
Translating from one language into another—
Asking, thanking, cursing, greeting, praying.

---It is interesting to compare the multiplicity of the tools in language and of the ways they are used, the multiplicity of kinds of word and sentence, with what logicians have said about the structure of language.

(Including the author of the Tractatus Logico-Philosophicus.)

24. If you do not keep the multiplicity of language-games in view you will perhaps be inclined to ask questions like: “What is a question?”
---Is it the statement that I do not know such-and-such, or the statement that I wish the other person would tell me . . . .? Or is it the description of my mental state of uncertainty?—And is the cry “Help!” such a description?

Think 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; or of a mood.

Of course it is possible to substitute the form of statement or description for the usual form of question: “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 statements into sentences beginning “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 that animals do not talk because they lack the mental capacity. And this means: they do not think, and that is why they do not talk.” But—they simply do not talk. Or to put it better: they do not use language—if we except the most primitive forms of language.—Commanding, questioning, recounting, chatting, 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. Viz, to human beings, to shapes, to colours, to pains, to moods, to numbers, etc. To repeat—naming is something like attaching a label to a thing. One can say that this is preparatory to 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 a thing". Whereas in fact we do the most various things with our sentences. Think of exclamations alone, with their completely different functions.

Water!
Away!
Owl!
Help!
Finel
No!

Are you inclined still 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 definition, is, we might say, a language-game on its own. 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, and hence of saying, “This is . . . .” and then using the new name. (Thus, for example, children give names to their dolls and then talk about them and to them. Think in this connexion how singular is the use of a person’s name to call him!)

28. Now one can ostensively define a proper name, the name of a colour, the name of a material, a numeral, 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 exactly exact. But how can two be defined like that? The person one gives the definition to doesn’t know what 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 understand it as a numeral. And he might equally well take the name of a person, of which I give an ostensive definition, as that of a colour, of a race, or even of a point.
of the compass. That is to say: an ostensive definition can be variously interpreted in every case.

29. Perhaps you say: two can only be ostensively defined 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 the ostensive definition can be understood.—The word "number" in the definition does indeed shew this place; does shew 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 there is only one way of taking the word "colour" or "length"?—Well, they just need defining.—Defining, then, by means of other words! And what about the last definition in this chain? (Do not say: "There isn’t a ‘last’ definition". That is just as if you chose 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 the ostensive definition depends on whether it is used by the person the one person who wishes to make 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 definition is seen in the use that he makes of the word defined.

30. So one might say: the ostensive definition explains the use—the meaning—of the word when the overall role of the word in language is clear. Thus if I know that someone means to explain a colour-word to me the ostensive definition "This is called ‘sepia’" will help me to understand the word.—And you can say this, so long as you do not forget that all sorts of problems attach to the words "to know" or "to be clear".

One has already to know (or be able to do) something in order to be capable of asking a thing’s name. But what does one have to know?

31. When one shews someone the king in chess and says: "This is the king", this does not tell him the use of this piece—unless he already knows the rules of the game up to this last point: the shape of the king. You could imagine his having learnt the rules of the game without ever having been shewn an actual piece. The shape of the chessman corresponds here to the sound or shape of a word.

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 shewn chessmen of a shape he was not used to. This explanation again only tells him the use of the piece because, as we might say, the place for it was already prepared. Or even: we shall only say that it tells him the use, if the place is already prepared. And in this case it is so, not because the person to whom we give the explanation already knows rules, but because in another sense he is already master of a game.

Consider this further case: I am explaining chess to someone; and I begin by pointing to a chessman and saying: "This is the king; it can move like this, . . . and so on."—In this case we shall say: the words "This is the king" (or "This is the ‘king’") are a definition only if the learner already ‘knows what a piece in a game is’.

That is, if he has already played other games, or has watched other people playing ‘and understood’—and similar things. Further, only under these conditions will be able to ask relevantly in the course of learning the game: "What do you call this?"—that is, this piece in a game.

We may say: only someone who already knows how to do something with it can significantly ask a name.

And we can imagine the person who is asked replying: "Settle the name yourself"—and now the one who asked would have to manage everything for himself.

32. Someone coming into a strange country will sometimes learn the language of the inhabitants from ostensive definitions that they give him; and he will often have to guess the meaning of these definitions; and will guess sometimes right, sometimes wrong.

And now, I think, we can say: Augustine describes the learning
of human language as if the child came into a strange country and
did not understand the language of the country; that is, as if it 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 itself".

33. Suppose, however, someone were to object: "It is not true
that you must already be master of a language in order to understand
an ostensive definition: all you need—of course!—is to know or
guess what the person giving the explanation is pointing to. That is,
whether for example to the shape of the object, or to its colour, or to its
number, and so on."—And what does 'pointing to the shape',
'pointing to the colour' consist in? Point to a piece of paper.—And now
point to its shape—now to its colour—now to its number (that sounds
queer).—How did you do it?—You will say that you 'meant' a different
thing each time you pointed. And if I ask how that is done, you will
say you concentrated your attention on the colour, the shape, etc.
But I ask again: how is that done?

Suppose someone points to a vase and says "Look at that marvellous
blue—the shape isn't the point."—Or: "Look at the marvellous shape—
the colour doesn't matter." Without doubt you will do something
different when you act upon these two invitations. 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 paint and you say "It's hard to get the blue of this
sky."

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

"Look what different effects these two blues have."

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

"This blue signal-light means . . . ."

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

You sometimes attend to the colour by putting your hand up to keep
the outline from view; or by not looking at the outline of the thing;
sometimes by staring at the object and trying to remember where you
saw that colour before.

You attend to the shape, sometimes by tracing it, sometimes by
screwing up your eyes so as not to see the colour clearly, and in many
other ways. I want to say: This is the sort of thing that happens while
one 'directs one's attention to this or that'. But it isn't these things by
themselves that make us say someone is attending to the shape, the
colour, and so on. Just as a move in chess doesn't consist simply in
moving a piece in such-and-such a way on the board—nor yet in one's
thoughts and feelings as one makes the move: but in the circumstances
that we call "playing a game of chess", "solving a chess problem",
and so on.

34. But suppose someone said: "I always do the same thing when
I attend to the shape: my eye follows the outline and I feel . . . ."
And suppose this person to give someone else the ostensive definition
"That is called a 'circle'", pointing to a circular object and having all
these experiences—cannot his hearer still interpret the definition
differently, even though he sees the other's eyes following the outline,
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
word; in what he points to, for example, when told: "Point to a
circle".—For neither the expression "to intend the definition in such-
and-such a way" nor the expression "to interpret the definition in
such-and-such a way" stands for a process which accompanies the
giving and hearing of the definition.

35. There are, of course, what can be called "characteristic ex-
periences" of pointing to (e.g.) the shape. For example, following
the outline with one's finger or with one's eyes as one points.—But this
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.—
Besides, 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 should say "He pointed to the
shape and not to the colour".

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

To repeat: in certain cases, especially when one points 'to the shape'
or 'to 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 to a piece in a game as a piece in a game?
characterize many different kinds of use of a word, related to one another in many different ways—but the kind of use that “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 say the name. And similarly, in giving an ostensive definition for instance, we say the word “this” while pointing to a thing. And also the word “this” and a name often occupy the same position in a sentence. But it is precisely characteristic of a name that it is defined by means of the demonstrative expression “That is N” (or “That is called ‘N’”). But do we also give the definitions: “That is called ‘this’”, or “This is called ‘this’”?

