

Relativism.

It is claimed by the school of Russell that relations are in some sense external to the terms they relate.

A. By this is meant

(1). 'Relatedness does not imply any corresponding complexity in the relata'.

(2). 'Any given entity is a constituent of many different complexes'.

B. Both of these tenets presuppose that we know exactly what 'complexity' or 'complex', ~~mean~~ and 'constituent' mean.

(1). The only meaning I can attach to the statement 'a is a constituent of the complex b' is, 'a is a part of b', while a thing is complex if it has parts. Thus to understand the theory of the externality of relations, I must know the precise nature of the part-whole relation.

(2). It would probably be held by Mr. Russell that the part-whole relation is an ultimate, and therefore the meaning of 'Relatedness does not imply any corresponding complexity of the relata' - i. e. things without parts can be related to one another - needs no analysis.

(α). It is quite obvious, however, that ~~it is~~ the part-whole relation is not an ultimate in any sense relevant to the problem at issue, for we can know a relation - e. g. the relation of Egypt to the British Empire - without knowing whether it is a part-whole relation, so that the proposition that things without parts can be related to one another ~~requires~~ ^{demand}, prima facie, ~~analysis~~ ^{that we analyse the nature of the relation between p & w.}

(3). ~~The part~~ x may be considered to be in the part-whole relation to y when the duration, or the extension, or both, of x include those of y, respectively.

(α). In this sense it may be true that simple relata - i. e. relata

Relativism

By relativism I mean that view which claims, firstly, that no proposition which can be known to be either true or false can be made about anything without reference to ^{other} things ~~outside it~~; secondly, that, although our experience possesses and must possess a certain immediacy, we cannot have a ~~strictly~~ ~~immediate~~ knowledge ^{known to be strictly immediate} of any particular thing or any particular fact; and thirdly, that in no significant sense can we ~~be said to have~~ ^{show that we have} knowledge about or acquaintance with any ~~class~~ so-called 'absolute', or totality of all things. It is, as this list of claims shows, primarily negative rather than in its nature, but, as I ~~shall show later in this paper~~ ^{hope I shall show in the ensuing discussion}, it is closely bound up with certain views of the nature of science and ethics that are not entirely negative and sceptical.

Let me take up the three claims of relativism in order; first, no proposition which can be known to be either true or false can be made about anything without reference to ^{other} things ~~outside it~~. This I believe to be the least controversial of all the points at issue in Relativism. The realist, for example, would agree with me, I believe, that all knowledge by ^{description} ~~acquaintance~~ is mediate. If A be anything, then any statement I make about it is either a mere tautology, or says something about the relation of A to things outside it, or about the relation of A to its parts. The very use of language, the very use of thought demand that a thing be given in its relation to other things, for, when I mention a thing I either must give it a generic name, in which case I must treat it in its relation to the other things that come under its generic name, or I give it a proper name, in which case I mark it off from other things. Similarly, whatever I think of, if I am to think of it as a definite object or event at all, must be given ^{as} in time, or ^{as} in space, or in some context or other of some sort, that I may

have some principium individuationis whereby to single it out as this particular object, this particular event. ~~When I think of A, it is essential to my thought of it that A does not exhaust my consciousness at that moment; if it did, and at another time I also think of A, how do I know that it is the same A of which I was thinking? If two experiences are each complete in itself, how can they ever come into contact with one another? It is clear that either we have some means of knowledge of A independent of any propositions concerning A, or that all our knowledge of A is relative.~~

This leads me to my second point; have we, as a matter of fact, any knowledge of any particular event or object or fact, ^{of} which we can prove the immediacy? ~~One thing is clear, that if there is any particular item of our experience which is immediate~~ It is clear that ~~there cannot be~~ there must be something of immediacy pertaining to our experience, for were there not, the knowledge of A would depend ^{presumably} on that of B; that of B, that of C, and so on ad infinitum. But what relativism denies is that if we assign immediacy to the particular experiences A, B, C, etc., we do not really explain this fundamental immediacy of our experience. For let A and B be two immediate experiences. How are we aware that they are two, and not one? It is clear that this knowledge must be finally based on some immediate knowledge, if, again, we are to avoid an infinite regress. But we are confronted with the fact that if the relations between A and B, A and C, etc. are given immediately, as separate experiences, we have still the difficulty pointed out by Bradley, of connecting these relations with the terms they relate. If 'red is different from green' be exhaustively analysable into the immediate experiences of 'red', 'different', and 'green', then how does this state of affairs differ from,

'green is different from red? It is clear that there is only one way of avoiding this difficulty; we must take 'red-is-different-from-green as an ~~un~~ ~~imm~~ totality as an ^{red green} immediate experience which cannot be exhaustively analyzed. ^{red green} A, B, the relation between ^{red} A and ^{green} B, etc. may be immediate experiences, complete in themselves, given in acquaintance, but it red-is-different-from-green, or some larger experience embracing this, must be; moreover, whatever immediacy red and green, etc. ^{may} have in their own right is of no avail to us, for red and green never appear simply as red or as green, but as red or green in this or that context. ~~the~~ The awareness of red is not even the awareness of red as distinct from the awareness of green except in so far as it is the awareness of red-as-distinct-from-green; the awareness, that is, of the ~~situation in which red and green~~ red and green in their relation. If, then, it be true that in addition to that immediacy of the situation in which our particular experiences occur, we have ~~an~~ ^{the} immediate awareness of the particular ~~things~~ ^{experiences} themselves, it must be remembered that it is only through the ~~larger~~ ^{larger} situation that we are able to discriminate between the particular awarenesses we have of ~~the part or event~~. It is obvious, then, that any knowledge of or acquaintance with any particular thing, in so far as it can be known to belong to that particular thing at all, though it involves something of immediacy, cannot be immediate with reference to that particular thing, but must involve reference to something outside it. It can never be shown that in Mr. Russell's sense we are acquainted with ~~anything~~ ~~less~~ ~~than~~ any particular thing.

But now a strong temptation besets us. If, as we have shown, we are certain that our experience is not without

immediacy, and if that immediacy does not pertain to any particular thing as such in our experience, it would seem that we could say that ^{the totality of things of which we have mediate knowledge} ~~our experience~~ as a whole is immediately given, or, at any rate, that we ~~the things which are~~ ^{involved} This assumption is equivalent to the assumption of absolutism; that the totality of all things is an object of acquaintance, for if this be the case, we have in so far knowledge about any particular thing, so that the totality of all things would be the same as the totality of all things whereof we have mediate knowledge. I wish to show that we cannot be sure that we have immediate knowledge of the totality of all mediately given things. For supposing we had such knowledge; how would we know that it pertains to the ^{totality of all mediately given things} ~~totality of all mediately given things~~? It would seem that I could never be sure that ~~it was~~ ^{I was acquainted with this totality until I had} some knowledge about it, ^{which would enable me to discriminate it from other things} Now, we are never ~~sure~~ sure that we have any knowledge about the totality of things whereof we have knowledge, qua totality, — the totality, I mean, not merely of the things of which we have concrete information at this present moment, but the totality of things and events whereof we ever have had, or will have, or will have ^{concrete information} ~~knowledge~~, for it is manifest that any immediate knowledge merely of the totality ^{merely} of things at present clearly in our consciousness is unable to supply us with a basis for the correlation of our present ~~conscious~~ ^{and is on the subject of} experience with our past and our future experiences, ~~so that~~ Now, ~~of~~ ^{of} this totality we can never be sure of having any other than a purely nominal descriptive knowledge, we are perforce unable to identify it with any given thing or fact or situation whereof we are conscious, for to do this would be tantamount to the complete prediction of all future

and is open to all the objections which I have raised against our knowledge of our acquaintance with concrete objects things

events. Therefore, this totality, this absolute is but an empty name to us, and we can have no way of determining that it is this ~~for which our~~ ^{whereof we have} immediate knowledge. Remember, I neither deny nor affirm the existence of an absolute, but I do most emphatically deny its significance.

To conclude, & we have seen that, as I believe, will be universally agreed, all knowledge by description is relative. We have seen that, although our experience is not without immediacy, we ~~have~~ ^{are sure of} complete acquaintance neither with any given part of it, nor the totality of all experience things whereof we have had, have, or will have any information whatever, and hence, we cannot be acquainted with the absolute. These are the negative conclusions that are fundamental to my view. The positive conclusions, which I would be very glad to develop here, would make my paper exceed the time limit, so I shall leave ^{it to} the ~~dis~~ discussion to bring them out.

Approximations are possible; definitive knowledge is not — this is the dictum of relativism. Though no knowledge is certain, any knowledge may be treated by us as certain, and used ~~for~~ the criticism of other knowledge. We can give to any knowledge the brevet-rank of absolute certainty and ultimacy. This is another sense in which it can be said that all experience partakes of immediacy.

But, the critic will say, relativism refutes itself. If no knowledge is absolutely certain, how can the relativist be sure of the truth of relativism? If we can doubt everything, we can't doubt our very doubt. Now, I am quite ready to admit that relativism, like all other theories is subject to doubt and criticism. It is subject to doubt and criticism because "doubt" and "criticism" are words, ~~which~~, like that of all words, whose meanings cannot be determined with absolute certainty.

