An Inquiry into Meaning and Truth

Bertrand RUSSELL 1940

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26-27 DU MOT À L'IDÉE : LE DANGEREUX SAUT VERS LES CIEUX PLATONIQUES

The word "dog" is a universal, just as dog is a universal. We say, loosely, that we can utter the same word "dog" on two occasions, but in fact we utter two examples of the same species, just as when we see two dogs we see two examples of the same species. There is thus no difference of logical status between dog and the word "dog": each is general, and exists only in instances. The word "dog" is a certain class of verbal utterances, just as dog is a certain class of quadrupeds. Exactly similar remarks apply to the heard word and to the written word.

It may be thought that I have unduly emphasized a very obvious fact in insisting that a word is a universal. But there is an almost irresistible tendency, whenever we are not on our guard, to think of a word as one thing, and to argue that, while there are many dogs, the one word "dog" is applicable to them all. Hence we come to think that dogs all have in common a certain canine essence, which is what the word "dog" really means. And hence we arrive at Plato and the dog laid up in heaven. Whereas what we really have is a number of more or less similar noises which are all applicable to a number of more or less similar quadrupeds.

28 COMBINATOIRE : LE PARADIS DES LOGICIENS

By using black print on white paper, we make each letter stand out sharply against its background. Thus a printed page consists of a set of discrete and easily classified shapes, and is in consequence a logician's paradise. But he must not delude himself into thinking that the world outside books is equally charming.

29 LE LANGAGE S'APPREND ET S'UTILISE PAR L'USAGE, PAS PAR DES IDÉES

It is obvious that knowing a language consist in using words appropriately, and acting appropriately when they are heard. It is no more necessary to be able to say what a word means than it is for a cricketer to know the mathematical theory of impact and of projectiles. Indeed, in the case of many object-words, it must be strictly impossible to *say* what they mean, except by a tautology, for it is with them that language begins. You can only explain (say) the word "red" by pointing to something red. A child understands the heard word "red" when an association has been established between the heard word and the colour red; he has mastered the spoken word "red" when, if he notices something red, he is able to say "red" and has an impulse to do so.

30-31 / 186 LE LANGAGE VISE L'ACTION CHEZ AUTRUI

In adult life, all speech, like the calling of a name, though less obviously, is, in intention, in the imperative mood. [...] when, in adult life, you use a word, you do so, as a rule, not only because what the word "denotes" is present to sense or imagination, but because you wish your hearer to **do** something about it. [...]

We may say, generally, that speech consists, with some exceptions, of noises made by persons with a view to causing desired actions by other persons. Its indicative and assertive capacities, however, remain fundamental [...]. It is interesting that language *can* state facts; it is also interesting that it *can* state falsehoods. When it states either, it does so with a view to causing some action in the hearer [...]

[...] The purpose of words, though philosophers seem to forget this simple fact, is to deal with matters other than words. If I go into a restaurant and order my dinner, I do not want my words to fit into a system with other words, but to bring about the presence of food. I could have managed without words, by taking what I want, but this would have been less convenient.

31 LES MOTS-OBJETS AFFIRMENT

At the lowest level of speech, the distinction between sentences and single words does not exist. At this level, single words are used to indicate the sensible presence of what they designate. It is through this form of speech that object-words acquire their meaning, and in this form of speech each word is an assertion. [...] Thus the meaning of object-words is fundamental in the theory of empirical knowledge, since it is through them that language is connected with non-linguistic occurrences in the way that makes it capable of expressing empirical truth or falsehood.

36-37 DE L'IDÉE À LA CLASSE : LA SAINE DESCENTE DES CIEUX PLATONIQUES

I say "A." Then I say "what did I say?" Then you reply "you said 'A.' " Now the noise you make when saying "A" in this reply is different from the noise I originally made; therefore, if "A" were the name of a particular noise, your statement would be false. It is only because "A" is the name of a *class* of noises that your statement is true; your statement classifies the noise I made, just as truly as if you had said "you barked like a dog." This shows how language forces us into generality even when we most wish to avoid it. [...] Strictly, we ought not to say "I said 'A'"; we ought to say "I said an 'A.'" All this illustrates a general principle, that when we use a general term, such as "A" or "man", we are not having in our minds a universal, but an instance to which the present instance is similar.

38 UN NOM PROPRE N'EST PAS UN NOM-CLASSE

A proper name, in practice, always embraces many occurrences, but not as a class-name does: the separate occurrences are *parts* of what the name means, not *instances* of it.