This is connected with the conception of naming as, so to speak, an occult process. Naming appears as a queer connexion of a word with an object. And you really get such a queer connexion when the philosopher tries to bring out the relation between name and thing 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 here we may indeed fancy naming to be some remarkable act of mind, as it were a baptism of an object. And we can also say the word “this” to the object, as it were address the object as “this”—a queer use of this word, which doubtless only occurs in doing philosophy.

39. But why does it occur to one to want to make precisely this word into a name, when it evidently 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 for this one might perhaps give the following reasons: The word “Excalibur”, say, is a proper name in the ordinary sense. The sword Excalibur consists of parts combined in a particular way. If they are combined differently Excalibur does not exist. But it is clear that the sentence “Excalibur has a sharp blade” makes sense whether Excalibur is still whole or is broken up. But if “Excalibur” is the name of an object, this object no longer exists when Excalibur is broken in pieces; and as no object would then correspond to the name it would have no meaning. But then the sentence “Excalibur has a sharp blade” would contain a word that had no meaning, and hence the sentence would be nonsense. But it does make sense; so there must always be something corresponding to the words of which it consists. So the word “Excalibur” must disappear when the sense is
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 this point of the argument: that a word has no meaning if nothing corresponds to it. It is important to note that the word "meaning" is being used illicitly if it is used to signify the thing that corresponds to the 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 that, 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 (§). Now suppose that the tool with the name "N" is broken. Not knowing this, A gives B the sign "N". Has this sign meaning now or not?—What is B to do, when he is given it?—We have not settled anything about this. One might ask: what will he do? Well, perhaps he will stand there at a loss, or shew 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 him the sign belonging to a tool that is broken. In this way the command "N" might be said to be given a place in 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 has for instance a name which has never been used for a tool also got a meaning in that game?—Let us assume that "X" is such a sign and that A gives this sign to B—well, even such signs could be given a place in the language-game, and B might have, say, to answer them too with a shake of the head. (One could imagine this as a sort of joke between them.)

43. For a large class of cases—though not for all—in which we employ the word "meaning" it can be defined thus: the meaning of a word is its use in the language.

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

44. We said that the sentence "Excalibur has a sharp blade" made sense even when Excalibur was broken in pieces. Now 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 should certainly include among names) in which they are used only in the presence of the bearer; and so could always be replaced by a demonstrative pronoun and the gesture of pointing.

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, the gesture of pointing.

46. What lies behind the idea that names really signify simples?—Socrates says in the Theaetetus: "If I make no mistake, I have heard some people say this: there is no definition of the primary elements—so to speak—out of which we and everything else are composed; for everything that exists in its own right can only be named, no other determination is possible, neither that it is nor that it is not . . . . But what exists in its own right has to be . . . . named without any other determination. In consequence it is impossible to give an account of any primary element; for it, nothing is possible but the bare name; its name is all it has. But just as what consists of these primary elements is itself complex, so the names of the elements become descriptive language by being compounded together. For the essence of speech is the composition of names."

Both Russell's 'individuals' and my 'objects' (Tractatus Logico-Philosophicus) were 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 bits of wood of which it is made? 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'.

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* I have translated the German translation which Wittgenstein used rather than the original. Tr.
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 (13); 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 all the same you will not deny that a particular order in (a) means 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 should say that an order in (a) had the same meaning as one in (b); or, as I expressed it earlier: they achieve the same. And this means that if I were shown an order in (a) and asked: "Which order in (b) means the same as this?" or again "Which order in (b) does this contradict?" I should 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 meaning" or "to achieve the same". For it can be asked in what cases we say: "These are merely two forms of the same game."

62. Suppose for instance 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 should say so too. But it is not everywhere clear 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;—that it is an ornament to the room, fills an empty space, etc., is not essential. But there is not always a sharp distinction 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 shews what is meant by the other, and so on. For example, we think: If you have only the unanalysed form you miss the analysis; but if you know the analysed form that gives you everything.—But can I not say that an aspect of the matter is lost on you in the latter case as well as the former?

64. Let us 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 the cases where we say: "This arrangement of colours (say the French tricolor) was a quite special character."

In what sense do the symbols of this language-game stand in need of analysis? How far is it even possible to replace this language-game by (48)?—It is just another 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 take the easy way out! You talk about all sorts of language-games, but have nowhere said what the essence of a language-game, and hence of language, is: what is common to all these activities, and what makes them into language or parts of language. So you let yourself off the very part of the investigation that once gave you yourself most headache, the part about the general form of propositions and of language."

And this is true.—Instead of producing something common to all that we call language, I am saying that these phenomena have no one thing in common which makes us use the same word for all,—but that they are related to one another in many different ways. And it is because of this relationship, or these relationships, that we call them all 'language'. I will try to explain this.

66. Consider for example the proceedings that we call "games". I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all?—Don't say: "There must be something 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 will not see something that is common to all, but similarities, relationships, and a whole series of them at that. To repeat: don't think, but look!—Look for example at board-games, with their multifarious relationships. Now pass to card-games; here you find many correspondences with the first group, but many common
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 ‘amusing’? 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 games like ring-a-ring-a-roses; here is the element of amusement, 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 result of this examination is: we see a complicated network of similarities overlapping and criss-crossing; sometimes overall similarities, sometimes similarities of detail.

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

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

But if someone wished to say: “There is something common to all these constructions—namely the disjunction of all their common properties”—I should reply: Now you are only playing with words. One might as well say: “Something runs through the whole thread—namely the continuous overlapping of those fibres”.

68. “All right the concept of number is defined for you as the logical sum of these individual interrelated concepts: cardinal numbers, rational numbers, real numbers, etc.; and in the same way the concept of a game as the logical sum of a corresponding set of sub-concepts.”—It need not be so. For I can give the concept ‘number’ rigid limits in this way, that is, use the word “number” for a rigidly limited concept, but I can also use it so that the extension of the concept is not closed by a frontier. 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 give the boundary? No. You can draw one; for none has so far been drawn. (But that never troubled 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 circumscribed by rules; but no more are there any rules for how high one throws the ball in tennis, or how hard; yet tennis is a game for all that and has rules too.

69. How should we explain to someone what a game is? I imagine that we should describe games to him, and we might add: “This and similar things are called ‘games’”. And do we know any more about it ourselves? Is it only other people whom we cannot tell exactly what a game is?—But this is not ignorance. We do not know the boundaries because none have been drawn. To repeat, we can draw a boundary— for a special purpose. Does it take that to make the concept usable? Not at all! (Except 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”, then I reply: very well, it was an inexact one.—Though you still owe me a definition of exactness.

70. “But if the concept ‘game’ is uncircumscribed like that, 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 I don’t know what I am talking about until I can give a definition of a plant?

My meaning would be explained by, say, a drawing and the words “The ground looked roughly like this”. Perhaps I even say “it looked exactly like this.” — Then were just this grass and these leaves there, arranged just like this? No, that is not what it means. And I should not accept any picture as exact in this sense.

Someone says to me: “Shew the children a game.” I teach them gaming with dice, and the other says “I didn’t mean that sort of game.” Must the exclusion of the game with dice have come before his mind when he gave me the order?
71. One might say that the concept 'game' is a concept with blurred edges.—"But is a blurred concept a concept at all?"—Is an indistinct photograph a picture of a person at all? Is it even always an advantage to replace an indistinct picture by a sharp one? Isn't the indistinct one often exactly what we need?

