VII.—ERROR.

By F. C. S. SCHILLER.

ALMOST all philosophers would agree that if justice were done to it, the chapter on Error would be the longest in the history of human thought. It is human to err, and philosophic to think that one alone has escaped this common doom.* But the history of thought should be written, not with the severity of the logician, but with the sympathetic insight into individual idiosyncrasy which is the glory of the best psychologists. But as I can neither boast of a logicity that rises into infallibility nor lay claim to a psychological charity that extends to the contemplation of the pathological, I must attempt something far humbler than a history of the errors that have beset the career of mankind.

What I shall attempt may, however, possibly be a more urgent task, viz., to *distinguish* between Truth and Error.† For men in general desire to attain truth and to avoid error, and even the most purely contemplative soul will probably admit that these are not unworthy aims, and that not merely because of their enormous practical importance. But in order to escape from or avoid Error and to attain Truth it is necessary first of all to be able to discriminate between them. To distinguish Truth from Error is a primary problem both of theory and of practice; it is a necessity of life, and yet not even the most purely theoretic philosophy would lose caste if it could

* Who the one is philosophic modesty is usually able to determine.

† We have surly been told often enough that all truth is a sort of error and that all error has lurking in it a measure of truth, and proofs of the *identity* of truth and error can breed nothing but scepticism, until their *difference* has been made clear. And it is curious that our Hegelaters should be so content to ignore the difference in the identity of truth and error.

contrive to say something relevant to the making of this distinction.

It appears however, that, like the other predicates of value, Truth and Error are antitheses belonging to the same science. The True and the False, like the Good and the Bad, the Right and the Wrong, the Beautiful and the Ugly, hunt in couples, and, like twins, they are not truly known until you know them apart. A theory of Truth, therefore, must, *ipso facto*, be a theory of Error, nor is theory of Error possible save for a tenable theory of Truth. *Veritas norma sui et falsi*; but let no man imagine that he has a theory of Truth unless it *does* distinguish True from False. Hence the theory of Error becomes the touchstone of a theory of Truth.

A logical analysis of the general nature of Error, therefore, is a theoretic undertaking of the first importance. It is essential to the theory of Truth, to its discrimination from Error, to the correction of Error, and to our salvation from its ravages. But its difficulty is quite commensurate with its importance, and the historic failures of philosophers attest this eloquently.

Our philosophic predecessors give little help. For though they have usually been eager to point out the errors of their predecessors they have reflected little upon the nature of Error in general, and the little they have contributed to the subject has often been of negative value. Perhaps it may be urged in extenuation that they have not been much more successful with the theory of Truth. However this may be, it is indisputable that until recently what there was of the theory both of Truth and of Error was utterly inadequate and calculated only to hinder men from grasping their actual nature.

Relatively, the best of philosophic inquiries into the nature of Error is still the *Theætetus* of Plato,* whose careful and sustained attempt to fathom the mystery was baffled only by

* 187 C. 200 D.

the initial mistake of his intellectualistic assumptions. Plato tries to conceive Error successively as lying in the apprehension of the object and in the object itself, as confusion ("allodoxy"), as potential knowledge, as incidental to sensation, as badness of memory. But in each case it turns out that the possibility of Error requires us both to know and simultaneously not to know the object about which we are in error. But this contradiction, on which all Plato's theories are wrecked, is at bottom nothing but a simple fallacy of division. Collectively we both know and do not know, but individually some know while *others do not*, and the "error" exists only *for* the former *in* the latter. Plato has simply been misled by the false abstraction into which too many logicians have followed him, that of ignoring the personal aspect of the judgment. He proves the nature of Error to be self-contradictory in the same way as he proves the nature of the Sensible to be self-contradictory, viz., by first mutilating the fact and abstracting from its particularity, its reference to time, place and personality. Just as the qualities of the Sensible can be regarded as contradictory only if it is denied the right to change, to be different in different places, and to be used for various purposes in predication, so Error can be distorted into a self-contradiction only by treating it as irrelevant that the person who affirms and the person who denounces the "error" cannot possibly be the same.

Subsequent contributions to the theory of Error have been strangely shallow. They have usually tried to define Error by presupposing the notion of Truth. But to say, *e.g.*, that Error is avoided or corrected by discovering Truth is just like saying that the cure for poverty is the acquisition of property. It is a similar verballity to declare that a judgment which errs is not really a judgment, or that opinion but not knowledge can err, seeing that in neither case is there any indication given of how a real judgment may be distinguished from an imitation or a piece of "knowledge" from one of "opinion." For actual use such doctrines are about as valuable as saying that because

"diamond" implies preciousness no so-called "diamond" can be paste.