44 UNE AMBIGUÏTÉ TYPIQUE

"Day precedes night" and "night precedes day" are both true. There is thus, in such cases, an absence of logical homogeneity between the symbol and its meaning: the symbol is a universal while the meaning is particular. This kind of logical heterogeneity is very liable to lead to confusions.

45-46 PERCEPTION PRIMITIVE DU TEMPS : DE LA CERTITUDE

When I hear the sentence "Brutus killed Caesar", I perceive the time-order of the words; if I did not, I could not know that I had heard that sentence and not "Caesar killed Brutus." If I proceed to assert the time-order by the sentences "'Brutus' preceded 'killed'" and "'killed' preceded 'Caesar,' "I must again be aware of the time-order of the words in these sentences. We must, therefore, be aware of the time-order of events in cases in which we do not assert that they have time-order, for otherwise we should fall into an endless regress. What is it that we are aware of in such a case?

65 LE SENS DES MOTS PERMET L'INTENTION

A sentence, we shall say, differs from a word by having an intention, which may be only that of communicating information. But it is from the meanings of words that it derives its power of fulfilling an intention. For when a man utters a sentence, it is owing to the meanings of the words that it has power to influence the hearer's actions, which is what the speaker intends it to do.

66 WITTGENSTEIN

The words that we use never exhaust all that we could say about a sensible experience.

70 / 393 ILLUSION DU MOT-IDÉE PLATONIQUE

I can only utter an instance of the word, not the word itself, which remains immovably in a Platonic heaven. [...] the sort of generality that *seems* to be involved in the repeated use of the word "black" is an illusion; what we really have is similarity. [...]

All use of language involves a certain universality in fact, but not necessarily in knowledge. [...] Repetition and universality, *in fact*, are of the essence of the matter, for language consist of habits, habit involves repetition and repetition can only be of universals. But *in knowledge* none of this is necessary, since we use language, and can use it correctly, without being aware of the process by which we acquired it.

81-82/85/92 COMPRENDRE UN MOT-OBJET : PAR ASSOCIATION (MERCI L'HABITUDE)

The meaning of an object-word can only be learnt by hearing it frequently pronounced in the presence of the objet. The association between word and object is just like any other habitual association, e. g., that between sight and touché. When the association has been established, the object suggests the word, and the word suggests the object, just as an object seen suggests sensations of touch, and an object touched in the dark suggests sensations of sight. Association and habit are not specially connected with language; they are characteristic of psychology and physiology generally. How they are to be interpreted is, of course, a difficult and controversial question, but it is not a question which specially concerns the theory of language.

As soon as the association between an object-word and what it means has been established, the word is "understood" in the absence of the object, that is to say, it "suggests the object in exactly the same sense in which sight and touch suggest one another.

[...] children learn, in time, to utter noises appropriate to objects that are sensibly present, and then, almost immediately, they learn to use the same noises when they desire the objects. As soon as this has happened, they possess an object-language: objects suggest their names, their names suggest them, and their names may be suggested, not only by the presence of the objects, but by the thought of them.

[...]

An *object-word* is a class of similar noises or utterances such that, from habit, they have become associated with a class of mutually similar occurrences frequently experienced at the same time as one of the noises or utterances in question.

94/97 NIVEAUX DES MOTS "VRAI" ET "FAUX"

the object-language does not contain the words "true" and "false," or logical words such as "not," "or," "some," and "all." [...]

The words "true" and "false" [...] are to be applied only to sentences of the primary language.

99 VÉRITÉ PREMIÈRE (DE LA CERTITUDE), FAUSSETÉ ÉVENTUELLE DANS LA CONVENANCE AVEC L'USAGE

So long as a man avoids words which are condensed inductions, and confines himself to words that can describe a single experience, it is possible for a single experience to show that his words are true.

[...] So long as your words merely describe present experiences, the sole possible errors are linguistic, and these only involve socially wrong behaviour, not falsehood.

102-108/111 DISTONCTIONS

Disjunctions [...] arise in practice in the form of choice. You see a sign post saying "To Oxford," and presently you come to a fork in the road where there is no signpost. You then believe the proposition "Oxford is along the right-hand road or Oxford is along the left-hand road. [...]

Psychologically, "or" corresponds to a state of hesitation. [...]

Hesitation arises when we feel two incompatible impulses, and neither is strong enough to overcome the other. [...]