Frege compares a concept to an area and says that an area with vague boundaries cannot be called an area at all. This presumably means that we cannot do anything with it.—But is it senseless to say: "Stand roughly there"? Suppose that I were standing with someone in a city square and said that. As I say it I do not draw any kind of boundary, but perhaps point with my hand—as if I were indicating a particular spot. And this is just how one might explain to someone what a game is. One gives examples and intends them to be taken in a particular way.—I do not, however, mean by this that he is supposed to see in those examples that common thing which I—for some reason—was unable to express; but that he is now to employ those examples in a particular way. Here giving examples is not an indirect means of explaining—in default of a better. For any general definition can be misunderstood too. The point is that this is how we play the game. (I mean the language-game with the word "game").

72. Seeing what is common. Suppose I shew someone various multi-coloured pictures, and say: "The colour you see in all these is called 'yellow ochre'".—This is a definition, and the other will get to understand it by looking for and seeing what is common to the pictures. Then he can look at, can point to, the common thing.

Compare with this a case in which I shew 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 shew 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 defines the names of colours for me by pointing to samples and saying "This colour is called 'blue', this 'green' . . . . ." this case can be compared in many respects to putting a table in my hands, with the words written under the colour-samples.—Though this comparison may mislead in many ways.—One is now inclined to extend the comparison: to have understood the definition means to have in one's mind an idea of the thing defined, and that is a sample or picture. So if I am shewn various different leaves and told

"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 shew us any particular shape, but 'what is common to all shapes of leaf'? Which 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 there might. But for such a schema to be understood as a schema, and not as the shape of a particular leaf, and for a slip 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 used.

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

74. Here also belongs the idea that if you see this leaf as a sample of 'leaf shape in general' you see it differently from someone who regards it as, say, a sample of this particular shape. Now this might well be so—though it is not so—for it would only be to say that, as a matter of experience, if you see the leaf in a particular way, you 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, if you see the schematic drawing of a cube as a plane figure consisting of a square and two rhombi you 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 should 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; shewing how all sorts of other games can be constructed on the analogy of these; saying that I should scarcely include this or this among games; and so on.
76. If someone were to draw a sharp boundary I could not acknowledge it as the one that I too always wanted to draw, or had drawn in my mind. For I did not want to draw one at all. His concept can then be said to be not the same as mine, but akin to it. The kinship is that of two pictures, one of which consists of colour patches with vague contours, and the other of patches similarly shaped and distributed, but with clear contours. The kinship is just as undeniable as the difference.

77. If I were to carry this comparison still further it is clear that the degree to which the sharp picture can resemble the blurred one depends on the latter's degree of vagueness. For imagine having to sketch a sharply defined picture 'corresponding' to a blurred one. In the latter there is a blurring red rectangle: for it you put down a sharply defined one. Of course—several such sharply defined rectangles can be drawn to correspond to the indefinite one.—But if the colours in the original merge without a hint of any outline 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 or heart as a rectangle, for all the colours merge. Anything—and nothing—is right."—And this is the position you are in if you look for definitions corresponding to such concepts in aesthetics or ethics.

In such a difficulty 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 feet high Mont Blanc is—
how the word "game" is used—
how a clarinet sounds.

If you are surprised that one can know something and not be able to say it, you are 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 withdrew from Egypt—or: their leader was not called Moses—or: there cannot have been anyone who accomplished all that the Bible relates of Moses—or: etc. etc.—We may say, following Russell: the name "Moses" can be defined by 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 assume one definition or another the proposition "Moses did not exist" acquires a different sense, and so does every other proposition about Moses.—And if we are told "N did not exist", we do ask: "What do you mean? Do you want to say . . . . . or . . . . etc. ?"

But when 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 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?—Is it not the case 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 another case. When 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 I (1) 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 social life.—Asked what I understand by "N", I should 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 now proves false—Should I be prepared to declare the proposition "N is dead" false—even if it is only something which strikes me as incidental that has turned out false? But where are the bounds of the incidental?—If I had given a definition of the name in such a case, I should now be ready to alter it.

And this can be expressed like this: I use the name "N" without a fixed meaning. (But that detracts as little from its usefulness, as it detracts from that of a table that it stands on four legs instead of three and so sometimes wobbles.)

Should it be said that I am using a word whose meaning I don't know, and so am talking nonsense?—Say what you choose, so long as it does not prevent you from seeing the facts. (And when you see them there is a good deal that you will not say.)

(The fluctuation of scientific definitions: what to-day counts as an
observed concomitant of a phenomenon will to-morrow be used to define it.)

80. I say "There is a chair". What if I go up to it, meaning to fetch it, and it suddenly disappears from sight?—"So it wasn't a chair, but some kind of illusion". — But in a few moments we see it again and are able to touch it and so on. — "So the chair was there 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 one may use the word "chair" to include this kind of thing? 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 he had in mind, but it was doubtless closely related to what only dawned on me later: namely, that in philosophy we often compare the use of words with games and calculi which have fixed rules, but cannot say that someone who is using language must be playing such a game. — But if you say that our languages only approximate to such calculi you are standing on the very brink of a misunderstanding. For then it may look as if what we were talking about 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 the logician to show people at last what a proper sentence looked like.

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

82. What do I call 'the rule by 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 gives us in reply if we ask him what his rule is? — But what if observation does not enable us to see any clear rule, and the question brings none to light? — For he did indeed give me a definition when I asked him what he understood by "N", but he was prepared to withdraw and alter it. — So how am I to determine the rule according to which he is playing? He does not know it himself. — Or, to ask a better question: What meaning is the expression "the rule by which he proceeds" supposed to have left to it here?

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 so as to start various existing games, but playing many without finishing them and in between throwing the ball aimlessly into the air, chasing one another with the ball and bombarding one another for a joke and so on. And now someone says: The whole time they are playing a ball-game and 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 there is even one where we alter them—as we go along.

84. I said that the application of a word 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 cracks where it might? — Can't we imagine a rule determining 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 his door and making sure about it before he went through the door (and he might on some occasion prove to be right)—but that does not make me doubt in the same case.

85. A rule stands there like a sign-post. — Does the sign-post leave no doubt open about the way I have to go? Does it shew which direction I am to take when I have passed it; whether along the road or the footpath or cross-country? But where is it said which way I am to follow it; whether in the direction of its finger or (e.g.) in the opposite one? — And if there were, not a single sign-post, but a chain of adjacent ones or of chalk marks on the ground—is there only one way of interpreting them? — So I can say, the sign-post does after all
86. Imagine a language-game like (z) played with the help of a table. The signs given to B by A are now written ones. B has a table; in the first column are the signs used in the game, in the second pictures of building stones. A shows B such a written sign; B looks it up in the table, looks at the picture opposite, and so on. So the table is a rule which he follows in executing orders.—One learns to look the picture up in the table by receiving a training, and part of this training consists perhaps 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 table.

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

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another time like this:

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or in some other way.—Such a schema is supplied with the table as the rule for its use.

Can we not now imagine further rules to explain this one? And, on the other hand, was that first table incomplete without the schema of arrows? And are other tables 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 “Moses” are possible about the words of this explanation (what are you calling “Egypt”, whom the “Israelites” etc.?). Nor would these questions come to an end when we got down to words like “red”, “dark”, “sweet”—“But then how does an explanation help me to under-

stand, 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 prevent a misunderstanding. One might say: an explanation serves to remove or to forestall a misunderstanding—one, that is, that would occur but for the explanation; not every one that I can imagine.