It is no wonder therefore that desperate philosophers are tempted to disclaim a theory of Error, as of Truth, altogether. Why not leave each science to correct its own errors in each case as it arises, according to its own lights? When you know you have no theory on the subject that will stand inspection, is it not the part of caniness to shift the duty on to other shoulders? Now in so far as this attitude implies that philosophy is dependent on the truths elaborated by the sciences, and should learn from their procedure and should not try to dictate to them *a priori* laws, it is worthy of all praise. But it is difficult to see how if the procedures of the sciences are in any sense material for philosophic contemplation, they can fail to confront philosophy with the problem of a theory both of Truth and of Error. For in every science "truths" have to be distinguished from errors, and surely it would be marvellous indeed if the methods employed in the sciences exhibited no common features out of which a general theory might be compounded. And again, is it not profoundly unphilosophic to despair of finding a general theory of Truth and Error? How could a philosophy that renounced this duty continue to lay claim to rationality?

The theories of Error, whose failure we have noted, nearly all exhibit a common tendency to objectify the source of error. They conceive it metaphysically as a thing, and not logically as a cognitive relation. And yet if we desire to give an account of the way men actually err, it is clear that what is needed is a logical analysis of human procedure.

Let us try, then, this alternative. But here too we at once encounter the most formidable obstacles. It is at once objected that a logical analysis of Error is technically illegitimate. Officially, Logic, strictly understood, can take no cognizance of Error. The analysis of Error is really extra-logical. Logic cannot be conceived to concern itself with the

practical difficulties of concrete human thinking. It either (1) contemplates with ecstatic veneration the ideal of a knowledge perfect and divine, or (2) tabulates with microscopic care the forms which thought employs, or (3) obtains its most artistic effects by subtly commingling these two modes of treatment.

Now it is evident that from none of these three points of view can a problem of Error be discerned: for none of them can Error exist:—

(1) If Logic contemplates the Ideal of Perfect Knowledge, it clearly presupposes that its object has *ex hypothesi* been purged of every taint of Error. Knowledge as such is necessarily true and infallible.

(2) Formal Logic, on the other hand, rests on an abstraction from "material" truth, and does not attempt to look beyond the formal claim to truth which is expressed in every judgment. Now, in point of form, *every* judgment without exception claims to be true without restriction, *i.e.*, absolutely and infallibly, nor is there anything in its form whereby to distinguish the judgment which is actually true from that which is actually false. By its fundamental definition, therefore, Formal Logic operates with a notion of "truth" which is not exclusive, but inclusive, of material error.

For, taken in the abstract, and apart from any actual context to which it is applied, there is no saying whether a judgment, other than a formal tautology or contradiction,* is true or false. "It is two o'clock," and "it is seven" may both be true and both false, and, indeed, they always are. It all depends when and where you say it. But both claim to be true, whether they are so or not. Formal truth of this sort, therefore, is mere truth-claim. It includes Error, and cannot therefore possibly

* Even these Formal Logic cannot safely condemn; for in their actual use they need not be the tautologies or contradictions they verbally seem.

discriminate truth from error. The conclusion is inevitable that no formal treatment of Truth can possibly throw any light on the nature of Error.

If (3) we consider the mixed Logics which are in vogue and arise from a fusion of the ideal and the formal stand-points in various proportions, it is plain that they must be doubly incapacitated from taking notice of Error. But they have this great advantage, that, by a judicious shuffling of the standpoints, the refusal to deal with Error may be made to look quite plausible. When the long suffering student evinces dissatisfaction with mere formalism, they can proudly point to the glittering generalities of their logical ideal; when he is tantalized by the elusiveness of an unattainable ideal, he can be gorged with a mass of formal distinctions; and as in general Logic is taught only to those who have no occasion to apply its doctrines to actual problems, while the student of Science is allowed to escape from what is treated as a literary subject, the enormous discrepancy between the facts of knowing and the doctrines of Logic, whether formal or ideal, easily escapes detection. And so, by this crafty policy, Logic has kept its place among the subjects of academic endowment, even though it has always surfeited men with futile subtleties which were irrelevant to questions of real truth, and has left them to grope their way unaided through the labyrinths of Error.