We ourselves, for example, have had to specify that "doubt" does not mean the same thing as "scepticism". A relativist would as a matter of fact contradict himself if he believed unreservedly in relativism. It is also true that our refutation of such views as Absolutism or Mr. Russell's view cannot be regarded as final; there may be a sense, with the meaning of the terms by means of which they state their systems, in which their systems are true. ~~But what seems to me to be true is this, — if no really vital criticism of a system can be made from outside. But what seems to me to be true is this — if one starts from the standpoint of either of these systems, one finds that in any sense in which it is true it will have very little significance. The "Absolute" degenerates into a mere name, immediate acquaintance contributes nothing of importance to description. It is the pragmatic test that really condemns them in the end.~~

$$a \cdot b = \cancel{\bar{a} \bar{b} i} + \bar{a} \bar{b} o' + a \bar{b} (\bar{a}; \bar{b})$$

$$(a \cdot b) \Gamma c = (a \Gamma b) \Gamma c + (a \Gamma b) \bar{c} o' + \bar{a} \bar{b} i +$$

$$\bar{a} \bar{b} \bar{a}; \bar{b} \quad i'$$

Let

$$(a \Gamma b) \Gamma a = \bar{a} \bar{b}$$

$$\cancel{(a \Gamma a) \Gamma a = \bar{a} \quad i' \Gamma a = \bar{a}}$$

$$a \Gamma (b \Gamma a) = \bar{a}; \bar{b}$$

$$\cancel{i' \Gamma (i' \Gamma i') = i'}$$

$$a \Gamma a = i'$$

$$\cancel{i' \Gamma (a \Gamma a) = o'}$$

$$\cancel{(a \Gamma (i' \Gamma a)) \Gamma a = a}$$

$$i' \Gamma (a \Gamma a) \Gamma a = \bar{a}$$

$$\cancel{i' \Gamma a = \bar{a} \quad i' \Gamma o' =}$$

$$a \Gamma o' = \bar{a}; \bar{a}$$

$$(a \Gamma a) \Gamma a = \bar{a}$$

$$i' \Gamma a = \bar{a}$$

$$a \Gamma (a \Gamma a) = \bar{a}; \bar{a}$$

$$a \Gamma i' = \bar{a}; \bar{a}$$

$$i' \Gamma i' = o'$$

$$(a \Gamma (a \Gamma a) \Gamma a) \Gamma a = o$$

$$\cancel{(a \Gamma a) \Gamma (a \Gamma b) \Gamma a = a + b}$$

$$\overline{(a+b)}; \bar{c} = \bar{a}; \bar{c} + \bar{b}; \bar{c}$$

$$\overline{(a+b)}$$

Relativism

10/10/11 1.

(It is a tenet of many philosophers that there is some object of experience for whose existence the existence of anything else is not a necessary condition: that, in other words, some substance can be known. Descartes regarded the self as a substance; Spinoza thought that God, and God alone, is conditioned by nothing outside himself; Leibniz believed that each monad is a self-determining substance. Locke and Berkeley took over the notion of substance from Descartes; and even Hume, though it is true he no longer considered the self and matter as substances, regarded each sense-datum as entirely independent of everything else. Hegel and the Absolutist school of philosophers, while firmly denying that any particular thing is independent for its existence of all other things, assert that the Universe knows itself as a complete whole, conditioned by nothing outside itself. At the present day, there is a very influential school of philosophers, embracing, among others, the authors of the "New Realism" in America, and Mr. G. E. Moore, and ~~Mr. Bertrand Russell~~ in England, who hold that we have knowledge by acquaintance of certain sense-data and objects of introspection, and that these objects of acquaintance are entirely independent of anything else, for their existence.

Throughout this paper I shall speak of the knowledge or experience of an object which does not depend for its existence on the existence of anything else as a self-sufficient knowledge or experience.

It will be noticed that those views which hold that self-sufficient experience exists divide themselves naturally into two classes, according as to whether or not they hold that any object less in range than the whole object of an experience can be experienced self-sufficiently. Those who hold views of the first class believe that we experience certain particular objects, such as the self, or certain sense-data, whose existence is conditioned by nothing outside themselves; those who hold views of the second class believe that there is only one substance — the ~~Universe~~^{Universe}. Descartes, Leibniz, the English Empiricists, and Mr. ~~Russell~~^{Moore} hold positions of the former type; Spinoza, Hegel, and the ~~Absolutists~~^a are adherents of the latter doctrine.

It is an argument often used by philosophers of the second type against those of the first that in so far as we are experiencing something whose existence is independent of that of anything else, we can only get information from ~~it~~^{the experience} which is independent of the existence of anything else, and hence irrelevant to everything else. Whatsoever self-sufficient experience I may have must float down the stream of my consciousness as passively as a chip of wood on a millstream. If the particular patch of red I am perceiving at this present moment could be exactly the same patch of red, whatever the context in which it occurs might be, then my sensation of this particular patch of red can throw no light on the

context in which it occurs: it would not in itself be an experience of red as distinct from green, nor an experience of a color having certain physical and psychological properties, nor an experience of the color known as "red", nor even of the thing before me at the present moment. Even "this" is far too descriptive a name for it. *Such an experience* ~~It~~ cannot be used as the ground of explanation of any other experience: for all the part it plays in my consciousness, it might be known by someone else instead of by myself. Indeed, the only meaning which I can attach to the statement that a certain item of experience belongs to me is that it belongs to a system of experiences internally relevant to one another which I call myself. At any rate, any self-sufficient experience I may have is a mere excrescence on the rest of my consciousness, and nothing in the rest of my consciousness can give the slightest evidence of the existence of self-sufficient experience.

This argument only tends to prove the uselessness of self-sufficient knowledge of particular things for explanatory purposes, and those who believe in its existence might still retort that they are intuitively certain of the existence of self-sufficient knowledge of particular things, entirely apart from ~~its~~ *all such knowledge might have* usefulness ¹ for explanatory purposes. But there is a far more vital difficulty which Mr. ^{Moore} ~~Russell~~ and those who hold similar views encounter. To say that

something exists whose existence has no necessary condition other than itself is equivalent to saying that something exists which can exist in isolation, for the only meaning of, "a is not a necessary condition of b", is, "in some cases b exists and a does not." Now, to say that a can be isolated from everything else, and yet be the same thing as the a that now exists in the context of our experience, is self-contradictory. For, if it were completely isolated, it would be isolated from its identity with the a which now exists in the context of our experience, and would not be the same a which now exists in the context of our experience. Even if the whole world, except the particular patch of red I am looking at, should be abolished at this present moment, it is only by virtue of the relation it would have to the world which had been abolished that this patch would still remain the same patch of red as the one at which I am now looking. To say that x is in some relation to y, and that z is in no relation to y, and that z has some sort of sameness with x, is clearly self-contradictory, for in this proposition we assert a very definite relation between z and y.

In fact, the very hypothesis, "If a were isolated" refutes itself, for a is in a context if it is a possible argument to the propositional function, "a is isolated." It is true that one may argue that the definition of the proposition, "a is isolated," may still be determined in such a

manner that even under this condition a would be isolated, but this argument only carries weight if one believes that the proposition, ('a is isolated'), can have some sort of existence with nobody to assert it. If this is not the case, "a is isolated," will contradict itself, because, in order for this proposition to be a proposition at all, it is necessary for a to be in relation to some knowing subject. This is a fortiori necessary if it is to be a true proposition. And it is extremely hard to see what meaning there can be in saying that a proposition exists without reference to the possibility of its being asserted by some subject.

At any rate, it is not true in any significant sense that the objects of experience would be exactly what they are now if they were in isolation. If a sense-datum is to enter into the system of our experiences, it must be in relation to this system from the beginning. Moreover, the introduction of self-sufficiently given relations between the self-sufficiently given terms of our experience would in no way render it a coherent experience, as Bradley has so well pointed out. If I know ('black' and 'darker' and 'white'), I do not, eo ipso, know "black is darker than white," nor any objective situation these ^{words} ~~words~~ may represent. These terms and this re-

One may say, e.g., that a is isolated when it is in relation to no particulars except facts of which it forms a component.

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lation would give me just as readily, "white is darker than black." It may be retorted, "No. It is true that the terms and their relation alone do not give us the required proposition, but the terms, their relation, and their order do." It is easy to see the futility of this answer. Let B and W stand for 'black' and 'white', respectively, D(x,y) for "X and Y are in the relation, 'darker than,'" and XPY for "X precedes Y in the relation, 'darker than,'" ("Black is darker than white" will then be represented by the symbols D(BW) and BPW, while "White is darker than black" will be represented by the symbols D(B,W) and WPB. In both of these, B, W, D, and P may be found. It is clear that this method of proceeding will give us no results: from the terms and their relation we can never get to the terms in their relation. To be brought into connection by a given relation, the terms of that relation must be known initially as related, and hence our knowledge of each of them by itself cannot be mere knowledge by acquaintance.

It thus becomes clear that in addition to any self-sufficient knowledge we may be supposed to have of items of experience less than the whole of our present experience, we must experience in relation from the very beginning everything we ever know in relation. Our experience, if given at all, must be given as a system. Moreover, no property of this system can give the slightest evidence in favour of the existence

of various items of self-sufficient experience, in addition to our experience of this system since, as we have shown, we can never proceed from a self-sufficient item of knowledge to any further knowledge. Our experience must be coherent in cross-section.

But it is not enough that our experience should be coherent in cross-section: it must also be coherent in sagittal section. If each moment of our experience would be precisely what it is if neither past nor future existed, then the experience of a moment would, to all intents and purposes, constitute my whole personality at that moment, and I would be undergoing a continual alternation of personality. It is indeed a logical possibility that our present is entirely dissociated from our past: that the I which writes this word is an entirely different person from the I that crosses this t. It is, however, a view which nobody will hold, for if it were true, our memory would be but an illusion, and our expectation a vain self-deception. Though at each moment we might have an illusion of the permanence of our experience, that illusion would have no permanence. Our ideas would spring into being full formed, like Athene from the head of Zeus. That this may not be the case, that our experience may possess longitudinal coherence, it is necessary that the successive instants of time should be known in relation to one another, and hence that each moment should not constitute a

self-sufficient object of experience.

It does not render our experience temporally coherent, moreover, to regard it as made up of a series of self-sufficient experiences, each of finite duration. For, suppose that the maximum duration of such an experience is t seconds. Let A, B, C and D be a sequence of instants of physical time following one another in the order given. Let the durations of the intervals AC and BD each be t seconds. Then the experience of all those moments between A and C preceding C by an interval less than t seconds will form our self-sufficient experience at C . Nowhere else will we experience the interval AC immediately: at any moment before C , C will be as yet unexperienced, while at any moment after C , the lapse of time between A and that moment being greater than t seconds, A will have passed forever beyond our present self-sufficient experience. Similarly, the only moment when the whole interval between B and D is experienced in one self-sufficient experience is D . Though AC and BD have BC in common, it can never be learned from any of our self-sufficient experiences that they possess this in common: this can never be known before D , for then BD is as yet unknown as a whole, nor after C , for then, since the experience of A no longer forms a part of the self-sufficient experience of the moment, AC has passed beyond any self-sufficient experience. Even though the duration of the objects of our self-sufficient experience

would thus be more than momentary, we would have at each moment one self-sufficient experience, and one only, and no self-sufficient experience would have any duration.