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

The sign-post is in order—if, under normal circumstances, it fulfils its purpose.

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

But isn’t it an inexact explanation?—Yes; why shouldn’t we call it “inexact”? Only let us understand what “inexact” means. For it does not mean “unsuitable”. And let us consider what we call an “exact” explanation in contrast with this one. Perhaps something like drawing a chalk line round an area? 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 the engine idling? And remember too that we have not yet defined what is to count as overstepping this exact boundary; how, with what instruments, it is to be established. 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 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? because it is possible to say: “Think of the determination of time in the laboratory or the observatory; there you see what ‘exactness’ means”?
"Inexact" is really a reproach, and "exact" is praise. And that is to say that what is inexact attains its goal less perfectly than what is more exact. Thus the point here is what we call "the goal". Am I inexact when I do not give our distance from the sun to the nearest foot, or tell a joiner the width of a table to the nearest thousandth of an inch?

No single ideal of exactness has been laid down; we do not know what we should be supposed to imagine under this head—unless you yourself lay down what is to be so called. But you will find it difficult to hit upon such a convention; at least any that satisfies you.

89. These considerations bring us up to the problem: In what sense is logic something sublime?

For there seemed to pertain to logic a peculiar depth—a universal significance. Logic lay, it seemed, at the bottom of all the sciences.—For logical investigation explores the nature of all things. It seeks to see to the bottom of things and is not meant to concern itself whether what actually happens is this or that.—It takes its rise, not from an interest in the facts of nature, nor from a need to grasp causal connexions; but from an urge to understand the basis, or essence, of everything empirical. Not, however, as if to this end we had to hunt out new facts; it is, rather, of the essence of 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 the Confessions "quid est ergo tempus? si nemo ex me quaserat seco; si quaecriter explicare velit, nescio". This could not be said about a question of natural science ("What is the specific gravity of hydrogen?" for instance). Something that we know when no one asks us, but no longer know when we are supposed to give an account of it, is something that we need to remind ourselves of. (And it is obviously something of which for some reason it is difficult to remind oneself.)

90. We feel as if we had to penetrate phenomena: our investigation, however, is directed not towards phenomena, but, as one might say, towards the 'possibilities' of phenomena. We remind ourselves, that is to say, of the kind of statement that we make about phenomena. Thus Augustine recalls to mind the different statements that are made about the duration, past present or future, of events. (These are, of course, not philosophical statements about time, the past, the present and the future.)

Our investigation is therefore a grammatical one. Such an investigation sheds light on our problem by clearing misunderstandings away. Misunderstandings concerning the use of words, caused, among other things, by certain analogies between the forms of expression in different regions of language. Some of them can be removed by substituting one form of expression for another; this may be called an "analysis" of our forms of expression, for the process is sometimes like one of taking a thing apart.

91. But now it may come to look as if there were something like a final analysis of our forms of language, and so a single completely resolved form of every expression. That is, as if our usual forms of expression were, essentially, unanalysed, as if there were something hidden in them that had to be brought to light. When this is done the expression is completely clarified and our problem solved.

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

92. This finds expression in questions as to the essence of language, of propositions, of thought.—For if we too in these investigations are trying to understand the essence of language—its function, its structure,—yet this is not what these questions have in view. For they see in the essence, not something that already lies open to view and that becomes surveyable by a rearrangement, but something that lies beneath the surface. Something that lies within, which we see when we look into the thing, and which an analysis digs out.

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 queer!"—And the latter is unable simply to look and see how propositions really work. The forms that we use in expressing ourselves about propositions and thought stand in his way.

Why do we say 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, together with a misunder-
standing of the logic of language, seduces us into thinking that something extraordinary, something unique, must be achieved by propositions. A misunderstanding makes it look to us as if a proposition did something queer.

94. 'A proposition is a queer thing!' Here we have in germ the subliming of our whole account of logic. The tendency to assume a pure intermediary between the propositional signs and the facts. Or even to try to purify, to sublime, the signs themselves. For our forms of expression prevent us in all sorts of ways from seeing that nothing out of the ordinary is involved, by sending us in pursuit of chimeras.

95. "Thought must be something unique". When we say, and mean, that such-and-such is the case, we—and our meaning—do not stop anywhere short of the fact; but we mean: this—is—so. But this paradox (which has the form of a truism) can also be expressed in this way: Thought can be of what is not the case.

96. Other illusions come from various quarters to attach themselves to the special 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. Thought is surrounded by a halo. Its essence, logic, presents an order, in fact the a priori order of the world; that is, the order of possibilities, which must be common to both world and thought. 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 can be allowed to affect 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 No. 5.5563).

We are under the illusion that what is peculiar, profound, essential, 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, proof, truth, experience, and so on. This order is a super-order between—so to speak—super-concepts. Whereas, of course, if the words "language", "experience", "world", have a use, it must be as humble a one as that of the words "table", "lamp", "door".

98. On the other 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 awaited construction by us. On the other hand it seems clear that 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 definite sense. An indefinite sense—that would really not be a sense at all. This is like: An indefinite boundary is not really a boundary at all. Here one thinks perhaps: if I say 'I have locked the man up fast in the room—there is only one door left open'—then I simply haven't locked him in at all; his being locked in is a sham. One would be inclined to say here: "You haven't done anything at all". An enclosure with a hole in it is as good as none. But is that true?

100. "But still, it isn't a game, if there is some vagueness in the rules?"—But does this prevent its being a game?—"Perhaps you'll call it a game, but at any rate it certainly isn't a perfect game." This means: it has impurities, and what I am interested in at present is the pure article. But I want to say: we misunderstand the role of the ideal in our language. That is to say: we too should call it a game, only we are dazzled by the ideal and therefore fail to see the actual use 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' be found in reality. Meanwhile we do not as yet see how it occurs there, nor do we understand the nature of this "must". We think it must be in reality; for we think we already see it there.

102. The strict and clear rules of the logical structure of propositions appear to us as something in the background—hidden in the medium of the understanding. I already see them (even though through a medium): for I understand the propositional sign, I use it to say something.

103. The ideal, as we think of it, is unshakable. You can never get outside it; you must always turn back. There is no outside; outside you cannot breathe. Where does this idea come from? It 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.
104. We predicate of the thing what lies in the method of representing it. Impressed by the possibility of a comparison, we think we are perceiving a state of affairs of the highest generality.

105. When we believe that we must find that order, must find the ideal, in our actual language, we become dissatisfied with what are ordinarily called "propositions", "words", "signs". The proposition and the word that logic deals with are supposed to be something pure and clear-cut. And 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 as it were to keep our heads up.—to see that we must stick to the subjects of our everyday thinking, and not go astray and imagine that we have to describe extreme subtleties, which in turn we are after all 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 narrowly we examine actual language, the sharper becomes the conflict between it and our requirement. (For the crystalline purity of logic was, of course, not a result of investigation: it was a requirement.) The conflict becomes intolerable; the requirement is now in danger of becoming empty.—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 "sentence" and "language" has not the formal unity that I imagined, but is the family of structures more or less related 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 it lose its rigour? Of course not by our bargaining any of its rigour out of it.—The preconceived idea of crystalline purity can only be removed by turning our whole examination round. (One might say: the axis of reference of our examination must be rotated, but about the fixed point of our real need.) The philosophy of logic speaks of sentences and words in exactly the sense in which we speak of them in ordinary life when we say e.g.

Faraday in *The Chemical History of a Candle*: "Water is one individual thing—it never changes."