A disjunction is the verbal expression of indecision, or, if a question, of the desire to reach a decision.

- [...] if we know "p or q," surely we know something about the world? To this question we may answer yes in one sense and no in another. To begin with reasons for answering no: [...] the straightforward correspondence theory of truth, which is valid in the primary language, is no longer available where disjunctions are concerned.
- [...] clearly, you know something about the world when you know a child has been born, even though you do not know its sex.
- [...] From the psychological point of view, there is a clear distinction [between disjunctive predicates and others]. A predicate is disjunctive is we feel a desire to decide alternatives which it leaves open; if not, it is not. But this is not quite adequate. The alternatives must be such as the predicate itself suggests, not irrelevant possibilities. Thus "boy" is not to be considered disjunctive because it leaves open the question "dark or fair?" Thus a predicate is only disjunctive if it *suggests* a question, and whether it does so or not depends solely upon the interests of the person concerned.

All our knowledge about the world, in so far as it is expressed in words, is more or less general, because every sentence contains at least one words that is not a proper name, and all such words are general Consequently every sentence is logically equivalent to a disjunction, in which the predicate is replaced by the alternative of two more specific predicates. Whether a sentence gives us a *feeling* of knowledge or of doubt depends upon whether it leaves open alternatives calling for **actions** and emotions or not. Every disjunction

which is not logically exhaustive (i. e., not such as "A or not-A") gives *some* information about the world, if it is true; but the information may leave us so he sitant as to what to **do** that it is *felt* as ignorance.

[...]"This is metal" may satisfy us for some purposes; for others, such a statement must be replaced by "This is iron or copper or etc." and we must seek to decide which possibility is realized. There is no point in the growing precision of language beyond which we cannot go; our language can always be rendered less inexact, but can never become quite exact.

Thus the difference between a statement which is disjunctive and one which is not does not consist in any difference in the state of affairs which would make it true, but solely in the question whether the difference between the possibilities which our statement leaves open is interesting to us or not.

There is another situation in which a disjunction may arise in practice, and that is where there is imperfect memory. "Who told you that?" "Well, it was either Brown or Jones, but I can't remember which." [...] Basic propositions, when they are expressions of present experience, never contain the word "or" unless the experience is verbal; but *memories* can be disjunctive.

 $[\ldots]$

It is obvious that "the book is *somewhere* in the room" cannot be a judgement of perception; you cannot perceive *somewhere*, you can only perceive *there*.

113-115 NÉCESSITÉ DES MOTS LOGIQUES

The non-mental world can be completely described without the use of any logical word, though we cannot, without the word "all," *state* that the description is complete; but when we come to the mental world, there facts which cannot be mentioned without the use of logical words. [...] while the word "or" does not occur in the basic propositions of physics, it does occur in some of the basic propositions of psychology, since it is an observable fact that people sometimes believe disjunctions. And the same is true of the words "not," "some," and "all."

[...] logical words, though not necessary in describing physical facts, are indispensable for the description of certain mental facts.

126 L'INDISTINGABILITÉ N'EST PAS TRANSITIVE

Let "S" stand for "indistinguishability." Then, given two patches of colour, we may observe that the shade of one patch has the relation S to the other. We can, however, rove that S does not imply identity, for identity is transitive, but S is not. That is to say, given three shades of colour x, y, z, existing in three visible patches, we may have x S y and y S z, but not x S z. Therefore x is not identical with z, and therefore y cannot be identical with both x and z, although it is indistinguishable from both. We can only say that x and y are identical if x S z always implies y S z, and vice versa.

140/142 "C'EST" ET "JE"

the perceptive effect begins with the words "this is," and the reminiscent effect with the words "that was."

[...] the phrase "I am" can always be replaced by the phrase "this is," or vice versa. Which of the two phrases we use depends upon accident or prejudice. We say "I am hot" rather than "this is hotness," if we are hot from exercise and not because of the surrounding temperature. But when we go into the engine-room of a ship, we say "ouf! it is hot here," which is equivalent (roughly) to "this is hotness." We say "this is a cat," and *intend* to make a statement about something which is not merely a part of our own biography. But is the words "this" is to apply, as is should, to something that we directly experience, it cannot apply to the cat as an object in the outer world, but only to our own percept of a cat. Thus we must not say "this is a cat," but "this is a percept such as we associate with cats," or "this is a cat-percept." This phrase, in turn, can be replaced by "I am cat-perceptive," which asserts a state of myself, and is true on exactly the same occasions as those on which I am tempted (rashly) to say 'this is a cat,' and on which I am justified in saying "this is a cat-percept." What we directly know when we say "this is a cat" is a state of ourselves, like being hot.