So far the arguments we have been using are such as the ~~A~~bsolutists use to prove ~~A~~bsolutism. The ~~A~~bsolutist of the type of Bradley starts with the presumption that the completely real must be that which as an object of knowledge is completely self-sufficient, and, by arguments such as those we have used above, shows that if any part of an experience be self-sufficient, it will not in any significant sense be part of that experience. So far I agree with the ~~A~~bsolutist, but when he confidently asserts that there must be some completely real and self-sufficient experience, I must part company with him. For his ~~A~~bsolute experience is not experienced in its self-sufficiency by any human being. Human experiences possess too many lacunae for anyone to hold that view. Our mind is continually stretching out tentacles to the past and the future: here we search for a memory forgotten, there for the verification of a prediction. It is only in its "relative manifestations" that the ~~A~~bsolute can be an object to us, and in its relative manifestations, as an object of our consciousness, the ~~A~~bsolute fails to attain perfect self-sufficiency. The ~~A~~bsolute, qua ~~A~~bsolute, is a mere name to us, and must from its very nature be entirely irrelevant to anything we can ever know. As has been often said, if the

^a Absolute is self-sufficient, then no appearances can emanate from it, for if it enters into relation with any appearances outside itself, it fails to attain self-sufficiency. And though it be said that the ^aAppearances are contained in the ^aAbsolute, not even the ^aAbsolutist will admit that the partiality, the relativity of these appearances is so contained. But the moment anything can be found which may in any way be contrasted with ^aReality, then ^aReality becomes a mere partial ^aReality, and any experiences which we may have of it are on the same plane as other partial self-sufficient experiences, so that ^aAbsolutism is open to precisely the same objections it raises against other philosophical views.

It is no answer for the ^aAbsolutist to retort that the ^aAbsolute has a completely self-sufficient knowledge of itself. The ^aAbsolutist believes in the existence of the completely ^aReal because he considers it the true object of his own thought. But he finds that it is never the object of his thought, in its complete reality. What should his conclusion be, then? That the completely ^aReal exists in its complete reality independently of his thought? It may have such an existence or it may not; † which alternative is the true one no argument on the basis of human knowledge can indicate. But what is clear is this: the true object of our human thought is not the completely ^aReal, and all reality that we know is relative and partial. The ^aAbsolutist quite

correctly shows that the world of knowable particulars does not contain his ^{re}Reality, as such, but he fails to make the obvious inference that it is his notion of ^{re}Reality, and not the world of knowable particulars, which is at fault, and should be regarded as mere ^aAppearance. The real conclusion to which the ^aAbsolutist argument should lead us is that in no significant sense can we assert the existence of self-sufficient knowledge.

But if no knowledge is self-sufficient, none is absolutely certain. For if we are not sure that any experience would be what it is in entire isolation from everything else, we can know no propositions in such a manner that our mere awareness of them guarantees our knowledge of their truth, for the simple reason that we can never have, in any significant sense, a mere awareness of them unrelated to the other objects of our consciousness. We can, that is, have no knowledge which is certain à priori. Now, every proposition known with absolute certainty must be obvious à priori, or deducible by infallible means from a set of propositions known with absolute certainty. In the latter case, we may know à priori when we have exhausted the presuppositions of the given proposition, or this may be discovered by an infallible deduction from a set of presuppositions known with absolute certainty; and so on indefinitely. But since, as we have seen, we have no knowledge certain à priori, we are driven

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to the conclusion that there is no absolutely certain knowledge at all, for to any given set of presuppositions for a given proposition which is to be proved with absolute rigor, there must be adjoined other propositions from which it can be deduced that the original set of presuppositions contain everything that it is necessary for us to know in order to deduce with absolute rigor the desired proposition, and so in infinitum. Without self-sufficient knowledge at some point or other, we can never arrive at all the presuppositions of any proposition.

Since we can never arrive at all the premises of any proposition, although no knowledge is self-sufficient, no knowledge is merely derived; that is, more is said in any proposition than in any set of premises we can assign to it. Even the propositions of geometry do not follow merely from the axioms of geometry. The axioms of geometry are stated in some language, either of words, or of symbolism, but it is not merely so many queer marks on paper, so many sounds, that go to make up the axioms of geometry. No! These marks or sounds must be interpreted according to certain rules which collectively constitute the grammar of the language of words or symbolism in question, and these rules as well as the axioms of geometry, themselves condition the propositions of geometry. But these rules, too, must be applied, and we need further rules by which to apply these, and so on in-

definitely. At some stage or other we come to rules which are not written or spoken, but only thought,³ but in so far as they are definitely formulated rules, they must be applied in accordance with further rules. The so-called 'laws of thought' are no exception: to make use of the law of contradiction, you must have some criterion which will enable you to identify a proposition. As Mr. Russell has pointed out, no law can cover itself as a special case of its field of validity, so that the 'laws of thought' cannot themselves dictate the mode of their application.

The views I have stated above — that no experience is self-sufficient, that no knowledge is absolutely certain, and that no knowledge is merely derived — I call collectively 'Relativism'. It is obvious on the face of it that Relativism is closely related to two great tendencies in modern philosophy: Pragmatism and the metaphysics of Bergson. Like both these theories, it is a protest against mere formalism in Metaphysics. Pragmatism insists that every philosophical theory should be judged by the value of its consequences for

³It is our inability to give any exhaustive set of rules for any language of words or of symbolism which makes every grammar contain idioms (i.e., words or phrases or symbols whose use is not adequately explained by the rules of grammar). Since any set of rules is inadequate to express all the usages of any language, to understand any language of words or of symbols, we must enter into its spirit. This 'spirit of the language' consists in the rules which are thought, but not formulated in words, and the still greater body of usages which are rather felt than formally thought. Even in mathematical symbolisms, it is necessary for the student to 'enter into the spirit of' the symbolism.

action; Bergson holds that the intellect alone gives us but a superficial account of the universe—that it is by intuition, by that species of thought which allows the mutual interpenetration of idea with idea, and does not insist that concept shall be separated from concept by rigid formal definitions, that we really grasp the inner meaning of Reality; Relativism insists that the supposed absolute rigidity of the definitions used in Metaphysics is but a fiction, that no concept can ^{mean} be what it ^{does} is entirely independently of ~~all other concepts.~~ ^{everything else.} To all these theories the Universe is, to all intents and purposes, infinitely complex: at any rate, they all regard the infinite complexity of the Universe as an object of knowledge as a hypothesis incapable of ultimate disproof. For Pragmatism regards the Universe as just as complex as it is profitable to regard it, and does not consider it possible to determine this in advance; Bergson considers all analysis of the Universe, from the very nature of analysis, inadequate; while Relativism shows that we are unable to find any notions themselves independent of all analysis (i.e. self-sufficient) in terms of which we can analyze the Universe. Pragmatism, Bergsonianism, and Relativism are three forms of anti-intellectualism.

Moreover, Relativism agrees with Pragmatism in the manner in which it criticizes intellectualism. Why is it that we have condemned Absolutism or the philosophy of Acquaintance?

Not because ~~they are~~ ^{it is} necessarily false, but because ~~their~~ ^{it} truth is unverifiable; because the existence or non-existence of the ~~absolute~~ ^{absolute}, or knowledge by acquaintance, would not be distinguishable from ~~their~~ ^{it} presence — ~~their~~ ^{it} presence would lead to no significant results. But the cardinal notions of Pragmatism are that the truth of a theory consists in its verifiability, that only that which is distinguishable from something else is distinct from it, and that no theory is either true or false except in so far as its consequences are significant for human action. That is, our dialectic showed that the views we criticized are not true by proving that they are unpragmatic.

But the fact that we have made use of the pragmatic method in criticizing other views does not necessarily commit us to the acceptance of the pragmatic criterion of truth as an ultimate criterion. We are not compelled by anything we have said above to make the unqualified assertion that the whole meaning of a conception expresses itself in its practical consequences. Indeed, taking the words as they stand, we cannot accept this as final, for in no significant sense has a conception a "whole meaning", nor are we able to give a perfectly adequate account of what we mean by its "practical consequences." As the pragmatist is the first to urge, no conception has a meaning ~~except~~ ⁱⁿ some particular context or other, and in no significant sense can ~~We~~ ever arrive at

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the total context of any concept. Every concept we can mention is particular and partial. Moreover, the notion of the "practical consequences" of a view is extremely vague and indeterminate, and cannot possibly be regarded as an ultimate. Does the phrase mean those consequences which satisfy or fail to satisfy some of our particular purposes, or any of our purposes, or all of our purposes? Just when is a mental state a purpose, after all? These questions and many more must be answered once for all before we ~~could~~^{can} accept the pragmatic criterion as an ultimate. Pragmatism can claim only to be a better relative standard of truth and falsity than the views it opposes: as an absolute standard, it is open to the objections we have raised against all views which claim to have attained complete truth. And even as a relative standard, whatever our individual opinions on the subject may be, there is nothing in ~~Relativism~~ⁱⁿ Relativism per se which compells us to admit that Pragmatism has any advantages over any other theory of the nature of truth. The fact that the relativist denies the existence of the pure reason does not in itself demand that he should believe in the primacy of the practical reason, in the Kantian sense of the latter term. As Mr. Russell has emphasised in his essay on "Pragmatism" in his "Philosophical Essays", open-mindedness is not the exclusive prerogative of the Pragmatist.

I do not think, however, that James would have claimed

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seriously that Pragmatism has attained any absolute truth: James was too open-minded a man ever to become quite dogmatic. But the Humanism of Schiller claims to be nothing if not final. Schiller treats his fundamental proposition, "Man is the measure of all things," as though it were an ultimate truth. Now, it is easy to see that, taken in any absolute sense, this is either a tautology or an error. For what constitutes a man? It is not as subject that our self can be made the measure of all, or of any things; it is only the self as known, as object, that can be made such a measure. But what is the self as known, the empirical ego? As James pointed out, we have many empirical egos: we have a social, a professional, a business, a religious self, etc. No one of these is the measure of all things: our religious self is the measure of religion, our business self of business, etc. But, it will be said, it is our empirical ego taken in its widest sense, embracing all these, that is the measure of all things. But is this not a mere tautology? Is not the empirical ego but another name for that which is central in our experience, for that to which other experiences are related? Is not the sole reason that man is the measure of all things, that "man", taken in this sense, is a mere synonym for "the measure of all things"? If one define "man" by naming the body, or the body, and certain particular experiences closely related to it, one will only get a relatively

imperfect measure of all things: just as the inch is no longer the length of the royal thumb, nor the ell the length of the royal arm, so most of our criteria become progressively dehumanized, though of course, since no two things are completely out of relation, they never completely lose their connection with the self. But it is only in this relative sense, where "man" stands for certain central aspects of our experience, which cannot be delimited with absolute rigor, that "Man is the measure of all things" is significantly true. And even here it would be better to say, "Man is a factor entering into the measurement of all things, and the most significant factor in the measurement of many, perhaps most things", than merely, "Man is the measure of all things." Humanism is partial in precisely the same sense that the Humanists accuse Naturalism of being partial, though perhaps not to the same degree.