Hence there arises a very pretty contrast between the sordid cares of Science and the sublime indifference of Logic. In human science Error is the shadow cast by Truth, its constant companion, whose presence can never be ignored, and whose mischief-making has to be guarded against by unceasing vigilance. But in Logic Error is put out of court by a definition. Thus, although it is human to err, it is logical to be infallible; nay, so absolute is the logician's infallibility that the Pope's, by comparison, pales into insignificance. For it is any and every assertion, it is judgment as such, that is

infallible, so long as the definition stands which restricts Logic to the contemplation of truth, formal or ideal.

But does the definition stand? Is this notion of Logic itself inerrant? Shall no one be permitted to think of a Logic that can and will consider human needs, and teach us how to escape from human errors?

To some minds the first demand to which the problem of Error naturally leads will be one for a revision of the conception of Logic. They will demand that Logic shall be humanised. It must be enabled to adopt a notion of Truth which excludes Error instead of harbouring and ignoring it. It must take account of our processes of thought, which frequently go wrong. It must cease, therefore, to be merely formal, to be merely ideal. Its "forms" must be shown to have a function, and its "ideals" to be rooted in the actual.

Why such a Logic should be inadmissible no logician ever deigns to explain. It is too sacred a mystery, and into it we must not pry. Let us, however, provisionally assume the legitimacy of this new conception of Logic in order to proceed with the theory of Error.

Let us first of all contemplate a paradox about Error which accounts, if it does not atone, for the logician's handling of the matter. No error is ever affirmed as such. No cross-section of what any mind at any time affirms will ever reveal the presence of error. For a mind that errs, whatever is affirmed seems true, and the error does not exist. Thus Error comes into being only by being found out.

No judgment, therefore, can be an error *per se*. It is an error in retrospect only, after it has been corrected. We are not, entitled, in strictness, to call any opinion erroneous until we have seen our way to a better, and to speak of it as an error always involves a confusion of standpoints. Error as such then implies a relation, a reference to a second judgment which detects the error and corrects it. If this relation is

abstracted from, the "error" becomes invisible. Hence the *formal* truth of *all* judgments taken in abstraction.

The relation to the correcting judgment, moreover, which the erroneous judgment implies, necessarily involves a time-reference. In the case of a self-correction it is clear that the correcting judgment is necessarily posterior to the "error" it supersedes. The error must have claimed truth before it was corrected. Where the correction comes from others, the correcting judgment may indeed have been in existence previously, but its application to the error is necessarily posterior to the enunciation of the error. It follows that the existence of Error necessarily involves a *second* assertion, and that no logic which conceives Truth as "eternal" * can possibly grasp the nature of Error.

On the other hand, the existence of Error does *not* necessarily involve a second assertor. It happens, of course, more commonly that we are convicted of error by others. But still it is possible that we should ourselves correct an error by withdrawing the judgment which affirmed it, and substituting a better.

In strictness, indeed, all correction of error is self-correction. There is no *undisputed* error, until it is admitted by the mind that made it. Until then there is only *conflict of opinion*, and to describe either view as an error is a partisan begging of the question. When my view differs from yours, and each thinks his own right and the other wrong, an impartial logic should describe the situation as a dispute which has not yet ended in the establishment of any universal and objective truth. By so describing it Logic would perform a great social service. For it would remind us how many are the "truths" that are so only in a party sense, and how rare are

* I hold, of course, that the logical abstraction from tense and the doctrine of the "timelessness" of Truth are thoroughly unsound for many other reasons as well, but this is not the place to dilate upon the matter.

those which are really undisputed. And this would not only mitigate the conceit of philosophy, which can hardly boast of any undisputed truths, and check the tendencies to bigotry and intolerance which the ordinary phraseology perniciously fosters, but it would concentrate attention upon the ways of establishing the superiority of one opinion over the other.

The time-relation between the "error" and the truth which corrects it, carries with it a further consequence of great importance. The original assertion has provoked its refutation either by the protests of others or by the logic of events. It has led to consequences which destroy its claim to truth. The whole process is a typical example of the pragmatic testing of a truth-claim. The recognition of an "error" means neither more nor less than an adverse decision which refutes a claim by the consequences to which it has led, and this should prepare us for the perception that the discrimination of Truth and Error always proceeds pragmatically. Truth-claims which have worked badly are condemned as "errors," even as those which have worked well are accepted as "truths."