Thus in every statement containing "this" we may substitute "what I-now notice," and in every statement containing "I-now" we may substitute "what is compresent with this".

149-150/152-153 PERCEPTION PAR UN SENS : LES AUTRES SENS ANTICIPENT

In our reaction to a sensory stimulus there are two theoretically distinguishable elements, first, that due merely to the stimulus, second, that due to is habitual concomitants. A visual sensation is never pure: other

senses are also stimulated in virtue of the law of habit. When we see a cat, we expect it to mew, to feel soft, and to move in a cat-like manner; if it barked, or felt like a stone, or moved like a bear, we should experience a violent shock or surprises. This sort of thing has to do with our belief that we see "objects," and do not merely have visual sensations. [...] what is important is that sensations are rounded out by spontaneous images or expectations of their usual accompaniments.

[...] by virtue of the law of habit, the experience [...] is [...] accompanied by what Hume would call "ideas," but which I should prefer to call "expectations," which may be purely bodily states. In any case, these expectations deserve to be called "beliefs," as we shall find later when we come to analyse belief. [...]

To sum up this part of our discussion: In our environment it frequently happens that events occur together in bundles—such bundles as distinguish a cat from another kind of object. Any one of our senses may be affected by a stimulus arising from some characteristic of the bundle in question. Let us suppose the stimulus to be visual. Then physics allows us to infer that light of certain frequencies is proceeding from the object to our eyes. Induction allows us to infer that this pattern of light, which, we will suppose, looks like a cat, probably proceeds from a region in which the other properties of cats are also present. Up to a point, we can test this hypothesis by experiment: we can touch the cat, and pick it up by the tail to see if it mews. Usually the experiment succeeds; when it does not, its failure is easily accounted for without modifying the laws of physics. (It is in this respect that physics is superior to ignorant common sense.) But all this elaborate work of induction, in so far as it belongs to common sense rather than science, is performed spontaneously by habit, which transforms the mere sensation into a perceptive experience. Broadly speaking, a perceptive experience is a dogmatic belief in what physics and induction show to be probable, it is wrong in its dogmatism, but *usually* right in its content.

[...] While [...] none of the inferences from the perceptive experience is certain, the inferences drawn from the sensory core have a higher probability than those drawn from the other parts of the perceptive experience. This can only be denied by those who are willing to deny physics or physiology.

157 VOCABULAIRE & HABITUDE, PERCEPTION & SCIENCE

Our empirical vocabulary is based upon words having ostensive definitions, and an ostensive definition consists of a series of percepts which generates a habit. When the vocabulary has been mastered, it is perception that gives us the primary knowledge of matters of fact upon which science is based; and perceptive knowledge, *prima facie*, demands egocentric words in its verbal expression.

158-159/161 DU SUJET VERS L'OBJET

every object-word, in its primitive use, has an implicit egocentricity [...] But [...] this egocentricity is no part of the meaning of the word "hot" as it exists in a developed language. The word "hot" means only that quality in occurrences which, *if* the occurrences are suitably related to me, will make them causes of my utterance of the word "hot." In passing from "hot!" to "this is hot," we effect an analysis: the quality "hot" is freed from egocentricity, and the formerly implicit egocentric element is rendered explicit by the words "this is." Thus in a developed language object-words such as "hot," "red," "smooth," etc., are not egocentric.

[...] the egocentricity in such a proposition as "this is hot" lies, not in what is known, but in the causation of our knowledge and in the words by means of which we express it. The words "this" may be replaced by something that is strictly a name, say "W," denoting that whole complex of qualities which constitutes all that I am now experiencing. The impersonal truth asserted when I say "this is hot" will then be translated into the words "hotness is part of W." In this form, what I have learnt from perception is ready for incorporation in impersonal science.

 $[\ldots]$

The above theory has the consequence that we cannot express our knowledge without names for complex wholes, and that we can be acquainted with complex wholes without knowing of what constituents they consist.