109. "Here is a Chinese sentence", or "No, that only looks like writing; it is actually just an ornament" and so on.

We are talking about the spatial and temporal phenomenon of language, not about some non-spatial, non-temporal phantasm. [Note in margin: 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 of the game, not describing their physical properties.

The question "What is a word really?" is analogous to "What is a piece in chess?"

110. It was true to say that our considerations could not be scientific ones. It was not of any possible interest to us to find out empirically 'that, contrary to our preconceived ideas, it is possible to think such-and-such'—whatever that may mean. (The conception of thought as a gaseous medium.) And we may not advance any kind of theory. There must not be anything hypothetical in our considerations. We must do away with all explanation, 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; they are solved, rather, by looking into the workings of our language, and that in such a way as to make us recognize those workings: in spite of an urge to misunderstand them. The problems are solved, not by giving new information, but by arranging what we have always known. Philosophy is a battle against the bewitchment of our intelligence by means of language.

111. "Language (or thought) 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.

112. The problems arising through a misinterpretation of our forms of language have the character of *depth*. They are deep disquietudes; their roots are as deep in us as the forms of our language and their significance is as great as the importance of our language.—Let us ask ourselves: why do we feel a grammatical joke to be deep? (And that is what the depth of philosophy is.)

113. A simile that has been absorbed into the forms of our language produces a false appearance, and this disquiets us. "But this isn't how it is!"—we say. "Yet this is how it has to be!"
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, get it in focus, I must grasp the essence of the matter.

114. (Tractatus Logico-Philosophicus, 4.3): "The general form of propositions is: This is how things are."—That is the kind of proposition that one repeats to oneself countless times. One thinks that one is tracing the outline of the thing's 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 could not get outside it, for it lay in our language and language seemed to repeat it to us inexorably.

116. When philosophers use a word—"knowledge", "being", "object", "I", "proposition", "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-game which is its original home?

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

117. You say to me: "You understand this expression, don't you? Well then—I am using it in the sense you are familiar with."—As if the sense were an atmosphere accompanying the word, which it carried with it into every kind of application.

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. Then it does make sense.

118. Where does our investigation get its importance from, since 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.) What we are destroying is nothing but houses of cards and we are clearing up the ground of language on which they stand.

119. The results of philosophy are the uncovering of one or another piece of plain nonsense and of bumps that the understanding has got by running its head up against the limits of language. These bumps make us see the value of the discovery.

120. When I talk about language (words, sentences, etc.) I must speak the language of every day. Is this language somehow too coarse and material for what we want to say? Then how is another one to be constructed?—And how strange 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 by itself shews that I can adduce only exterior facts about language.

Yes, but then how can these explanations 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. You say: the point isn't the word, but its meaning, and you think of the meaning as a thing of the same kind as the word, though also different from the word. Here the word, there the meaning. The money, and the cow that you can buy with it. (But contrast: money, and its use.)

121. One might think: if philosophy speaks of the use of the word "philosophy" there must be a second-order philosophy. But it is not so: 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 do not command a clear view of the use of our words.—Our grammar is lacking in this sort of perspicuity. A perspicious representation produces just that understanding which consists in 'seeing connections'. Hence the importance of finding and inventing intermediate cases.

The concept of a perspicious representation is of fundamental significance for us. It eazmarks the form of account we give, the way we look at things. (Is this a 'Weltanschauung'?)

123. A philosophical problem has the form: "I don't know my way about".

124. Philosophy may in no way interfere with the actual use of language; it can in the end only describe it.

For it cannot give it any foundation 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.
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 wrong.

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

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 ours as an offshoot, a variant of his. —And here too our pupil's capacity to learn may come to an end.

144. What do I mean when I say "the pupil's capacity to learn may come to an end here"? Do I say this from my own experience? Of course not. (Even if I have had such experience.) Then what am I doing with that proposition? Well, I should like you to say: "Yes, it's true, you can imagine that too, that might happen too!" —But was I trying to draw someone's attention to the fact that he is capable of imagining 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 rather than that set 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 only be the case when he is often successful, not if he does it right once in a hundred attempts. Now I continue 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 only means 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 independently—or he does not. —But why do you say that? So 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 he has mastered the system. —But how far need he continue
the series for us to have the right to say that? Clearly you cannot state a limit here.

146. Suppose I now ask: "Has he understood the system when he continues the series to the hundredth place?" Or—if I should not speak of 'understanding' in connection with our primitive language-game: Has he got the system, if he continues the series correctly so far?—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. The 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. The point is, we can think of more than one application of an algebraic formula; and every type of application can in turn be formulated algebraically; but naturally this 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 am surely not saying so because I have found out that up to now I have applied the algebraic formula in such-and-such a way! In my own case at all events I surely know that I mean such-and-such a series; it doesn't matter how far I have actually developed it."

Your idea, then, is that you know the application of the rule of the series quite apart from remembering actual applications to particular numbers. And you will perhaps say: "Of course! For the series is infinite and the bit of it that I can have developed finite."

148. But what does this knowledge consist in? Let me ask: When do you know that application? Always, day and night? or only when you are actually thinking of the rule? 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 thought 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 a mental apparatus (perhaps of the brain) by means of which we explain the manifestations of that knowledge. Such a state is called a disposition. But there are objections to speaking of a state of the mind here, inasmuch as there ought to be two different criteria for such a state: a knowledge of the construction of the apparatus, quite apart from what it does. (Nothing would be more confusing here than to use the words "conscious" and "unconscious" for the contrast between states of consciousness and dispositions. For this pair of terms covers up a grammatical difference.)

150. The grammar of the word "knows" is evidently closely related to that of "can", "is able to". But also closely related to that of "understands". ('Mastery' of a technique.)

151. But there is also this use of the word "to 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 series of numbers down; B watches him and tries to find a law for the sequence of numbers. If he succeeds he exclaims: "Now I can go on!"—So this capacity, this understanding, is something that makes its appearance in a moment. So let us try and see what it is that makes its appearance here. A has written down the numbers 1, 3, 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 putting one number after another, B was occupied with trying 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 hypothesis.

(a) "Understanding a word": a state. But a mental state?—Depression, excitement, pain, are called mental states. Carry out a grammatical investigation as follows: we say "He was depressed the whole day".

"He was in continuous pain since yesterday".

We also say "Since yesterday I have understood this word". "Continuously", 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) Suppose it were asked: "When do you know how to play chess? All the time? or just while you are making a move? And the whole of chess during each move?—How queer that knowing how to play chess should take such a short time, and a game so much longer!"
Or again, B does not think of formulæ. He watches A writing his numbers down with a certain feeling of tension, and all sorts of vague thoughts go through his head. Finally he asks himself: "What is the series of differences?" He finds the series 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 sensation "that's easy!" (Such a sensation is, for example, that of a light quick intake of breath, as when one is slightly startled.)

152. But are the processes which I have described here understanding?

"B understands the principle of the series" surely doesn't mean simply: the formula \( a_n = \ldots \) occurs to B. For it is perfectly imaginable that the formula should occur to him and that he should nevertheless not understand. "He understands" must have more in it than the formula occurs to him. And equally, more than any of those more or less characteristic accompaniments or manifestations of understanding.

153. We are trying to get hold of the mental process of understanding which seems to be hidden behind those coarser and therefore more readily visible accompaniments. But we do not succeed; or, rather, it does not get as far as a real attempt. For even supposing I had found something that happened in all these cases of understanding—why should it be the understanding? And how can the process of understanding have been hidden, when I said "Now I understand" because I understood? 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 principle" does not mean the same as "The formula ... occurs to me" (or "I say 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 with that of saying the formula?