This fact furnishes a further reason for the inability of the current theories of knowledge to distinguish truths from errors. For the distinction cannot be made intellectualistically, but only pragmatically by their several consequences. It is characteristic of an error that it is not self-sufficient and cannot stand alone in isolation. As we saw, it always implies a further truth, and usually refers to a larger system of truths and an organisation of purposes from which it is discrepant. Whereas a truth, taken in the sense of claim, as Formal Logic prefers to do, may often seem at first to be self-evident and independent of what precedes and follows. Simple truths of perception and the undisputed postulates of knowing are therefore often taken to be indisputable by naïve theories of knowledge. They tempt philosophers to cut Truth loose from relation to cognitive process and to the system which it gradually builds up. But this superficial treatment rests

upon the abstraction from Error, and so the study of Error here renders a signal service to the cause of Truth.

It is no less potent to restrain the opposite extravagance, that of seeking for the explanation of our truths in the ideal of a single, rigid, and absolute system of Truth. For this view, while it does not deny the relevance of context to whatever we judge true or false, radically misconceives the nature of this context, and is ultimately the worst alternative of all. As Mr. Joachim has shown so well, though so unwillingly, it inevitably leads to scepticism. It implies that only the whole Truth can be wholly true. Knowledge exists only for omniscience. Every (so-called) partial truth is self-disruptive, invalidated by the certainty that its meaning must be altered in the context of the whole, and the possibility that it may be transformed beyond human recognition. Unless, therefore, we know everything, we know nothing. Hence, though this doctrine at first seemed to dissolve away many perplexing problems, and to warrant, *e.g.*, the suggestion that what we now judge evil may be an error incidental to our partial view and evanescent *sub specie æternitatis*, it is ultimately the most desperately sceptical and disintegrating fancy which philosophy has ever propounded.

But there are two ways of avoiding it. The first is to pry into the genesis of the doctrine, and to elicit the fact that in order to form the ideal of an all-embracing system of Truth, it was necessary to presuppose the existence of truth, to start from the systematic nature of human truths and to accept as valid the partial systems of the sciences. In the beginning there can be no truth unless there are truths; yet in the end there can be no truths if there be truth. The whole theory concludes, therefore, by refuting its own premisses, *viz.*, the existence of partial truths.

But inasmuch as I shall probably be told that in *Logique la recherche de la paternité est interdite*, it may be more persuasive to insist that on this theory the existence of Error becomes inexplicable.

(1) If the absolute system or totality of Truth excludes as such all the partial truths which men in point of fact believe in and affirm, it will truly be infallible. But in this case it will exclude also all possibility of Error, and will profess itself unable to understand its existence. This is the conclusion finally arrived at in Mr. Joachim's book on Truth.

But (2) to this truly Hegelian view all and nothing are the same. It promised men all truth and furnished none. But if that does not satisfy us, it is equally capable of furnishing all truth, provided only that no man tries to use it. For it is equally easy to conceive the infinite elasticity of the Absolute System as including, instead of excluding, all human truths, though whether it thereby betters its position remains to be seen. Let it however exhibit, not an inhuman exclusiveness, but an indiscriminate hospitality. Let it harbour all the judgments which at any time or place may be held true. What will follow? In the Absolute all the distinctions which depended on the relativity of judgments to the circumstances of the time must be obliterated. The Absolute System, being timeless, cannot appeal to these temporary occasions in order to excuse and remove contradictions; it must simultaneously possess all the incompatible attributes ever predicated. Will not the result be that it must appear to us as a chaotic mass of contradictions? Will it not deprive us of the right to think contradiction as a formal symptom of Error?

The context then that is relevant to the truth of any claim cannot possibly be conceived as the whole; for if it is, either there is no Error or all is Error. The context that is relevant to the truth or falsity of any judgment is always limited, and this is why human beings can refer to it. We do not need to affirm the whole body even of human truths in order to pass judgment on a cognitive situation; and still less do we need to deny it. If, *e.g.*, I want to know when the next train goes to Edinburgh, it is not necessary for me to be aware that Queen Anne is dead or that $2+2=4$. Only a very small portion of

total truth, even of that which is contained within the covers of a Bradshaw, is relevant to the situation and gives the right answer to my question. As for the rest, you may call it potentially true, though, not being relevant, the answers it yields would usually be held to be "wrong." Indeed *irrelevance* is treated as a very bad sort of wrongness. It was once my painful privilege to meet a rationalist philosopher who thought it his duty to devote his whole life to the enunciation of pure truth. But did his fellow men appreciate his wholehearted devotion? Not a bit of it! Instead of appointing him to a well paid chair in an important seat of learning, they secluded him in an asylum, where he spent the rest of his days in reciting the eternal and immutable truths of the Multiplication Table! Must we not infer from this sad tale that relevance is a more specific character of truth than system? For it is that which confines context within bounds.