155 / 165-166 / 169-170 / 173 / 189 / 390-391 / 395 / 414 L'EXPÉRIENCE PRIMITIVE FONDE

The question of data has been, mistakenly as I think, mixed up with the question of certainty. The essential characteristic of a datum is that it is not inferred. It may not be true, and we may not feel certain that it is true. The most obvious example is memory. We know that memory is fallible, but there are many things that we believe, though not with complete assurance, on the basis of memory alone. [...]

[...] We assume that perception *can* cause knowledge, although it *may* cause error if we are logically careless. Without this fundamental assumption, we should be reduced to scepticism as regards the empirical

worlds. No arguments are logically possible either for or against complete scepticism, which must be admitted to be one among possible philosophies. It is, however, too short and simple to be interesting. I shall, therefore, without more ado, develop the opposite hypothesis, according to which beliefs caused by perception are to be accepted unless there are positive grounds for rejecting them.

[...] My momentary knowledge consists largely of memory, and my individual knowledge consists largely of testimony. But memory, when it is veridical, is related to a previous perceptive premiss, and testimony, when it is veridical is related to some one's else perceptive premises. Social empiricism takes theses premisses of other times or other persons of *the* empirical premises for what is now accepted, and thus evades the problems connected with memory and testimony. This is plainly illegitimate, since there is reason to believe that both memory and testimony sometimes deceive. [...] The paramount importance of perception, in any tenable form of empiricism, is causal. Memory, when veridical, is causally dependent upon a previous perception; testimony, when veridical, is causally dependent upon some one else's perception. We may say, therefore: "All human knowledge of matters of fact is in part *caused* by perception." [...] It is fairly clear that part of the *cause* of my believing in the Straigts of Magellan is that certain people have seen them, but this is not the *ground* of my belief, since it has to be proved to me (or rather made probable) that such people have has such percepts. To me, their percepts are inferences, not premises.

[...] Perception affords for the belief evidence which is considered the strongest possible, but which is not verbal.

[...]

We thus arrive at the momentary perception as the least questionable thing in our experience, and as therefore the criterion and touchstone of all other certainties and pseudo-certainties.

[...] I start from sentences about particular occurrences, such as "this is red," that is bright," "I-now am hot." The evidence in favour of such a sentence is not other sentences, but a non-verbal occurrence; the whole of the evidence is contained in a single such occurrence, and nothing that happens at any other time or place can confirm or confute this evidence. Previous occurrences are concerned *causally* in my use of language: I say "red" because of a habit generated by past experiences. But the manner in which the habit was formed is irrelevant to the meaning of the word "red," which demands upon what the habit *is*, not upon how it came about.

[...]

Throughout the above discussion, I have not been contending that what Carnap says is mistaken, but only that there are certain prior questions to be considered, and that, while they are ignored, the relation of empirical knowledge to non-linguistic occurrences cannot be properly understood. It is chiefly in attaching importance to these prior questions that I differ from the logical positivists.

The most important of these prior question is: Can anything be learnt, and if so what, from a single experience? [...]

It is customary now-a-days to dismiss contemptuously the atomic view of sensation as it appears in Hume and his followers. [...] What is not hypothetical is what *is* noticed, not what *could* be noticed; and what *is* noticed has, I maintain, just that atomicity and discreteness which the critics of Hume reject. They do not, as empiricists should, start from data, but from a world that they have inferred from data but use to discredit the kind of thing that can be a datum. In theory of knowledge, what is fundamental is noticing, not sensation.

179 SAVOIR COMMUN & SAVOIR PRIVE

The man who is constructing an encyclopaedia is not expected himself to conduct experiments; he is expected to compare the opinions of the best authorities, and arrive, so far as he can, at the standard scientific opinion of this time. Thus in dealing with a scientific question his data are opinions, not direct observations of the subject-matter. The individual men of science, however, whose opinions are the encyclopaedist's premisses, have not themselves merely compared other investigators' opinions; they have made observations and conducted experiments, on the bases of which they have been prepared, if necessary, to reject previously unanimous opinions. The purpose of an observation or experiment is to give rise to a perceptive experience, as a result of which the percipient has new knowledge, at first purely personal and private. Others may repeat the experiment, and in the end the result becomes part of *public* knowledge; but his public knowledge is merely an abstract or epitome of private knowledges.

All theory of knowledge must start from "what do I know?" not from "what does mankind know?" For how can I tell what mankind knows? Only by (a) personal observation of what it says in the books it has written, and (b) weighing the evidence in favour of the view that what is said in the books is true. If I am Copernicus, I shall decide against the books; if I am a student of cuneiform, I may decide that Darius did not say what he is supposed to have said about his campaigns.