But, all things considered, Relativism is far nearer to Pragmatism than to Bergsonianism. Relativism only objects to Pragmatism in [so far as it seems to claim to have said the last word in philosophy: a relativistic Pragmatism is quite possible. But Bergsonianism contains elements which are essentially non-relativistic. Bergson postulates gulfs which cannot be bridged between homogeneous duration and mathematical time, between purposes and mechanism, between life and matter, between language and thought, between that intuitive

thought which allows the mutual interpenetration of idea
 with idea, and intellectual thought,—that thought which deals
 in absolutely hard-and-fast concepts and clear-cut distinc-
 tions. The world is for Bergson divided by a set of funda-
 mental dichotomies, which are made with absolute ^{sharpness} ~~rigor~~.
 Though he believes that the opposing sides of these dichot-
 omies are found everywhere intertwined and interrelated
 with one another, their opposition is for him a fundamental
 and irreducible fact. Now, to suppose the existence of ab-
 solutely ^{sharp} ~~rigorous~~ distinctions runs directly counter to the
 spirit of ^{the} Relativism, and, I believe, of Bergsonianism it-
 self. For Bergson, in a quite ^{the} Relativistic way, believes
 that our only way of attaining a true insight into the in-
 most nature of the world is by a sort of thought which does
 not admit absolutely rigid distinctions or clean-cut concepts—
 the kind of thought he calls intuitive. Intellectual thought
 he regards as giving us only a surface view of the ^{the} Universe.
 Therefore, judged both by its own criteria and by those of
 Relativism, Bergsonianism fails to give us an adequate in-
 sight into the true nature of things, for it treats the world
 as made up of two absolutely separate, irreconcilable halves.
 Bergsonianism gives a highly intellectualistic account of
 the ^{the} Universe, tending to show the inadequacy of intellectual-
 ism. It is true, M. Bergson states that the intellectualis-
 tic form of his presentation of ^{the} Metaphysics is only the hull

in which a really intuitive treatment is concealed, yet it seems to me that his unbridgeable antitheses are in spirit even more intellectualistic than in form. Certainly, they satisfy all the criteria he gives of intellectual in contradistinction to intuitive thought.

It seems to me that Bergson's error arises as follows: Bergson believes that the physical sciences and mathematics deal with notions that are absolutely rigid. He thinks that there is a more or less independent, purely intellectual world, within which these disciplines move, though he regards this world as of derived and secondary importance. Though the world of space and matter is for him but a surface-world, but the external manifestation of the true world of time and life, it is a world of pure space and pure matter and pure forms, uncontaminated by any taint of time or of life or of the "mutual interpenetration" of idea with idea. Whether this world is or is not ever found in entire separation from time, life, and intuitive thought is of no essential importance: Bergson supposes that this world has some sort of an independent existence. But we have seen that such a world is a mere nonentity; that natural science, like every other intellectual discipline, must deal with imperfectly defined concepts, and hence must permit a certain amount of the interpenetration of idea with idea. Even in the case of mathematics, that most abstract and most formal of

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all disciplines, we have seen that no assignable set of rules will ever exhaust the conditions of the validity of a single deduction; we have seen how the very use of a symbolism is conditioned by our thinking according to the spirit of the symbolism, which can never itself be exhaustively and adequately symbolized. No! Bergson's dualism is a false one: pure formal thought exists only as a misinterpretation of mathematics by Bergson and certain formalistic philosophers of mathematics. Only the realm of the mutual interpenetration of idea with idea really exists.

But even this realm does not exist quite as Bergson conceives it. Since Bergson regards mathematics and the allied sciences as purely formal disciplines, and puts them in a world by themselves, he is forced to consider the realm of the mutual interpenetration of idea with idea as free from all taint of mathematics. In our true insight into the world, he believes, we cast aside the shackles of formal reasoning, and with a sort of a systematical intuition, perceive immediately the inmost nature of reality. Scientific reasoning, though perhaps necessary as a propædæntic^{to} to our final appreciation of reality, is entirely transscended^c by it. This mysticism is the necessary result of a belief in the purely formal character of mathematics and physical science. But, if we do not believe that mathematics and physical science are purely formal, if we believe that these disciplines admit

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of and even demand the 'mutual interpenetration' of idea with idea, then there is no ground for thinking that they, too, do not play their part in our true insight into the universe. Indeed, there is no metaphysical reason why the extremest claims ever made for the value of mathematics and science as factors in the explanation of the universe (provided that these claims do not demand that mathematics or science should be ultimate) should not be true. Bergson sets up a windmill, calls it physical science, and then charges it most valiantly. But it is only because it is a windmill, and not true science, that he attacks, that he comes off victorious.

We have explained what we mean by Relativism, and wherein it differs from other philosophical beliefs, and we have given certain reasons which seem to justify our preference for it. But before we close this paper we must consider certain objections which have been raised against some of the views which go to make up the Relativistic position. Bradley raises an objection against our position which might seem at first sight fatal. He says, "In theory you cannot indulge with consistency in an ultimate doubt. You are forced, willingly or not, at a certain point to assume infallibility. For, otherwise, how could you proceed to judge

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at all? The intellect... ~~is~~ in the intellectual world... ~~is~~ must remain supreme. And, if it attempts to abdicate, its empire is forthwith broken up.... Even the extreme of theoretical skepticism is based on some accepted idea of truth and fact. It is because you are sure as to some main feature of truth and reality, that you are compelled to doubt or to reject special truths which are offered to you. But, if so, you stand on an absolute principle, and, with regard to this, you claim, tacitly or openly, to be infallible. And to start from our general fallibility, and to argue from this to the uncertainty of every possible result, is in the end irrational. For the assertion, "I am sure I am everywhere fallible," contradicts itself, and would revive a familiar Greek dilemma."

Bradley's argument here is vitiated by the ambiguity of the term, "doubt". ("Doubt" may mean (1) the absence of certainty, or (2) disbelief, or (3) an attitude of active questioning. In the first sense, I may be said to have doubts of the law of the Conservation of Energy, because no proofs which may be given of it are adequate to establish it as more than an approximation, but that does not mean that I disbelieve it, nor even that I actively question it. Bradley is right in saying that an ultimate disbelief in every proposition, or even an ultimate questioning of every proposition is impossible, for every disbelief or question is poss-

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ible only on the basis of some belief which is not at the same time questioned. If I disbelieve that $2+2 = 4$, I believe that $2+2 \neq 4$, and if I question whether $2+2 = 4$, I do so on the basis of some further mathematical notions of mine which I leave unquestioned for the time being. But an ultimate uncertainty is not by any means impossible. The fact that any uncertainty must have a ground does not lay upon us an eternal injunction never to be uncertain of this ground, — in fact my very uncertainty whether there is a ground for doubting a given proposition or not is a sufficient ground for my uncertainty of its truth. The principle on which I stand in any doubt I need not regard as infallible: I may simply consider it extremely plausible. True, if we had the bare alternative before us of criticising the principle of our doubt while we are doubting, or not criticising it at all, Bradley's argument would hold, and I would need an absolute principle as the ground of my doubt. But this is not so: the fact that I have once considered a proposition without questioning it does not mean that I have thereby relinquished forever my right to question it. Moreover, the true doubter would not say, "I am sure I am everywhere fallible"; or, if he said it, he would not regard the certainty asserted as absolute. For to say with absolute confidence, "I am sure I am everywhere fallible," you must have an absolutely adequate knowledge of wherein fallibility consists, and what

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constitutes sureness. And these concepts, like all concepts, can only be defined in terms of concepts themselves requiring further definition, and so in infinitum. So in a very significant sense, the ^rRelativist may be said to regard his very uncertainty as uncertain. ^rRelativism only claims to be relatively true.

But the moment we take this view of ^rRelativism, the dialectical refutations we have made of other views take on a new aspect. For if we admit that the ^{correctness}~~truth~~ of these refutations is only relatively certain, the views refuted may still retain something of relative truth. Absolutism, Bergsonianism, the ~~Acquaintance~~ philosophy ^{of R.M. M. Moore}, and all the views we have opposed will, looked at from this new standpoint, have a certain amount of truth in them. In what sense, then, has our refutation been a refutation at all? If these views, when crushed to earth, rise again, why should we not regard them as true? Should we not rather regard what we have considered a refutation a dialectical corroboration of these positions, showing that their very denial involves their assertion?

No! for although all propositions are relatively true, not all relative truths are of the same value. Though no absolute refutation of any view is possible, a relative refutation is. And what we have really shown concerning the views we criticize is this: any sort of truth they may have

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is very different in character from what we ordinarily call truth. We have attempted to discuss the views we oppose, and see what consequences they would lead to if they meant anything at all similar to what they appear to mean, and we have seen that these conclusions are very paradoxical, to say the least. Perhaps by some distortion of language they may be made to represent some significant reality, but such a distortion would have to be very far-fetched. Though the views we have criticized are only relatively uncertain, their degree of certainty, if taken as they stand, is much lower than that of ^rRelativism. This does not necessarily mean, however, that they are not perversions of views of a high degree of certainty, couched in relative terms.