But relevance to what? To the judgment's *immediate* context in the first place. Now this context is always intensely personal. Persons are the judges of the judgment's relevance. They put the questions, they receive the answers. They are concerned in the making and the taking of the judgment. Whatever else may happen to it later, it has to be relevant to their interests and purposes in the hour of its birth into the world of fact. Otherwise, however true it might be in the shadow-world of logical possibility, it is erroneous for the purpose in hand. Hence it is that common sense refuses to regard a mind like Nero's which falls into an æsthetic ecstasy at the sight of his burning capital as truly that of a king; because, though the spectacle was doubtless superb, his reaction was not the "right" one. Nor is it thought that a thinker who rejects new opinions because he has reason to dislike their advocates or to love the old, thinks truly. An *ignoratio elenchi* is considered a fallacy, even though it may draw the formally correct conclusion from its premisses. In short in ordinary life the irrelevant counts as false.

Now this fact, that truth must be relevant and that irrelevance is error or insanity, explains why the notion of a total truth is not only superfluous for the explanation of human knowing, but actually fatal to it.

Not only is it not necessary to have achieved omniscience before proceeding to the simplest affirmation, but the adequate testing of a claim is only possible through a reference to the context in which it arose. This reference yields a verdict which can be decisive without being final, for the possibility of further progress is always safeguarded by the power to revise any process, if occasion should arise; every verdict is valid, but only while it remains uncontested.

The doctrine, therefore, that only the Whole can be true is seen to mean that humanly nothing can be true, and, indeed, to be ultimately meaningless, because it construes truth in such a way that it is no longer distinguishable from error. We must therefore replace it by the doctrine that *only the relevant can be true*, and that the relevant must always be relative to a purpose.

But this definition is not yet sufficiently precise. For a certain degree of relevance is likely to be possessed also by most of the errors that are committed in actual thinking. And though, as Professor Stout has shown in the admirable essay which inaugurated the modern theory of Error,* a reference to purpose is essential to the existence of Error, it is even more essential to the existence of Truth. It is true that, without a relation to a purpose, there can be no Error, that, *e.g.*, if I wander into a wood without wishing to get anywhere in particular I cannot go wrong, as I can if I wish to get to a particular place by a particular time; but this is only because my purpose has abolished the distinction between the right road and the wrong. The fact is that relation to purpose

* In *Personal Idealism*.

is necessary to the existence of meaning as such, and therefore includes the spheres both of Truth and of Error.

To discriminate effectively between the true and the false it is necessary to return to the personal aspect of knowing and to add that the one satisfies, and the other defeats, the purposes of the knower. These purposes are essential to the existence both of the true judgment and of the false, for they alone contain the reasons which evoke from the infinite welter of potentially thinkable truths and errors any truth which is actually approved and every error which is actually condemned. No proposition, therefore, can make its *début* on the world's battlegrounds until it has occurred to some one to claim truth on its behalf. But this *sine qua non* of its existence at once equips it with a psychological pedigree. It could not have come into being unless it had somehow commended itself to an individual mind's idiosyncrasy; it could not be accepted as in any real sense true, unless it somehow afforded satisfaction socially.

Unfortunately, however, for the simplicity of our theory, Truth and Error are used in a multiplicity of senses; what is "true" religiously, morally, or æsthetically is not necessarily true for science, nor within the sphere of science do the truths of perception invariably accord with those of reasoning. Hence "truth" may collide with "truth," and errors discredited by their failure to satisfy the purposes for which they were propounded may escape destruction by disguising themselves as "truths" of a different kind. For example, a "God" who was postulated to satisfy the demand for a moral world-order and then so stupidly conceived as to be incapable of performing this function, is often converted into a name for the totality of Reality, and thus, by claiming to satisfy a quite other demand, enabled to escape the atheist's refutation, and the reconstruction to which it ought to lead.

What, however, is common to all sorts of Truth and Error and renders them species of a common genus is that on their

psychological side, "truth" is the proper term for what satisfies, and "error" for what thwarts, a human purpose in cognitive activity.