[...] the point is that my knowledge as to matters of act must be based upon my perceptive experiences, through which alone I can ascertain what is received as public knowledge.

192-193 / 198 MÉMOIRE ET HABITUDE

It is by no means easy to distinguish between memory and habit. [...] we have a habit of making a record of an event that for any reason is important to us, either in writing or by creating in ourselves a verbal habit. We do the latter, for example, if, when we are introduced to a man, we repeat his name over and over to ourselves. We may do this so often that, when we next see him, we think of his name at once. We are then said, in popular language, to "remember" his name, but we do not necessarily recall any past event.

198-199 MÉMOIRE ET SAVOIR

Is it possible to build up our knowledge of the past in this way by means of records and verbal habits alone? [...] There is no doubt that we could, without the help of memory, know *something* of the past. But I think it is clear that, in fact, we know more of the past than can be accounted for in this way. And while we must admit that we are sometimes mistaken as to what we think we remember, some recollections are so nearly indubitable that they would still command credence event if much contrary evidence were produced.

207 L'EMPIRISME NE PEUT SE SAVOIR

empiricism; as a theory of knowledge, is self-refuting. For, however it may be formulated, it must involve *some* general proposition about the dependence of knowledge upon experience; and any such proposition, if true, must have as a consequence that itself cannot be known. While, therefore, empiricism may be true, it cannot, if true, be known to be so. This however, is a large problem.

229 / 237-238 / 242 NATURE DU "SENS" D'UNE PHRASE : ÉTAT DE CROYANCE

the significance is a state of the believer, or rather a set of such states having certain similarities. A possible form of such a state is a complex image, or rather a whole set of similar complex images. Images form a language, but the language differs from that of words in the fact that it does not contain any nonsense. To extend the definition of "significance" beyond atomic sentences is obviously only a question of logic.

- [...] [Propositions] are to be defined as psychological and physiological occurrences of certain sorts complex images, expectations, etc. Such occurrences are "expressed" by sentences. When two sentences have the same meaning, that is because they express the same proposition. Words are not essential to propositions. The exact psychological definition of propositions is irrelevant to logic and theory of knowledge; the only thing essential to our inquiries is that sentences signify something other than themselves, which can be the same when the sentences differ. That this something must be psychological (or physiological) is made evident by the fact that propositions can be false.
- [...] There are states which may be called states of "believing"; these states do not essentially involve words. Two states of believing may be so related that we call them instances of the same belief. In a man with suitable language-habits, one of the states which is an instance of a given belief is that in which he utters a certain sentence. When the utterance of a certain sentence is an instance of a certain belief, the sentence is said to "express" the belief. A spoken sentence is "significant" when there is a possible belief that it "expresses."

256 RÔLES DU LANGUAGE

Language serves three purposes: (1) to *indicate* facts, (2) to *express* the state of the speaker, (3) to *alter* the state of the hearer.

261 PLUSIEURS ÉTATS DE CROYANCE

The one word "belief" should, I think, be replaced by several. First: perception, memory, expectation. Next come habit-inferences, of the kind that Hume considers in connection with causation. Last come deliberate inferences such as logicians sanction or condemn. [...] Suppose I am a Dictator, and at 5 P. M. on October 22 some one attempts to stab me with a dagger. As a result of reports by the secret police, I believe that this is going to happen; this is (or at least may be) a logically inferential belief; it may also be a belief produced by habit-inference. At 4:59 I see a known enemy taking a dagger from its sheath; at this moment I *expect* the assault. The inference to the immediate future is now not logical, but habitual. A moment later, the assassin rushes forward, the blade pierces my coat, but is stopped by the shirt of chain armour that I wear next the skin. At this instant, my belief is a matter of perception. Subsequently, the villain having been beheaded, I have the experience of "emotion recollected in tranquillity," and my belief has become one of memory. It is obvious that my bodily and

mental state is different on these four occasions, though what I am believing is the same throughout, in the sense that it can be indicated in the same words, viz: "I believe that at 5 P. M. on October 22 an attempt is made to stab me with a dagger."

270-271 DÉCOUVERTE D'UNE ERREUR

the sole method of discovering error is, I believe, the experience of surprise owing to a disappointed expectation.