If there has to be anything 'behind the utterance of the formula' it is particular circumstances, which justify me in saying I can go on—when the formula occurs to me.

Try not to think of understanding as a 'mental process' at all.—For that is the expression which confuses you. But ask yourself: in what sort of case, in what kind of circumstances, do we say, "Now I know how to go on," when, that is, 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 growing more and less; the hearing of a tune or a sentence: these are mental processes.)

155. Thus what I wanted to say was: when he suddenly knew how to go on, when he understood the principle, then possibly he had a special experience—and if he is asked: "What was it? What took place when you suddenly grasped the principle?" 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 justify him in saying in such a case that he understands, that he knows how to go on.

156. This will become clearer if we interpolate the consideration of another word, namely "reading". First I need to remark that I am not counting the understanding of what is read as part of 'reading' for purposes of this investigation: reading is here the activity of rendering out loud what is written or printed; and also of writing from dictation, writing out something printed, playing from a score, and so on.

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

Now what takes place 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; in particular 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 should 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
of course for me to call this colour "blue". (Criteria for the fact that something is '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 it is to use a word as a name.

240. Disputes do not break out (among mathematicians, say) over the question whether a rule has been obeyed or not. People don't come to blows over it, for example. That is part of the framework on which the working of our language is based (for example, in giving descriptions).

241. "So you are saying that human agreement decides what is true and what is false?"—It is what human beings say that is true and false; and they agree in the language they use. That is not agreement in opinions but in form of life.

242. If language is to be a means of communication there must be agreement not only in definitions but also (quer as this may sound) in judgments. 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 partly 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. We could even 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 could we also imagine a language in which a person could write down or give vocal expression to his inner experiences—his feelings, moods, and the rest—for his private use?—Well, can't we do so in our ordinary language?—But that is not what I mean. The individual words of this language are to refer to what can only be known to the person speaking; 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 give them names? But how is the connexion between the name and the thing named set up? This question is the same as: how does a human being learn the meaning of the names of sensations?—of the word "pain" for example. Here is one possibility: words are connected with the primitive, the natural, expressions of the sensation and used in their place. A child has hurt himself and he cries; and 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 and does not describe it.

245. For how can I go so far as to try to use language to get between pain and its expression?

246. In what sense are my sensations private?—Well, only I can know how I am really in pain; another person cannot only surmise it.—In one way this is wrong, and in another nonsense. If we are using the word "to know" as it is normally used (and how else are we to use it?), then other people very often know when I am in pain.—Yes, but all the same not with the certainty with which I know it myself.—I can't be said of me at all (except perhaps as a joke) that I know I am in pain. What is it supposed to mean—except perhaps that I am in pain?

Other people cannot be said to learn of my sensations only from my behaviour,—for I cannot be said to learn of them. I have them.

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

247. "Only you can know if you had that intention." One might tell someone this when one was explaining the meaning of the word "intention" to him. For then it means: that is how we use it. (And here "know" means that the expression of uncertainty is senseless.)
248. The proposition "Sensations are private" is comparable to: "One plays patience by oneself".

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

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

250. Why can’t a dog simulate pain? Is he too honest? Could one teach a dog to simulate pain? Perhaps it is possible to teach him to howl on particular occasions as if he were in pain, even when he is not. But the surroundings which are necessary for this behaviour to be real simulation are 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 images are private, or that only I myself can know whether I am feeling pain, and similar things.

Of course, here "I can’t imagine the opposite" doesn’t mean: my powers of imagination are unequal to the task. These words are a defence against something whose form makes it look like an empirical proposition, but which is really a grammatical one.

But why do we say: "I can’t imagine the opposite"? Why not: "I can’t imagine the thing itself"?

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 simply imagine a rod. Only this picture, in connexion with this proposition, has a quite different role from one used in connexion 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 (nor need it be a mental picture).

But the picture attaching to 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 this we might reply: "Nonsense!"—but are inclined to reply "Of course!"—Why is this?

253. "Another person can’t have my pains."—Which are my pains? 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 imaginable for two people to 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 emphatic stressing of the word "this". Rather, what the emphasis does is to suggest the 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 instance) 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. That is in question in philosophy only where we have to give a psychologically exact account of the temptation to use a particular kind of expression. What we are tempted to say in such a case is, of course, not philosophy; but it is its raw material. Thus, 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’s treatment of a question is like the treatment of 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 stand for 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 for the sensation, but only had the sensation? And now I simply associate names with sensations and use these names in descriptions.—
237. "What would it be like if human beings showed no outward
signs of pain (did not groan, grimace, etc.)? Then it would be impos-
sible to teach a child the use of the word 'tooth-ache.'"—Well, let's
assume the child is a genius and itself invents a name for the sensation
—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’?—I owe he has done 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 a great deal of stage-
setting in the language is presupposed if the mere act of naming is
to make sense. And when we speak of someone's having given a name
to pain, what is presupposed is the existence of the grammar of the
word "pain"; it shews the post where the new word is stationed.

238. Let us 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 will remark first of all that a
definition of the sign cannot be formulated.—But still I can give myself
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 surely serves to establish
the meaning of a sign.—Well, that is done precisely by the concentra-
ting of my attention; for in this way I impress on myself the connexion
between the sign and the sensation.—But "I impress it on myself"
can only mean: this process brings it about that I remember the connexion
right in the future. But in the present case I have no criterion of
correctness. One would like to say: whatever is going to seem right
to me is right. And that only means that here we can't talk about
'right'.

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

240. "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
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.—If a person speaks when no one else is
present, does that mean he is speaking to himself?)

261. What reason have we for calling "S" the sign for a sensation?
For "sensation" is a word of our common language, not of one intel-
ligible to me alone. So the use of this word stands in need of a justifica-
tion 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. "I 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
as it occurs in a particular language-game, which should now be
described.

262. It might be said: if you have given yourself a private definition
of a word, then you must inwardly undertake to use the word in such-
and-such a way. And how do you undertake that? Is it to be assumed
that you invent the technique of using the word; or that you found it
ready-made?

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

264. "Once you know what the word stands for, you understand it,
you know its whole use."

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 something independent.—"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 right and to check it
I call to mind how a page of the time-table looked. Isn't it the same
here?"—No; for this process has got to produce a memory which is
actually correct. If the mental image of the time-table 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 the 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 the 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 hand of a clock till its position strikes me as right. So the look of a clock may serve to determine the time in more than one way. (Looking at the clock in imagination.)

267. Suppose I wanted to justify the choice of dimensions for a bridge which I imagine to be building, by making loading tests on the material of the bridge in my imagination. This would, of course, be to imagine what is called justifying the choice of dimensions for a bridge. But should 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, etc., we shall ask: "Well, and what of it?" And the same could be asked if a person had given himself a private definition 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 the fact that he does not understand 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 right. 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 discover that whenever I have a particular sensation a manometer shows that my blood-pressure rises. So I shall be able to say that my blood-pressure is rising without using any apparatus. This is a useful result. And now it seems quite indifferent whether I have recognized the sensation right or not. Let us suppose I regularly identify it wrong, it does not matter in the least. And that alone shows that the hypothesis that I make a mistake is mere show. (We as it were turned a knob which looked as if it could be used to turn on some part of the machine; but it was a mere ornament, not connected with the mechanism at all.)