The difference between Truth and Error, therefore, is ultimately one in *value*. The "true" way of conceiving an object or judging a situation is simply the way most valuable for our purposes; the "false" way is one which is at least relatively worthless. "Truth" is a eulogistic, "error" a dyslogistic, way of valuing a cognitive situation.

Truth and Error, therefore, are continuous, as history shows. Each may develop out of the other, and both are rooted in the same problems of knowing, which are ultimately problems of living. The "truths" of one generation become the "errors" of the next, when it has achieved more valuable and efficient modes of interpreting and manipulating the apparent "facts," which the new "truths" are continuously transforming. And conversely, what is now scouted as "error" may when restated become the parent of a long progeny of "truths."

It follows also that (as every examiner who marks a paper knows) "Truth" and "Error" admit of quantitative differences. Both can vary in importance and can attain (or fail of) their purpose to a greater or a less degree. But neither is absolute. An answer to a question is, in general, called true, if it is *true enough* for the purpose in hand. But this does not mean that greater value and exactitude is not thinkable, or even attainable, if, for a different purpose, it should be needed. It is a true answer to the question "When do you leave?" to reply "To-morrow," but that does not preclude a specification of the train I go by. Thus the demand for absolute exactness is both humanly unnecessary and scientifically unmeaning. Indeed, a higher degree of accuracy than the situation requires would be irrational. Nobody wants to know the height of a mountain in millimetres or a man's age to a second (unless he is an astrologer); and if he did he would not get it, because our methods do not measure fine enough. If, therefore, a man of

science is asked to determine the "true length" of a bar of metal, he will first want to know what degree of accuracy is required, he will then devise instruments that will measure to something more than that degree, and declare that it is, say, 1.00321 metres, with a probable error of $\pm 1/100$ of a millimetre. "But of course," he will add, "you understand that, strictly, this is the probable length at such and such a temperature and under the physical conditions of my laboratory, and that as soon as you alter any of the conditions the length will vary. I cannot, therefore, answer your question as to the 'absolute' length of the bar, because it is too vague, it does not specify the conditions under which the bar is to be measured." Thus scientific truths are infinitely perfectible, but for this very reason never absolute.

Now, if philosophers are wise, they will accept this sort of account of scientific truth as holding of all truth, and realize that any truth is "absolute" enough so soon as it satisfies the demands made upon it, while none can ever be so absolute as to be regarded as incorrigible and incapable of further improvement.

It is a vital interest of science to ascribe to our knowledge such capacity to progress indefinitely, and, in point of fact, history goes a long way towards showing that our knowledge does actually possess this capacity. But this means that the (formal) claim to infallibility must be given up. For, in retrospect, our past knowledge never was infallible; hence, prospectively, our present knowledge should not claim this futile dignity. For a new development of human purposes an old truth may always prove inadequate, and may have to be condemned as "error."

Hence it would be only in a world of fixed purposes that truths could be absolute, and in a world devoid of purposes that no "errors" could develop. As it is, the illusion of *stable* truths arises from the fact that many purposes are *relatively* fixed, while the whole distinction of "appearance" and "reality"

is a creation of purposive selection. Without selection of the more valuable aspects of objects as presented, there would be no reason to condemn anything as appearance or unreality; everything that appeared would be taken as equally real. It is only when we view things as disappointing expectations and thwarting purposes that we introduce differential degrees of "reality," which are at bottom differences in value, and then we can condemn as "errors" the appearances which deceived us. For example, why is it called an "error" to regard a stick immersed in water as really bent, or railway lines as really converging in the distance? Not surely because they do not appear thus to our senses, nor yet because they ought to appear otherwise. The reason surely is that beings who base their expectations on the analogy of other appearances find that these are disappointing, and that for the purpose of using the stick or travelling on the rails they must be rejected.*

The above considerations may have sufficed to make clear what is meant by calling error the negative sort of logical value, a definition which would probably have meant little at the outset. Error thwarts what "truth" furthers, viz., a purpose conceived as cognitive.† But the humanist theory of Error can hardly be complete unless Error is also distinguished from other inferior forms of cognitive value.

* Even so it remains a pretty problem why we prefer to assume the deceptiveness of the appearances rather than a change in the object itself. It would be quite possible to hold that the stick was instantly bent on being put into the water and straightened on being taken out, or that the rails became parallel only when approached, etc. We regard this interpretation of the appearances as absurd for the same reason that we interpret the varying sizes of visual images as due to motions and not to real changes in size, viz., that the view preferred is simpler and more convenient and more "economical" of thought.