[...] Expectation makes us say, 'the dos will bark"; perception makes us say, 'the dos is not barking"; memory makes us say, "I expected the dos to bark." Or we may expect the dos not to bark, and be surprised when he does. But I do not see how this simplest case of known error can be dealt with except by the above combination of perception, expectation and memory, in which either the expectation or the perception must be negative.

290-291 TÉMOIN D'UNE VÉRITÉ

When I say "the sun is hot," interpreted as in physics, I travel further from experience, since "hot" now means, not "hotness," which I have experienced, but "cause of hotness," which I have not experienced. The verifier of "the sun is hot" is not only unknown, like that of "you are hot,' but unimaginable. My grounds for believing "the sun is hot" (interpreted as in physics) are thus even more remote from the verifier.

[...]

When I say "I am hot," I am aware of the verifier, which is my hotness. When I say "you are hot" or "the sun is hot," I am not aware of the verifier.

336-337 P. « P » OU « QUE P » ?

the distinction between "p" and p is not the most important for our problem.

The important distinction, in this discussion, is not between "p" and p, but between what p expresses and what it *indicates*. This distinction is not confined to propositions; it exists also in the case of object-words. If I exclaim "fire!" I express my own state and indicate an occurrence different from my state. [...]

[...] Let us put for "p" the sentence "B is hot." When we say that A believes that B is hot, we are saying (roughly) that A is in a state which will lead him, if he speaks, to say "B is hot" or something having the same significance. We are not saying that these words are in A's mind; he may be a Frenchman who, if he spoke, would say "B a chaud." We are, in fact, saying nothing about the words "B is hot," but only about what they signify. Therefore there should be no inverted commas, and we should say: "A believes that p." Here "that" is essential.

We should say "p is true" or "'p' is true." It is generally assumed that we should say the latter, but I think this assumption is wrong. [...] we should say: "it is true that p," not "'p' is true."

[...]

It has been suggested to me by Mr. N. Dalkey that in" A believes that B is hot," the words "that B is hot" describe what is expressed by "B is hot" when this is a complete sentence. [...] This view makes it necessary to draw a sharp distinction between "p" and "that p." Whenever it is really "p" that occurs, we can preserve the principle of extensionality; but when is "that p" that occurs, the reason for the failure of the principle is that "p" is not, in fact, occurring.

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we have to consider [...] whether to sacrifice the law of excluded middle or to attempt a definition of truth which is independent of knowledge.

The difficulties of either view are appalling. If we define truth in relation to knowledge, logic collapse, and much hitherto accepted reasoning, including large parts of mathematics, must be rejected as invalid. But is we adhere to the law of excluded middle, we shall find ourselves committed to a realist metaphysic which may seem, in the spirit if not in the letter, incompatible with empiricism. The question is fundamental, and of the greatest importance.

368-369 SENS (EXPERIMENTE) ET SIGNIFICATION (TRANSCENDANTE)

it should, I think, be conceded that meaning is limited to experience, but significance is not.

As regards meaning: [...] Hume's principle, "no idea without an antecedent impression," certainly applies to learning the meaning of object-words. [...] [It] also applies to logical words; "not" must derive its meaning from experiences of rejection, and "or" form experiences of hesitation. Thus no essential word in our vocabulary can have a meaning independent of experience. Indeed any word that *I* can understand has a meaning derived from *my* experience.

As regards significance: This transcends my personal experience whenever I receive information; it transcends the experience of all mankind in works of fiction. We experience "Hamlet," not Hamlet, but our emotions in reading the may have to do with Hamlet, not with "Hamlet."

382-383 (RESUME) PROPOSITIONS, FAIT, VERITE, VERIFIABILITE, EMPIRISME

To sum up the results of this long discussion: What we called the epistemological theory of truth, if taken seriously, confines "truth" to proposition asserting what I now perceive or remember. Since no one is willing to adopt so narrow a theory, we are driven to the logical theory of truth, involving the possibility of events that no one experiences and of propositions that are true although there can never be evidence in their favour. Facts are wider (at least possibly) that experiences. A "verifiable" proposition is one having a certain kind of correspondence with an experience; a "true" proposition is one having exactly the same kind of correspondence with a fact [...]. Since an experience is a fact, verifiable proposition are true; but there is no reason to suppose that all true propositions are verifiable. If, however, we assert positively that there are true propositions that are not verifiable, we abandon pure empiricism. Pure empiricism, finally, is believed by no one, and if we are to retain beliefs that we all regard valid, we must allow principles of inference which are neither demonstrative nor derivable from experience.