But those who hold the views I criticize may answer, "Yes, ^rRelatively speaking, our views may be of a low degree of truth, but absolutely speaking, they are known with absolute certainty. You yourself admit that the validity of your arguments is only relatively certain, and that you only prove the relative dubiousness of other views. Hence, your arguments do not at all concern our claims to have reached absolutely certain conclusions." This argument is, strictly speaking, unanswerable, for the same reason that ^mMysticism, and all philosophical views which claim to be supported by some brand of knowledge essentially different from the sort of knowledge we recognize ourselves to possess, are unanswer-

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able. If my opponents actually meant by absolute knowledge something generically different from relative knowledge, then no arguments on the basis of relative knowledge could overthrow their faith in absolute knowledge. If one believes that, for example, in the contemplation of the ^a Absolute we have an insight into the nature of the ^u Universe different, not in degree, but in kind from the knowledge we have of "appearances," no argument can refute him. But I do not personally experience any different sort of knowledge than the relative knowledge of which I have given an account in this paper; and I believe that it is the results of this knowledge that the views I criticize mean to express. I believe that both the experiences of the ^a Absolutist, the ^a Acquaintance philosopher, the ^p Pragmatist, and even the Bergsonian, and the set of notions which they use to analyze their experiences, are radically similar to my own. I believe I am not talking entirely at cross-purposes with every other philosopher. Just as the ^a Absolutist thinks that all other philosophical views are incomplete ^c Absolutisms, and as the ^p Pragmatist thinks that all other philosophical views are inadequate ^p Pragmatisms, so I must think that all philosophies are nascent ^r Relativisms. This may seem a tremendous act both of faith and of presumption, but it is the sort of act of faith and presumption that everyone who holds a philosophical position must perform before his view can enter the

lists against other philosophies.

We have seen, then, the bearing on ~~Relativism~~ of the objection to it on the score that a universal doubt is impossible. There is another ground on which it might seem that valid criticisms of ~~Relativism~~ could be based. It is clear, as we have shown, that ~~Relativism~~ demands that experience should be, at least potentially, infinitely complex. For since no knowledge is self-sufficient, each item of knowledge ~~must be capable of being referred to~~ *means what it does only in relation to the objects of* other items of knowledge, which, in turn, ~~may be referred to~~ *are what they are only in relation to the objects of* still other items of knowledge, and so on indefinitely. To some people the notion of infinite complexity seems repugnant. "What!" they will say, "Does each item of knowledge demand reference to other items of knowledge? Is no experience simple? In the first place, this would make all knowledge absolutely, not relatively uncertain, for it would demand a detailed knowledge of the ~~Universe~~ before we could have any knowledge of any part of it. In the second place, the human mind rebels against the notion of infinite complexity."

Such criticisms of ~~Relativism~~, plausible as they may seem, are not really valid. For, in the first place, ~~Relativism~~ does not say that in order to have any comprehension of any item of knowledge we must refer it consciously to all or any other items of knowledge. Relativism does not deny that we may have "innate ideas", or other forms of instinctive

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knowledge. It is not the temporal, but the logical a priori
 that it ~~denies~~^{questions}. It merely says that any new knowledge we
 acquire must be internally relevant to our previous know-
 ledge: that only in proportion as it is thus relevant is it
 knowledge at all. It does not impose upon us the psychologi-
 cal task of experiencing each item of experience in conscious
 proximity to every other item, but simply cautions us that
 we are never ^{sure that we are} done with our labor of comparing one concept
 with another, of criticis~~ing~~^{ing} each notion and theory of ours
 on the basis of our other theories and notions. The former
 task can indeed never be accomplished, and if ~~Relativism~~^{Relativism}
 claimed to be a psychological theory of what actually occurs
 in our minds, we would have to regard knowledge as not re-
 latively, but absolutely impossible. The latter task,
 though, from the nature of the case, it can never be finish-
 ed, is by no means futile. Is the physicist discouraged
 because he knows that neither he, nor any~~one~~^{one} else, will ever
 be able to verify ^a single law of physics with more than approx-
 imate accuracy? Indeed, does he not expect with confidence
 that the next twenty or thirty years will bring new formula-
 tions of almost every physical law? The notion of the in-
 finite complexity of experience which ~~Relativism~~^{Relativism} demands is
 none other than that which the scientist has long made use ~~of~~^{of}:
 it is merely the notion of the infinite potential complexity
 of experience. It is our right to analy~~se~~^{se} every concept, not

our duty to analyse ³ any concept exhaustively, on which the ² Relativist insists.

In the second place, I doubt whether the human mind feels any great repugnance against the notion of infinite complexity. Against the spread-out infinite complexity which Royce attributes to the ^a Absolute ² Experience, I, at least, it is true, feel an instinctive repugnance. But, as we have just been saying, this is not the sort of infinite complexity which ² Relativism holds to exist. The ² Relativist believes that everything, in so far as it is understood adequately, is understood in relation to other things; ² - that our analysis need never come to a definitive stopping-place. And I think that that critic to whom all philosophers sooner or later appeal — the common man — will agree with me in this. He is never satisfied when, in answer to some question he asks, the metaphysician says, "This is ultimate, and hence inexplicable." For him, there is a "why" to everything, and everything has a structure, if ^{is taken} you only ~~take the~~ trouble to find it. In the same frame of mind in which he expected the atom to be divided, and confidently expects the electron to be divided, he distrusts those who tell him that certain of his experiences are simple and unanalysable. The common man is, as a matter of fact, a thorough ² Relativist: ² an "instinctive" repugnance against the belief in the infinite complexity of the universe is only to be found among those who, like the White Queen in "Through the

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~~Looking-glass~~,⁴ have schooled themselves long and carefully in believing impossibilities.

The scientist too, I repeat, is an out-and-out ^rRelativist in all that concerns his science: in all, that is, that he does not take over on faith from the technical philosopher. He realizes full well that his instruments give only approximate readings, that his observations record only approximately the readings of his instruments, that his laws and his formulae are mere approximations, and that even the margin of probable error which he calculates for his readings and his laws is only approximately determined, so that he never has a completely accurate knowledge of the degree of approximateness of his approximations. It is even only with approximate certainty that he knows that certain approximations are more accurate than certain other ones. In his whole work, presuppositions and conclusions together, he knows that he may search in vain for a single absolutely certain fact. Yet he works on, correcting approximate hypotheses with the aid of others also approximate, wearing them down by a sort of mutual attrition, much as the grinder of mirrors secures for his mirrors a highly accurate plane surface by first grinding two approximately flat pieces of glass together, then grinding each in turn against a third similar piece, then grinding them together again, and so on indefinitely. Our physics of today is the product of the

imperfect physics of the past, much as the tools of the modern smith were forged in the smithy of yesterday. And just as the imperfection of the tools of the past smith conditions the perfection of the tools of the present day, so the inadequacy of the past determinations of physical constants and laws prevents our present determinations of these constants and laws from being completely adequate. As the steam-hammer of today is the lineal product of the first stone hammer used by primitive man, through many generations of hammers, each used in making the next, and therefore must share, though in an infinitesimal degree, its deficiencies, so modern science is the lineal product of the crude physics of common sense, and partakes to some slight extent in its inadequacy, because it is obtained from it by a self-criticism which is always incomplete because it is a self-criticism. Science begins, remains, and ends in approximations. Yet this does not mean that it ends where it begins: we are as certain as we can be of anything that the approximations of science today are, in general, better than those of science yesterday, and not so good as those of science tomorrow. We are quite sure that a new statement of a law of science almost invariably marks an advance on all previous statements. Yet, be it noted, we never judge whether any scientific hypothesis is better or worse than another by any criterion which is itself known to be more than approximately true.

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But if, as we have seen, approximate knowledge is recognized to exist in physics without any certain knowledge to back it, while physics is recognized by all to present us with the most certain propositions we can reach, short of pure mathematics, it is clear that ~~Relativism~~ cannot be accused of denying the existence of all certainty, or of being a mere negation of all belief: it is only when one thrusts upon the ~~Relativist~~ a false dilemma between an absolute certainty and an equally absolute ignorance that his view may be made to appear in that light. Relativism is a philosophy of doubt, but it is of a liberating, not an enslaving, doubt that it is the philosophy. To the ~~Relativist~~, the incompleteness of science does not condemn it to deal with mere appearance: the fact that it has given us no perfectly certain results is no index of its failure. Relativism admits the existence of certainty, of any degree of certainty short of absolute certainty. Though it considers that even the best approximation is subject to criticism, it does not regard this as preventing us from giving the brevet rank of absolute certainty to items of our knowledge, and using them as a basis for the criticism of other knowledge, without, at the same time, criticizing them. And it will not permit the relative certainty of our scientific knowledge to be degraded to the rank of mere "appearance" at the behest of any metaphysical theory.

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Norbert Wiener

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" " REPRINTS "

RELATIVISM

IT is a tenet of many philosophers that there is some object of experience for whose existence the existence of anything else is not a necessary condition:¹ that, in other words, some substance can

¹ Throughout this paper I shall speak of the knowledge or experience of an object which does not depend for its existence on the existence of anything else as a *self-sufficient* knowledge or experience.

be known. Descartes regarded the self as a substance; Spinoza thought that God, and God alone, is conditioned by nothing outside himself; Leibniz believed that each monad is a self-determining substance. Locke and Berkeley took over the notion of substance from Descartes; and even Hume, though it is true he no longer considered the self and matter as substances, regarded each sense-datum as entirely independent of everything else. Hegel and the absolutist school of philosophers, while firmly denying that any particular thing is independent for its existence of all other things, assert that the universe knows itself as a complete whole, conditioned by nothing outside itself. At the present day, there is a very influential school of philosophers, embracing, among others, the authors of the "New Realism," in America and Mr. G. E. Moore, in England, who hold that we have *knowledge by acquaintance* of certain sense-data and objects of introspection, and that these objects of acquaintance are entirely independent of anything else for their existence.

It will be noticed that those views which hold that self-sufficient experience exists divide themselves naturally into two classes, according as to whether or not they hold that any object less in range than the whole object of an experience can be experienced self-sufficiently. Those who hold views of the first class believe that we experience certain particular objects, such as the self or certain sense-data, whose existence is conditioned by nothing outside themselves; those who hold views of the second class believe that there is only one substance—the universe. Descartes, Leibniz, the English empiricists, and Mr. Moore hold positions of the former type; Spinoza, Hegel, and the absolutists are adherents of the latter doctrine.