† Of course the purpose need not be specifically cognitive because it is so *conceived*: for we can speak of "errors" in religion, morals, and aesthetics, just as conversely we speak of a "right" and "wrong" in cognitions. It is the generic likeness of all the values which mediates such transfers.

To do so, we may map out the whole region of Formal Truth or Truth-claim, somewhat as follows: It contains (1) lies, (2) errors, (3) methodological fictions, (4) methodological assumptions, (5) postulates, (6) validated, (7) axiomatic, truths, and (8) jokes.* Of these the Lie is the most complex. It is distinguished from the Error by the fact that it not only involves two judgments, the false and the true, but also necessarily *two persons*, and difficult questions about the state of mind of one of them. This one, the liar, *knows* all along that the truth-claim made by the first or false judgment is untenable, and while he lives he can at any moment withdraw his judgment. He also knows where his truth-claim will not stand testing, and so the possibility of the correcting judgment is not a merely general prospect, as with ordinary claims, but a perfectly definite and predictable consequence of applying certain tests.

Another interesting feature about the lie is that when its *personal* character is abstracted from, it becomes indistinguishable from a falsehood. Hence in a thorough intellectualism these two conceptions fuse. The illustration (as so often) is afforded by the language of that typically intellectualist people, the Greeks. In Greek *ψεῦδος* means both "lie" and "falsity," and the Platonic doctrine of the "Lie in the soul" may be read either way.

There are also quite a number of puzzles which arise out of the vagueness of the conception of a "lie." It is hardly possible to conceive a "lie" intellectualistically, and without any reference to the *intention* of the liar to deceive. But does the mere intention to deceive suffice to constitute the lie? Must it not be crowned by success? At any rate, the more successful a lie is the more serious it becomes. And what means have we to discover the intention? Must we not to a

* There are also "untruths," which seem to be sometimes "errors" and sometimes "lies," without committing us to a decision of this question.

large extent judge by the subsequent facts? Was not Cassandra proved a true prophet by the fact that her predictions came true, even though no one believed her at first, and even to the end her success might have been a coincidence? And if Cassandra had uttered her prophecies without herself believing in their truth, would she have been a liar, or at least an announcer of untruths? What again of the case of a doctor who believes that his patient is going to die, but tells him he is going to recover? If, contrary to expectation, the patient recovers, has the doctor told a lie or spoken the truth? Or shall it be said that he has done both? But in other respects the error and the lie have much the same character. An undetected lie passes for truth, like an undetected error, and it is only by an *ex post facto* revaluation that it can be called a lie at all. Moreover, when its author dies unrepentant or becomes otherwise unavailable for the correction of his fabrication, a "lie" is completely assimilated to an "error." And lastly, it may be remarked that history is probably full of lies which have prevailed, and are now placidly accepted as truths.

Methodological fictions, assumptions and postulates form a closely connected group of truth-claims. What is essential to them all is that for certain purposes they must be treated as true and cannot be rejected. But to call these methodological reasons "fictions" is to evince a consciousness that they are either inadequate for their own purposes or so inconsistent with others that full truth is *not* claimed for them. They work and are held true only within implied limits. For example, for purposes of numerical calculation it is necessary to treat continua as if they were discrete; this is known to be a fiction, though indispensable; but it works, because any desired degree of accuracy can be given to our calculations, so that the "error" in the assumption can be made infinitesimal and irrelevant. The "methodological assumption" is a more

neutral way of describing the same procedure ; it leaves open the question whether the assumption will on testing be found to develop into a fiction or an uncontested truth. The term "postulate" on the other hand emphasizes rather the psychological way in which a claim is advanced than its logical value after it has come into being. The term "axiom," which is the Greek, and therefore intellectualized, equivalent of "postulate," merely serves to indicate the psychological change which comes over a postulate when it has received so much validation that no one thinks of disputing it. For it is vain to seek to base the truth of a claim on its intuitiveness or self-evidence ; these criteria are only psychological, and actually fallible, and above all they commit the methodological mistake of trying to found the certainty of our knowledge on the discovery of indispensable data, instead of on the adequacy of its functioning.