And what is our reason for calling "S" the name of a sensation here? 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, aren't we supposing that we write "S" every time?

271. "Imagine a person whose memory could not retain what the word 'pain' meant—so that he constantly called different things by that name—but nevertheless used the word in a way fitting in with the usual symptoms and presuppositions of pain"—in short he uses it as we all do. Here I should 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 exemplar, 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 sensation of red and another section another.

273. What am I to say about the word "red"?—that it means something 'confronting us all' and that everyone should really have another word, besides this one, to mean his own sensation of red? Or is it like this: the word "red" means something known to everyone; and in addition, for each person, it means 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" instead of "means" 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 the private sensation, as it were in order to say to myself: I know all right what I mean by it.
273. Look at the blue of the sky and say to yourself "How blue the sky is!"—When you do it spontaneously—without philosophical intentions—the idea never crosses your mind that this impression of colour belongs only to you. And you have no hesitation in exclaiming that to someone else. And if you point at anything as you say the words you point at the sky. I am saying: you have not the feeling of pointing-into-yourself, which often accompanies naming the sensation when one is thinking about 'private language'. Nor do you think that really you ought not to point to the colour with your hand, but with your attention. (Consider what it means "to point to something with the attention".)

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

277. But how is even possible for us to be tempted to think that we use a word to mean at one time the colour known to everyone—and at another 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 (as I should like to say) belongs to me alone I immerse myself in the colour—rather like when I 'cannot get my fill of a colour'. Hence it is easier to produce this experience when one is looking at a bright colour, or at an impressive colour-scheme.

278. "I know how the colour green looks to me"—surely that makes sense!—Certainly: what use of the proposition 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 prove it.

280. Someone paints a picture in order to show how he imagines a theatre scene. And now I say: "This picture has a double function: it informs others, as pictures or words inform—but for the one who gives the information it is 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. To him his private impression of the picture means what he has imagined, in a sense in which the picture cannot mean this to others."—And what right have I to speak in this second case of a representation or piece of information—if these words were rightly used in the first case?

281. "But doesn't what you say come to this: that there is no pain, for example, without pain-behaviour?"—It comes to this: 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 the pot too can see and hear!" (Certainly; but it can also talk.) "But the fairy tale only invents what is not the case: it does not talk nonsense."—It is not as simple as that. Is it false or nonsensical to say that a pot talks? Have we a clear picture of the circumstances in which we should say of a pot that it talked? (Even a nonsense-poem is not nonsense in the same way as the babbling of a child.)

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 ascribed pain only to inanimate things; pitied only dolls! (When children play at trains their game is connected with their knowledge of 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 copied from anything. One might say that the game did not make the same sense to them as to us.)

283. What gives us so much as the idea that living 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 the way other people use this word—I do not transfer my idea to stones, plants, etc.

Couldn't I imagine having frightful pains and turning to stone while they lasted? Well, 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 the pains? In what sense will they be ascribable to the stone? And why need the pain have a bearer at all here?

And can one say of the stone that it has a soul and that is what has the pain? What has a soul, or pain, to do with a stone?
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 soul which some body has. And how can a body have a soul?

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 anyone says: "That cannot simply come from the fact that a living thing moves about in such-and-such a way and a dead one not", then I want to intimate to him that this is a case of the transition 'from quantity to quality'.

283. Think of the recognition of facial expressions. Or 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 is it true that my hand does not feel pain, but I in my hand?

What sort of issue is: Is it the body that feels pain?—How is it to be decided? What makes it plausible to say 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 face.

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

288. I turn to stone and my pain goes on.—Suppose I were in error and it was no longer pain?—But I can’t be in error here: it means nothing to doubt whether I am in pain! That means: if anyone said "I do not know if what I have got is a pain or something else", we should think something like, he does not know what the

English word “pain” means; and we should explain it to him.—How? Perhaps by means of gestures, or by pricking him with a pin and saying: "See, that’s what pain is!" This explanation, like any other, he might understand right, wrong, or not at all. And he will shew which he does 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 should merely shake our heads and be forced to regard his words as a queer reaction which we have no idea what to do with. (It would be rather as if we heard someone say seriously: "I distinctly remember that some time before I was born I believed . . . . ")

That expression of doubt has no place in the language-game; but if we cut out human behaviour, which is the expression of sensation, it looks as if I might legitimately begin to doubt afresh. 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 without right.

290. What I do is not, of course, to identify my sensation by criteria: but to repeat an expression. But this is not the end of the language-game: it is the beginning.

But isn’t the beginning 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". You need 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 portray how a thing looks, what it is like. (These pictures are as it were idle.)
292. Don’t always think that you read off what you say from the facts; that you portray these in words according to rules. For even so you would 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 the same of other people too? And how can I generalize the one case so irresponsibly?

Now someone tells me that he knows what pain is only from his own case!—Suppose everyone had a box with something in it: we call it a “beetle”. No one can 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 suppose the word “beetle” had a use in these people’s language?—If so it would not be used as the name of a thing. The thing in the box has no place in the language-game at all; not even as a something for the box might even be empty.—No, one can’t 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 designation’ the object drops out of consideration as irrelevant.

294. If you say he sees a private picture before him, which he is describing, you have still made an assumption about what he has before him. And that means that you can describe it or do describe it more closely. If you admit that you haven’t any notion what kind of thing it might be that he has before him—then what leads 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 at all? An experiential one? No.—A grammatical one?

Suppose everyone does say about 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 explanation. And even if it gives no information, still it is a picture, and why should we not want to call up such a picture? Imagine an allegorical painting take the place of those words.

When we look into ourselves as we do philosophy, we often get to see just such a picture. A full-blown pictorial representation of our grammar. Not facts, but as it were illustrated turns of speech.

296. “Yes, but there is something there all the same accompanying my cry of pain. And it is on account of that that I utter it. And this something is what is important—and frightful.” —Only whom are we informing of this? And on what occasion?

297. Of course, if water boils in a pot, steam comes out of the pot and also pictured steam comes out of the pictured 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 should so much like to say: “This is the important thing”—while we point privately to the sensation—is enough to show how much we are inclined to say something which gives no information.

299. Being unable—when we surrender ourselves to philosophical thought—to help saying such-and-such; being irresistibly inclined to say it—does not mean being forced into an assumption, or having an immediate perception or knowledge of a state of affairs.

300. It is—we should like to say—not merely the picture of the behaviour that plays a part in 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’.” The image of pain is not a picture and this image is not replaceable in the language-game by anything that we should call a picture.—The image of pain certainly enters into the language game in a sense; only not as a picture.

301. An image 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 the easier a thing to do, for I have to imagine pain which I do not feel on the model of the pain which I do feel. That is, what I have to do is not simply to make a transition in imagination from one place of pain to another. As, from pain in the hand to pain in the arm. For I am not to imagine that I feel pain in some region of his body. (Which would also be possible.)

Pain-behaviour can point to a painful place—but the subject of pain is the person who gives it expression.
303. "I can only believe that someone else is in pain, but I know it if I am."—Yes; one can make the decision to say "I believe he is in pain" instead of "I see is in pain". But that is all.—What looks like an explanation here, or like a statement about a mental process, is in truth an exchange of one expression for another which, while we are doing philosophy, seems the more appropriate one.

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 accompanied by pain and pain-behaviour without any 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 is not a something, but not a nothing either! The conclusion was only that a nothing would serve just as well as a something about which nothing could be said. We have only rejected the grammar which tries 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 anything else you please.