It is an argument often used by philosophers of the second type against those of the first that in so far as we are experiencing something whose existence is independent of that of anything else, we can only get information from the experience which is independent of the existence of anything else, and hence irrelevant to everything else. Whatsoever self-sufficient experience I may have must float down the stream of my consciousness as passively as a chip of wood on a mill-stream. If the particular patch of red I am perceiving at this present moment could be exactly the same patch of red whatever the context in which it occurs might be, then my sensation of this particular patch of red can throw no light on the context in which it occurs: it would not in itself be an experience of red as distinct from green, nor an experience of a color having certain physical and psychological properties, nor an experience of the color known as "red," nor even of the thing before me at the present moment. Even "this" is far too descriptive a name for it. Such an experience can not be used as the ground of explanation of any other experience: for all the part it plays in my consciousness, it might be known by someone else instead of by myself. Indeed, the only meaning which I can attach to the statement that a certain item of experience belongs to me is that it belongs to a system of experiences internally relevant to one another which I call myself. At any rate, any self-sufficient experience I may have is a mere excrescence on the rest of my consciousness, and nothing in the rest of my consciousness can give the slightest evidence of the existence of self-sufficient experience.

This argument only tends to prove the uselessness of self-sufficient knowledge of particular things for explanatory purposes, and those who believe in its existence might still retort that they are intuitively certain of the existence of self-sufficient knowledge of particular things, entirely apart from the usefulness such knowledge might have for explanatory purposes. But there is a far more vital difficulty which Mr. Moore and those who hold similar views encounter. To say that something exists whose existence has no necessary condition other than itself is equivalent to saying that something exists which can exist in isolation, for the only meaning of, "*a* is not a necessary condition of *b*," is, "in some cases *b* exists and *a* does not." Now, to say that *a* can be isolated from everything else, and yet be the same thing as the *a* that now exists in the context of our experience, is self-contradictory. For, if it were completely isolated, it would be isolated from its identity with the *a* which now exists in the context of our experience, and would not be the same *a* which now exists in the context of our experience. Even if the whole world, except the particular patch of red I am looking at, should be abolished at this present moment, it is only by virtue of the relation it would have to the world which had been abolished that this patch would still remain the same patch of red as the one at which I am now looking. To say that *x* is in some relation to *y*, and that *z* is in no relation to *y*, and that *z* has some sort of sameness with *x*, is clearly self-contradictory, for in this proposition we assert a very definite relation between *z* and *y*.

In fact, the very hypothesis, "If *a* were isolated," refutes itself, for *a* is in a context if it is a possible argument to the propositional function, "*a* is isolated." It is true that one may argue that the definition of the proposition, "*a* is isolated," may still be determined in such a manner that even under this condition *a* would be isolated,²

² One may say, *e. g.*, that *a* is isolated when it is in relation to no particulars except facts of which it forms a component.

but this argument only carries weight if one believes that the proposition, "*a* is isolated," can have some sort of existence with nobody to assert it. If this is not the case, "*a* is isolated," will contradict itself, because, in order for this proposition to be a proposition at all, it is necessary for *a* to be in relation to some knowing subject. This is *a fortiori* necessary if it is to be a true proposition. And it is extremely hard to see what meaning there can be in saying that a proposition exists without reference to the possibility of its being asserted by some subject.

At any rate, it is not true in any significant sense that the objects of experience would be exactly what they are now if they were in isolation. If a sense-datum is to enter into the system of our experiences, it must be in relation to this system from the beginning. Moreover, the introduction of self-sufficiently given relations between the self-sufficiently given terms of our experience would in no way render it a coherent experience, as Bradley has so well pointed out. If I know "black" and "darker" and "white," I do not, *eo ipso*, know "black is darker than white," nor any objective situation these words may represent. These terms and this relation would give me just as readily, "white is darker than black." It may be retorted, "No. It is true that the terms and their relation alone do not give us the required proposition, but the terms, their relation, and their order do." It is easy to see the futility of this answer. Let *B* and *W* stand for "black" and "white," respectively, *D(x, y)* for "*X* and *Y* are in the relation, 'darker than,'" and *XPY* for "*X* precedes *Y* in the relation, 'darker than.'" "Black is darker than white" will then be represented by the symbols *D(BW)* and *BPW*, while "white is darker than black" will be represented by the

symbols $D(B, W)$ and WPB . In both of these, B , W , D , and P may be found. It is clear that this method of proceeding will give us no results: from the terms *and* their relation we can never get to the terms *in* their relation. To be brought into connection by a given relation, the terms of that relation must be known initially as related, and hence our knowledge of each of them by itself can not be mere knowledge by acquaintance.

It thus becomes clear that in addition to any self-sufficient knowledge we may be supposed to have of items of experience less than the whole of our present experience, we must experience in relation from the very beginning everything we ever know in relation. Our experience, if given at all, must be given as a system. Moreover, no property of this system can give the slightest evidence in favor of the existence of various items of self-sufficient experience, in addition to our experience of this system since, as we have shown, we can never proceed from a self-sufficient item of knowledge to any further knowledge. Our experience must be coherent in cross-section.

But it is not enough that our experience should be coherent in cross-section: it must also be coherent in sagittal section. If each moment of our experience would be precisely what it is if neither past nor future existed, then the experience of a moment would, to all intents and purposes, constitute my whole personality at that moment, and I would be undergoing a continual alternation of personality. It is indeed a logical possibility that our present is entirely dissociated from our past: that the I which writes this word is an entirely different person from the I that crosses this t . It is, however, a view which nobody will hold, for if it were true, our memory would be but an illusion, and our expectation a vain self-deception. Though at each moment we might have an illusion of the permanence of our experience, that illusion would have no permanence. Our ideas would spring into being full formed, like Athene from the head of Zeus. That this may not be the case, that our experience may possess longitudinal coherence, it is necessary that the successive instants of time should be known in relation to one another, and hence that each moment should not constitute a self-sufficient object of experience.

It does not render our experience temporarily coherent, moreover, to regard it as made up of a series of self-sufficient experiences, each of finite duration. For, suppose that the maximum duration of such an experience is t seconds. Let A , B , C , and D be a sequence of instants of physical time following one another in the order given. Let the durations of the intervals AC and BD each be t seconds. Then the experience of all those moments between A and C preceding C by an interval less than t seconds will form our self-sufficient experience at C . Nowhere else will we experience the interval AC immediately: at any moment before C , C will be as yet unexperienced, while at any moment after C , the lapse of time between A and that moment being greater than t seconds, A will have passed forever beyond our present self-sufficient experience. Similarly, the only moment when the whole interval between B and D is experienced in one self-sufficient experience is D . Though AC and BD have BC in common, it can never be learned from any of our self-sufficient experiences that they possess this in common: this can never be known before D , for then BD is as yet unknown as a whole, nor after C , for then, since the experience of A no longer forms a part of the self-sufficient experience of the moment, AC has passed beyond any self-sufficient experience. Even though the duration of the objects of our self-sufficient experience would thus be more than momentary, we would have at each moment one self-sufficient experience, and one only, and no self-sufficient experience would have any duration.

So far the arguments we have been using are such as the absolutists use to prove absolutism. The absolutist of the type of Bradley starts with the presumption that the completely real must be that which as an object of knowledge is completely self-sufficient, and, by arguments such as those we have used above, shows that if any part of an experience be self-sufficient, it will not in any significant sense be part of that experience. So far I agree with the absolutist, but when he confidently asserts that there *must be* some completely real and self-sufficient experience, I must part company with him. For his absolute experience is not experienced in its self-sufficiency by any human being. Human experiences possess too many lacuna for any one to hold that view. Our mind is continually stretching out tentacles to the past and the future: here we search for a memory forgotten, there for the verification of a prediction. It is only in its "relative manifestations" that the absolute can be an object to us, and in its relative manifestations, as an object of our consciousness, the absolute fails to attain perfect self-sufficiency. The absolute, *qua* absolute, is a mere name to us, and must from its very nature be entirely irrelevant to anything we can ever know. As has been often said, if the absolute is self-sufficient, then no appearances can emanate from it, for if it enters into relation with any appearances outside itself, it fails to attain self-sufficiency. And though it be said that the appearances are contained in the absolute, not even the absolutist will admit that the *partiality*, the *relativity* of these appearances is so contained. But the moment anything can be found which may in any way be contrasted with reality, then reality becomes a mere partial reality, and any experiences which we may have of it are on the same plane as other partial self-sufficient experiences, so that absolutism is open to precisely the same objections it raises against other philosophical views.

It is no answer for the absolutist to retort that the absolute has a completely self-sufficient knowledge of itself. The absolutist believes in the existence of the completely real because he considers it the true object of *his own* thought. But he finds that it is never the object of his thought, in its complete reality. What should his conclusion be, then? That the completely real exists in its complete reality independently of his thought? It may have such an existence or it may not; which alternative is the true one no argument on the basis of human knowledge can indicate. But what is clear is this: the true object of our human thought is *not* the completely real, and all reality that we know is relative and partial. The absolutist quite correctly shows that the world of knowable particulars does not contain his reality, as such, but he fails to make the obvious inference that it is his notion of reality, and not the world of knowable particulars, which is at fault and should be regarded as mere appearance. The real conclusion to which the absolutist argument should lead us is that in no significant sense can we assert the existence of self-sufficient knowledge.

But if no knowledge is self-sufficient, none is absolutely certain. For if we are not sure that any experience would be what it is in entire isolation from everything else, we can know no propositions in such a manner that our mere awareness of them guarantees our knowledge of their truth, for the simple reason that we can never have, in any significant sense, a *mere* awareness of them unrelated to the other objects of our consciousness. We can, that is, have no knowledge which is certain *a priori*. Now, every proposition known with absolute certainty must be obvious *a priori*, or deducible by infallible means from a set of propositions known with absolute certainty. In the latter case, we may know *a priori* when we have exhausted the presuppositions of the given proposition, or this may be

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Since we can never arrive at *all* the premises of any proposition, although no knowledge is self-sufficient, no knowledge is merely derived; that is, more is said in any proposition than in any set of premises we can assign to it. Even the propositions of geometry do not follow merely from the axioms of geometry. The axioms of geometry are stated in some language, either of words, or of symbolism, but it is not merely so many queer marks on paper, so many sounds, that go to make up the axioms of geometry. No! These marks or sounds must be interpreted according to certain rules which collectively constitute the *grammar* of the language of words or symbolism in question, and these rules as well as the axioms of geometry, themselves condition the propositions of geometry. But these rules, too, must be applied, and we need further rules by which to apply these, and so on indefinitely. At some stage or other we come to rules which are not written or spoken, but only thought,³ but in so far as

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The views I have stated above—that no experience is self-sufficient, that no knowledge is absolutely certain, and that no knowledge is merely derived—I call collectively "relativism." It is obvious on the face of it that relativism is closely related to two great tendencies in modern philosophy: pragmatism and the metaphysics of Bergson. Like both these theories, it is a protest against mere formalism in metaphysics. Pragmatism insists that every philosophical theory should be judged by the value of its consequences for action; Bergson holds that the intellect alone gives us but a superficial account of the universe—that it is by intuition, by that species of thought which allows the mutual interpenetration of idea with idea, and does not insist that concept shall be separated from concept by rigid formal definitions, that we really grasp the inner meaning of reality; relativism insists that the supposed absolute rigidity of the definitions used in metaphysics is but a fiction, that no concept can mean what it does entirely independently of everything else. To all these theories the universe is, to all intents and purposes, infinitely complex: at any rate, they all regard the infinite complexity of the universe as an object of knowledge as a hypothesis incapable of ultimate disproof. For pragmatism regards the universe as just as complex as it is profitable to regard it, and does not consider it possible to determine this in advance; Bergson considers all analysis of the universe, from the very nature of analysis, inadequate; while relativism shows that we are unable to find any notions themselves independent of all analysis (*i. e.*, self-sufficient) in terms of which we can analyze the universe. Pragmatism, Bergsonianism, and relativism are three forms of anti-intellectualism.