Lastly, the joke can be distinguished from other truth-claims only by the fact that it does not claim what it professes to claim ; its formal meaning is not its real meaning. Here, again, we must consider the intention of its maker, and study his personal idiosyncrasy to detect it. For the same assertion may mean one thing when made by one man, and quite another when made by another. A Logic then which systematically rules out the personal aspect of knowledge cannot discriminate between jest and earnest. In other words, pure intellectualism cannot, as such, understand a joke.

My intention in this paper has been merely to enunciate a series of, to me, obvious truisms. But if I have so far failed as to seem to have developed instead a mass of subtle distinctions, this will be the best proof that my distinctions were even more necessary than I thought. At any rate, I may have done something to check in future a grotesque conversion to which the critics of Humanism seem to be incurably addicted. We have never asserted or imagined that it is possible to pass from the dictum "all truths work" to

"all that works is true,"* but have always understood both the methodological nature of postulates, and been only too painfully aware of the vogue of errors and lies. But there is much reason to believe that the formal logicians, who have insisted that we ought to have converted this *A* proposition *simpliciter*, have never themselves been able to distinguish clearly in their minds between truth and error, lying and

* Two of the most recent and signal instances of this may be found in the *Edinburgh Review*, for April, 1911, p. 369, and in the preface to Professor Vaihinger's important *Philosophie des Als Ob* (p. x), which incidentally denounces Pragmatism (it is true of an "uncritical" sort) as "epistemological utilitarianism of the worst kind," asserting that "what is useful and enables us to endure life is true," and so becoming "not merely *ancilla theologiæ*, but actually *meretrix theologorum*." He does not specify how he would distinguish "uncritical" from critical pragmatism, or whom he would include under the former term, but it is curious to find him approving a little later (p. xv) of "useful, and therefore legitimate, necessary fictions of mankind." The line, therefore, which separates Professor Vaihinger from the "uncritical pragmatist" would appear to be a very fine one indeed. Both hold that usefulness for action "legitimizes" ideas, but apparently Professor Vaihinger thinks that these biologically useful ideas must not be regarded as true; they are excellent pap for the people, if you propagate them thinking them to be false, whereas if you honestly believe them to be true, you are to be reprobated as pandering to the meretricious instincts of theologians! It would not be easy to decide whether the ethics or the psychology of this doctrine had gone further astray; but there can be no doubt that genuine Humanism must repudiate the "as-if" attitude on both grounds. It is precisely because the teachers and rulers of the people—political, moral, and religious—have been so wickedly addicted to make-believe, and have so long imposed the most outrageous falsehoods on the people as good to believe, that they have destroyed the trust in authority, fostered a profound disbelief in the congruity of the good and the true, and demoralised the whole world. But it is the duty of pragmatism to sweep away the whole mass of unwise dishonesty by laying bare the defective psychology on which the "as-if" attitude rests, and pointing out that it is futile if its falsity has been detected, while, if it concerns a belief which is really indispensable in practice, it cannot possibly maintain itself, because such a belief cannot remain theoretically doubtful. It is, moreover, pretty plain that all our fundamental beliefs have actually convinced us of their truth by their vital value. If Professor Vaihinger will ask himself, *e.g.*, why so many believe that strong drink is strengthening, why nearly all believe that life is worth living, why women hold that

assumption, nor considered the parts they severally play in the theory of knowledge. Hence, it seemed not inappropriate to show how the humanist theory of knowledge makes a special point of discriminating what intellectualist theories have always confused.

babies are delightful and interesting *per se*, and each sex that its opposite is truly and intrinsically attractive, and will honestly try to answer these questions, he will not only find out why the "as-if" attitude is transitory and untenable, but also understand why necessary beliefs cannot be properly rated as fictions and how the progress of the world is actually effected. And he will then see that here also Humanism has built on Kantian doctrine, but has been forced to go beyond it, in order to relieve it of its inadequacy.

[I have since heard from Prof. Vaihinger that his remark was *not* directed against any of the leading pragmatists, but against obscure and unauthorised clerical exploiters of the pragmatic method, and that he himself so nearly agrees with us that he almost called his own position *critical pragmatism*. I have also been convinced by a first reading of the most relevant passages of Prof. Vaihinger's work that this is by no means an exaggeration; but I hope to discuss the important question of the exact relations between his doctrine and the pragmatic theory of truth fully on a subsequent occasion. There can, at any rate, be no doubt that Prof. Vaihinger's exhaustive study of the scientific function of fictions is a very valuable contribution to the modern logic of science.]