305. "But you surely cannot 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 setting our faces against the picture of the 'inner process'. What we deny is that the picture of the inner process gives us the correct idea of the use of the word "remembered". We say that this picture with its ramifications stands in the way of our seeing the use of the word as it is.

306. Why should I deny that there is a mental process? But "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. "Are you a Behaviourist in disguise? Aren't you at bottom really saying that everything except human behaviour is a fiction?"—If I do 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 shall know more about them—we think. But that is just what commits us to a particular way of looking at the matter. For we have a definite concept 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 we thought 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 shew the fly the way out of the fly-bottle.

310. I tell someone I am in pain. His attitude to me will then be that of belief; disbelieve; suspicion; and so on.

Let us assume he says: "It's not so bad."—Doesn't that prove that he believes in something behind the outward expression of pain?—His attitude is a proof of his attitude. Imagine not merely the words "I am in pain" but also the answer "It's not so bad" replaced by instinctive noises and gestures.

311. "What difference could be greater?" In the case of pain I believe that I can give myself a private exhibition of the difference. But I can give anyone an exhibition of the difference between a broken and an unbroken tooth. But for the private exhibition you don't have to give yourself actual pain; it is enough to imitate it—for instance, you screw up your face a bit. And do you know that what you are giving yourself this exhibition of is pain and not, for example, a facial expression? And how do you know what you are to give yourself an exhibition of 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 sensation in the one corresponds to the sensation of pain in the other. I can exhibit the visual sensation to myself as little or as well as the sensation of pain.
Let us imagine the following: The surfaces of the things around us (stones, plants, etc.) have patches and regions which produce pain in our skin when we touch them. (Perhaps through the chemical composition of these surfaces. But we need not know that.) In this case we should speak of pain-patches on the leaf of a particular plant just as at present we speak of red patches. I am 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 shews a fundamental misunderstanding, if I am inclined to study the headache I have now in order to get clear about the philosophical problem of sensation.

315. Could someone understand the word “pain”, who had never felt 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 is true?

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

317. Misleading parallel: the expression of pain is a cry—the expression of thought, a proposition.

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

318. Suppose we think while we talk or write—I mean, as we normally do—we shall not in general say that we think quicker than we talk; the thought seems not to be separate 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; how problems become clear to us in a flash, and so on. So it is natural to ask if the same thing happens in lightning-like thought—only extremely accelerated—as when we talk and ‘think while we talk.’ So that in the first case the clockwork runs down all at once, but in the second bit by bit, braked by the words.

319. I can see or understand a whole thought in a flash in exactly the 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. The lightning-like thought may be connected with the spoken thought as the algebraic formula is with the sequence of numbers which I work out 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-founded’, for I have learned to compute such functions, and so on. In other cases no reasons will be given for it—but it will 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 that we give this name to.—The question might mean: what are the tokens of sudden understanding; what are its characteristic psychological accompaniments?

(There is no ground for assuming that a man feels the facial movements that go with his expression, for example; or the alterations in his breathing that are characteristic of some emotion. Even if he feels them as soon as his attention is directed towards them.) (Posture.)

322. The question what the expression means is not answered by such a description; and this misleads us into concluding that understanding is a specific indefinable experience. But we forget that what should interest us is the question: how do we compare these experiences; what criterion of identity do we fix 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 shall not find I am stuck when I do try to go on.—Here there are cases in which I should 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.
We could also imagine a case in which light was always seeming to dawn on someone—he exclaims “Now I have it!” and then can never justify himself 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 it is a matter of induction, and that I am as certain that I shall be able to continue the series, as I am that this book will drop on the ground when I let it go; and that I should be no less astonished if I suddenly and for no obvious reason got stuck in working out the series, than I should be if the book remained hanging in the air instead of falling?—To that I will 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 shall be able to go on after I have had this experience—seen the formula, for instance,—is simply based on induction.” What does this mean?—“The certainty that the fire will burn me is based on induction.” Does that mean that I argue 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 ground? Whether the earlier experience is the cause of the certainty depends on the system of hypotheses, of natural laws, in which we are considering the phenomenon of certainty.

Is our confidence justified?—What people accept as a justification is shown by 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 do not have to wait for it as for an astronomical event and then perhaps make your observation in a hurry.

328. Well, what does one include in ‘thinking’? What has one learnt to use this word for?—If I say I have 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 really thinking; am I not making a mistake?” Suppose someone takes a measurement in the middle of a train of thought: has he interrupted the thought if he says nothing to himself during the measuring?

329. When I think in language, there aren’t ‘meanings’ going through my mind in addition to the verbal expressions: the language is itself the vehicle of thought.

330. Is thinking a kind of speaking? One would like to say it is what distinguishes speech with thought from talking without thinking. And so it seems to be an accompaniment of speech. A process, which may accompany something else, or can go on by itself.

Say: “Yes, this pen is blunt. Oh well, it’ll do.” First, thinking it; then without thought; then just thinking the thought without the words. —Well, while doing some writing I might test the point of my pen, make a face—and then go on with a gesture of resignation. —I might also act in such a way while taking various measurements that an onlooker would say I had—without words—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 only think aloud. (As there are people who can only read aloud.)

332. While we sometimes call it “thinking” to accompany a sentence by mental process, that accompaniment is not what we mean by a “thought”. —Say a sentence and think it; say it with understanding. —And now do not say it, and just do what you accompanied it with when you said it with understanding! (Sing this tune with expression. And now don’t sing it, but repeat its expression! And here one actually might repeat something. For example, motions 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 somewhere at hand by the side of 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 somewhere in his mind even
before we gave it expression. Various kinds of thing may persuade us to give up one expression and to adopt another in its place. To understand this, it is useful to consider the relation in which the solutions of mathematical problems stand to the context and ground of their formulation. The concept 'trisection of the angle with ruler and compass', when people are trying to do it, and, on the other hand, when it has been proved that there is 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 phrase 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 a picture occurs to me and I try to describe it. Or an English expression occurs to me and I try to hit on 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 consist in, as it existed before its expression?"

336. This case is similar to the one in which someone imagines that one could not think a sentence with the remarkable word order of German or Latin just as it stands. One first has to think it, and then one arranges the words in that queer 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 said it out loud!—If it was in my mind, still it would not normally be there in some different word order. But here we are constructing a misleading picture of 'intending', that is, of the use of this word. An intention is embedded in its situation, 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. In so far as I do intend the construction of a sentence in advance, that is made possible by the fact that I can speak the language in question.

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 we think about this, we grasp at the image 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 Schiemichl from the ground.—But how "not an incorporeal process"? Am I acquainted with incorporeal processes, then, only thinking is not one of them? No; I called the expression "an incorporeal process" to my aid in my embarrassment when I was trying to explain the meaning of the word "thinking" in a primitive way.

One might say "Thinking is an incorporeal process", however, 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: Minerals are actual, and numbers non-actual, objects.) An unsuitable type of expression is a sure means of remaining in a state of confusion. It as it were bars the way out.

340. One cannot guess how a word functions. One has to look at its use and learn from that.

But the difficulty is to remove the prejudice which stands in the way of doing this. It is not a stupid prejudice.

341. Speech with and without thought is to be compared with the playing of a piece of music with and without thought.

342. William James, in order to show that thought is possible without speech, quotes the recollection 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 can he have meant?—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 thought into words? And why does this question—which otherwise seems not to exist—raise its head here? Do I want to say that the writer's memory deceives