Moreover, relativism agrees with pragmatism in the manner in which it criticizes intellectualism. Why is it that we have condemned absolutism or the philosophy of acquaintance? Not because it is necessarily *false*, but because its truth is *unverifiable*; because the existence or non-existence of the absolute, or knowable by acquaintance, would not be distinguishable from its presence—its presence would lead to no *significant* results. But the cardinal notions of pragmatism are that the truth of a theory consists in its verifiability, that only that which is distinguishable from something else is distinct from it, and that no theory is either true or false except in so far as its consequences are significant for human action. That is, our dialectic showed that the views we criticized are not true by proving that they are unpragmatic.

But the fact that we have made use of the pragmatic method in criticizing other views does not necessarily commit us to the acceptance of the pragmatic criterion of truth as an ultimate criterion. We are not compelled by anything we have said above to make the unqualified assertion that the whole meaning of a conception expresses itself in its practical consequences. Indeed, taking the words as they stand, we can not accept this as final, for in no significant sense has a conception a "whole meaning," nor are we able to give a *perfectly* adequate account of what we mean by its "practical consequences." As the pragmatist is the first to urge, no conception has a meaning except in some particular context or other, and in no significant sense can we ever arrive at the *total* context of any concept. Every concept we can mention is particular and partial. Moreover, the notion of the "practical consequences" of a view is extremely vague and indeterminate, and can not possibly be regarded as an ultimate. Does the phrase mean those consequences which satisfy or fail to satisfy some of our particular purposes, or any of our purposes, or all of our purposes? Just when is a mental state a purpose, after all? These questions and many more must be answered once for all before we can accept the pragmatic criterion as an ultimate. Pragmatism can claim only to be a better *relative* standard of truth and falsity than the views it opposes: as an absolute standard, it is open to the objections we have raised against all views which claim to have attained complete truth. And even as a relative standard, whatever our individual opinions on the subject may be, there is nothing in relativism *per se* which compels us to admit that pragmatism has any advantages over any other theory of the nature of truth. The fact that the relativist denies the existence of the *pure* reason does not in itself demand that he should believe in the primacy of the *practical* reason, in the Kantian sense of the latter term. As Mr. Russell has emphasized in his essay on "pragmatism" in his "Philosophical Essays," open-mindedness is not the exclusive prerogative of the pragmatist.

I do not think, however, that James would have claimed seriously that pragmatism has attained any absolute truth: James was too open-minded a man ever to become quite dogmatic. But the humanism of Schiller claims to be nothing if not final. Schiller treats his fundamental proposition, "Man is the measure of all things," as though it were an ultimate truth. Now, it is easy to see that, taken in any absolute sense, this is either a tautology or an error. For what constitutes a man? It is not as subject that our self can be made the measure of all, or of any things; it is only the self as known, as object, that can be made such a measure. But what is the self as known, the empirical ego? As James pointed out, we have many empirical egos; we have a social, a professional, a business, a religious self, etc.

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No one of these is the measure of *all* things: our religious self is the measure of religion, our business self of business, etc. But, it will be said, it is our empirical ego taken in its widest sense, embracing all these, that is the measure of all things. But is this not a mere tautology? Is not the empirical ego but another name for that which is central in our experience, for that to which other experiences are related? Is not the sole reason that man is the measure of all things, that "man," taken in this sense, is a mere synonym for "the measure of all things"? If one define "man" by naming the body, or the body and certain particular experiences closely related to it, one will only get a relatively imperfect measure of all things: just as the inch is no longer the length of the royal thumb, nor the ell the length of the royal arm, so most of our criteria becomes progressively dehumanized, though of course, since no two things are completely out of relation, they never completely lose their connection with the self. But it is only in this relative sense, where "man" stands for certain central aspects of our experience, which can not be delimited with absolute rigor, that "Man is the measure of all things" is significantly true. And even here it would be better to say, "Man is a factor entering into the measurement of all things, and the most significant factor in the measurement of many, perhaps most things," than merely, "Man is the measure of all things." Humanism is partial in precisely the same sense that the humanists accuse naturalism of being partial, though perhaps not to the same degree.

But, all things considered, relativism is far nearer to pragmatism than to Bergsonianism. Relativism only objects to pragmatism in so far as it seems to claim to have said the last word in philosophy: a relativistic pragmatism is quite possible. But Bergsonianism contains elements which are essentially non-relativistic. Bergson postulates gulfs which can not be bridged between homogeneous duration and mathematical time, between purposes and mechanism, between life and matter, between language and thought, between that intuitive thought which allows the mutual interpenetration of idea with idea, and intellectual thought,—that thought which deals in absolutely hard-and-fast concepts and clear-cut distinctions. The world is for Bergson divided by a set of fundamental dichotomies, which are made with absolute sharpness. Though he believes that the opposing sides of these dichotomies are found everywhere intertwined and inter-related with one another, their opposition is for him a fundamental and irreducible fact. Now, to suppose the existence of absolutely sharp distinctions runs directly counter to the spirit of relativism, and, I believe, of Bergsonianism itself. For Bergson, in a quite relativistic way, believes that our only way of attaining a true insight into the inmost nature of the world is by a sort of thought which does not admit absolutely rigid distinctions or clean-cut concepts—the kind of thought he calls intuitive. Intellectual thought he regards as giving us only a surface view of the universe. Therefore, judged both by its own criteria, and by those of relativism, Bergsonianism fails to give us an adequate insight into the true nature of things, for it treats the world as made up of two absolutely separate, irreconcilable halves. Bergsonianism gives a highly intellectualistic account of the universe, tending to show the inadequacy of intellectualism. It is true, M. Bergson states that the intellectualistic form of his presentation of metaphysics is only the hull in which a really intuitive treatment is concealed, yet it seems to me that his unbridgeable antitheses are in spirit even more intellectualistic than in form. Certainly, they satisfy all the criteria he gives of intellectual in contradistinction to intuitive thought.

It seems to me that Bergson's error arises as follows: Bergson believes that the physical sciences and mathematics deal with notions that are absolutely rigid. He thinks that there is a more or less independent, purely intellectual world, within which these disciplines move, though he regards this world as of derived and secondary importance. Though the world of space and matter is for him but a surface-world, but the external manifestation of the true world of time and life, it is a world of pure space and pure matter and *pure forms*, uncontaminated by any taint of time or of life or of the "mutual interpenetration" of idea with idea. Whether this world is or is not ever found in entire separation from time, life, and intuitive thought is of no essential importance: Bergson supposes that this world has *some sort* of an independent existence. But we have seen that such a world is a mere nonentity; that natural science, like every other intellectual discipline, must deal with imperfectly defined concepts, and hence must permit a certain amount of the interpenetration of idea with idea. Even in the case of mathematics, the most abstract and most formal of all disciplines, we have seen that no assignable set of rules will ever exhaust the conditions of the validity of a single deduction; we have seen how the very use of a symbolism is conditioned by our thinking according to the *spirit of the symbolism*, which can never itself be exhaustively and adequately symbolized. No! Bergson's dualism is a false one: pure formal thought exists only as a misinterpretation of mathematics by Bergson and certain formalistic philosophers of mathematics. Only the realm of the mutual interpenetration of idea with idea really exists.

But even this realm does not exist quite as Bergson conceives it. Since Bergson regards mathematics and the allied sciences as purely formal disciplines, and puts them in a world by themselves, he is forced to consider the realm of the mutual interpenetration of idea with idea as free from all taint of mathematics. In our true insight into the world, he believes, we cast aside the shackles of formal reasoning, and with a sort of a systematical intuition, perceive immediately the inmost nature of reality. Scientific reasoning, though perhaps necessary as a propaedeutic to our final appreciation of reality, is entirely transcended by it. This mysticism is the necessary result of a belief in the purely formal character of mathematics and physical science. But, if we do not believe that mathematics and physical science are purely formal, if we believe that these disciplines admit of and even demand the "mutual interpenetration" of idea with idea, then there is no ground for thinking that they, too, do not play their part in our true insight into the universe. Indeed, there is no metaphysical reason why the extremest claims ever made for the value of mathematics and science as factors in the explanation of the universe (provided that these claims do not demand that mathematics or science should be ultimate) should not be true. Bergson sets up a windmill, calls it physical science, and then charges it most valiantly. But it is only because it is a windmill, and not true science that he attacks, that he comes off victorious.

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Bradley's argument here is vitiated by the ambiguity of the term, "doubt." "Doubt" may mean (1) the absence of certainty, or (2) disbelief, or (3) an attitude of active questioning. In the first sense, I may be said to have doubts of the law of the conservation of energy, because no proofs which may be given of it are adequate to establish it as more than an approximation, but that does not mean that I disbelieve it, nor even that I actively question it. Bradley is right in saying that an ultimate disbelief in every proposition, or even an ultimate questioning of every proposition is impossible, for every disbelief or question is possible only on the basis of some belief which is not at the same time questioned. If I disbelieve that $2 + 2 = 4$, I believe that $2 + 2 \neq 4$, and if I question whether $2 + 2 = 4$, I do so on the basis of some further mathematical notions of mine which I leave unquestioned for the time being. But an ultimate uncertainty is not by any means impossible. The fact that any uncertainty must have a ground does not lay upon us an eternal injunction never to be uncertain of this ground—in fact my very uncertainty whether there is a ground for doubting a given proposition or not is a sufficient ground for my uncertainty of its truth. The principle on which I stand in any doubt I need not regard as infallible: I may simply consider it extremely plausible. True, if we had the bare alternative before us of criticizing the principles of our doubt while we are doubting, or not criticizing it at all, Bradley's argument would hold, and I would need an absolute principle as the ground of my doubt. But this is not so: the fact that I have once considered a proposition without questioning it does not mean that I have thereby relinquished forever my right to question it. Moreover, the true doubter would not say, "I am sure I am everywhere fallible;" or, if he said it, he would not regard the certainty asserted as absolute. For to say with absolute confidence, "I am sure I am everywhere fallible," you must have an absolutely adequate knowledge of wherein fallibility consists, and what constitutes sureness. And these concepts, like all concepts, can only be defined in terms of concepts themselves requiring further definition, and so *ad infinitum*. So in a very significant sense, the relativist may be said to regard his very uncertainty as uncertain. Relativism only claims to be relatively true.

But the moment we take this view of relativism, the dialectical refutations we have made of other views take on a new aspect. For if we admit the correctness of these refutations is only relatively certain, the views refuted may still retain something of relative truth. Absolutism, Bergsonianism, the philosophy of Mr. Moore, and all the views we have opposed will, looked at from this new standpoint, have a certain amount of truth in them. In what sense, then, has our refutation been a refutation at all? If these views, when crushed to earth, rise again, why should we not regard them as true? Should we not rather regard what we have considered a refutation a dialectical corroboration of these positions, showing that their very denial involves their assertion?

No! for although all propositions are relatively true, not all relative truths are of the same value. Though no absolute refutation of any view is possible, a relative refutation is. And what we have really shown concerning the views we criticize is this: any sort of truth they may have is very different in character from what we ordinarily call truth. We have attempted to discuss the views we oppose, and see what consequences they would lead to if they meant anything at all similar to what they appear to mean, and we have seen that these conclusions are very paradoxical, to say the least. Perhaps by some distortion of language they may be made to represent some significant reality, but such a distortion would have to be very far-fetched. Though the views we have criticized are only relatively uncertain, their degree of certainty, if taken as they stand, is much lower than that of relativism. This does not necessarily mean, however, that they are not perversions of views of a high degree of certainty, couched in relative terms.

But those who hold the views I criticize may answer, "Yes, *relatively* speaking, our views may be of a low degree of truth, but *absolutely* speaking, they are known with absolute certainty. You yourself admit that the validity of your arguments is only relatively certain, and that you only prove the relative dubiousness of other views. Hence, your arguments do not at all concern our claims to have reached absolutely certain conclusions." This argument is, strictly speaking, unanswerable, for the same reason that mysticism, and all philosophical views which claim to be supported by some brand of knowledge essentially different from the sort of knowledge we recognize ourselves to possess, are unanswerable. If my opponents actually meant by absolute knowledge something generically different from relative knowledge, then no arguments on the basis of relative knowledge could overthrow their faith in absolute knowledge. If one believes that, for example, in the contemplation of the absolute we have an insight into the nature of the universe different, not in degree, but in kind from the knowledge we have of "appearances," no argument can refute him. But I do not personally experience any different sort of knowledge than the relative knowledge of which I have given an account in this paper; and I believe that it is the results of this knowledge that the views I criticize mean to express. I believe that both the experiences of the absolutist, the acquaintance philosopher, the pragmatist, and even the Bergsonian, and the set of notions which they use to analyze their experiences, are radically similar to my own. I believe I am not talking entirely at cross-purposes with every other philosopher. Just as the absolutist thinks that all other philosophical views are incomplete absolutisms, and as the pragmatist thinks that all other philosophical views are inadequate pragmatisms, so I must think that all philosophies are nascent relativisms. This may seem a tremendous act both of faith and of presumption, but it is the sort of act of faith and presumption that every one who holds a philosophical position must perform before his view can enter the lists against other philosophies.

We have seen, then, the bearing on relativism of the objection to it on the score that a universal doubt is impossible. There is another ground on which it might seem that valid criticisms of relativism could be based. It is clear, as we have shown, that relativism demands that experience should be, at least potentially, infinitely complex. For since no knowledge is self-sufficient, each item of knowledge meant what it does only in relation to the objects of other items of knowledge, which, in turn, are what they are only in relation to the objects of still other items of knowledge, and so on indefinitely. To some people the notion of infinite complexity seems repugnant. "What!" they will say, "Does each item of knowledge demand reference to other items of knowledge? Is no experience simple? In the first place, this would make all knowledge absolutely, not relatively uncertain, for it would demand a detailed knowledge of the universe before we could have any knowledge of any part of it. In the second place, the human mind rebels against the notion of infinite complexity."

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Such criticisms of relativism, plausible as they may seem, are not really valid. For, in the first place, relativism does not say that in order to have any comprehension of any item of knowledge we must refer it consciously to all or any other items of knowledge. Relativism does not deny that we may have "innate ideas," or other forms of instinctive knowledge. It is not the *temporal*, but the logical *a priori* that it questions. It merely says that any new knowledge we acquire must be internally *relevant* to our previous knowledge: that only in proportion as it is thus relevant is it knowledge at all. It does not impose upon us the psychological task of experiencing each item of experience in conscious proximity to every other item, but simply cautions us that we are never sure that we are done with our labor of comparing one concept with another, of criticizing each notion and theory of ours on the basis of our other theories and notions. The former task can indeed never be accomplished, and if relativism claimed to be a psychological theory of what actually occurs in our minds, we would have to regard knowledge as not relatively, but absolutely impossible. The latter task, though, from the nature of the case, it can never be finished, is by no means futile. Is the physicist discouraged because he knows that neither he, nor any one else, will ever be able to verify a single law of physics with more than approximate accuracy? Indeed, does he not expect with confidence that the next twenty or thirty years will bring new formulations of almost every physical law? The notion of the infinite complexity of experience which relativism demands is none other than that which the scientist has long made use of: it is merely the notion of the infinite *potential* complexity of experience. It is our *right* to analyze every concept, not our *duty* to analyze any concept exhaustively, on which the relativist insists.

In the second place, I doubt whether the human mind feels any great repugnance against the notion of infinite complexity. Against the spread-out infinite complexity which Royce attributes to the absolute experience, I, at least, it is true, feel an instinctive repugnance. But, as we have just been saying, this is not the sort of infinite complexity which relativism holds to exist. The relativist believes that everything, in so far as it is understood adequately, is understood in relation to other things,—that our analysis need never come to a definitive stopping-place. And I think that that critic to whom all philosophers sooner or later appeal—the common man—will agree with me in this. He is never satisfied when, in answer to some question he asks, the metaphysician says, "This is ultimate, and hence inexplicable." For him, there is a "why" to everything, and everything has a structure, if only trouble is taken to find it. In the same frame of mind in which he expected the atom to be divided and confidently expects the electron to be divided, he distrusts those who tell him that certain of his experiences are simple and unanalyzable. The common man is, as a matter of fact, a thorough relativist: an "instinctive" repugnance against the belief in the infinite complexity of the universe is only to be found among those who, like the White Queen in "Through the Looking-glass," have schooled themselves long and carefully in believing impossibilities.

The scientist too, I repeat, is an out-and-out relativist in all that concerns his science: in all, that is, that he does not take over on faith from the technical philosopher. He realizes full well that his instruments give only approximate readings, that his observations record only approximately the readings of his instruments, that his laws and his formulæ are mere approximations, and that even the margin of probable error which he calculates for his readings and his laws is only approximately determined, so that he never has a completely accurate knowledge of the degree of approximateness of his approximations. It is even only with approximate certainty that he knows that certain approximations are more accurate than certain other ones. In his whole work, presuppositions and conclusions together, he knows that he may search in vain for a single absolutely certain fact. Yet he works on, correcting approximate hypotheses with the aid of others also approximate, wearing them down by a sort of mutual attrition, much as the grinder of mirrors secures for his mirrors a highly accurate plane surface by first grinding two approximately flat pieces of glass together, then grinding each in turn against a third similar piece, then grinding them together again, and so on indefinitely. Our physics of to-day is the product of the imperfect physics of the past, much as the tools of the modern smith were forged in the smithy of yesterday. And just as the imperfection of the tools of the past smith conditions the perfection of the tools of the present day, so the inadequacy of the past determinations of physical constants and laws prevents our present determination of these constants and laws from being completely adequate. As the steam-hammer of to-day is the lineal product of the first stone hammer used by primitive man through many generations of hammers, each used in making the next, and therefore must share, though in an infinitesimal degree, its deficiencies, so modern science is the lineal product of the crude physics of common sense, and partakes to some slight extent in its inadequacy, because it is obtained from it by a self-criticism which is always incomplete because it is a *self-criticism*. Science begins, remains, and ends in approximations. Yet this does not mean that it ends where it begins: we are as certain as we can be of anything that the approximations of science to-day are, in general, better than those of science yesterday, and not so good as those of science to-morrow. We are quite sure that a new statement of a law of science almost invariably marks an advance on all previous statements. Yet, be it noted, we never judge whether any scientific hypothesis is better or worse than another by any criterion which is itself known to be more than approximately true.

But if, as we have seen, approximate knowledge is recognized to exist in physics without any certain knowledge to back it, while physics is recognized by all to present us with the most certain propositions we can reach, short of pure mathematics, it is clear that relativism can not be accused of denying the existence of all certainty, or of being a mere negation of all belief: it is only when one thrusts upon the relativist a false dilemma between an absolute certainty and an equally absolute ignorance that his view may be made to appear in that light. Relativism is a philosophy of doubt, but it is of a liberating, not an enslaving, doubt that it is the philosophy. To the relativist, the incompleteness of science does not condemn it to deal with mere appearance: the fact that it has given us no perfectly certain results is no index of its failure. Relativism admits the existence of certainty, of any degree of certainty short of absolute certainty. Though it considers that even the best approximation is subject to criticism, it does not regard this as preventing us from giving the *brevet rank* of absolute certainty to items of our knowledge, and using them as a basis for the criticism of other knowledge, without, at the same time, criticizing them. And it will not permit the relative certainty of our scientific knowledge to be degraded to the rank of mere "appearance" at the behest of any metaphysical theory.

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