

know is, for these logicians, sensible reality, the flux of our sensations and emotions as they pass. 'Energy' is the collective name (according to Ostwald) for the sensations just as they present themselves (the movement, heat, magnetic pull, or light, or whatever it may be) when they are measured in certain ways. So measuring them, we are enabled to describe the correlated changes which they show us, in formulas matchless for their simplicity and fruitfulness for human use. They are sovereign triumphs of economy in thought.

No one can fail to admire the 'energetic' philosophy. But the hypersensible entities, the corpuscles and vibrations, hold their own with most physicists and chemists, in spite of its appeal. It seems too economical to be all-sufficient. Profusion, not economy, may after all be reality's key-note.

I am dealing here with highly technical matters, hardly suitable for popular lecturing, and in which my own competence is small. All the better for my conclusion, however, which at this point is this. The whole notion of truth, which naturally and without reflexion we assume to mean the simple duplication by the mind of a ready-made and given reality, proves hard to understand clearly. There is no simple test available for adjudicating offhand between the divers types of thought that claim to possess it. Common sense, common science or corpuscular philosophy, ultra-critical science, or energetics, and critical or idealistic philosophy, all seem insufficiently true in some regard and leave some dissatisfaction. It is evident that the conflict of these so widely differing systems obliges us to overhaul the very idea of truth, for at present we have no definite notion of what the word may mean. I shall face that task in my next lecture, and will add but a few words, in finishing the present one.

There are only two points that I wish you to retain from the present lecture. The first one relates to common sense. We have seen reason to suspect it, to suspect that in spite of their being so venerable, of their being so universally used and built into the very structure of language, its categories may after all be only a collection of extraordinarily successful hypotheses (historically discovered or invented by single men, but gradually communicated, and used by everybody) by which our forefathers have from time immemorial unified and straightened the discontinuity of their immediate experiences, and put themselves into an equilibrium with the surface of nature so satisfactory for ordinary practical purposes that it certainly would have lasted forever, but for the excessive intellectual vivacity of Democritus, Archimedes, Galileo, Berkeley, and other excentric geniuses whom the example of such men inflamed. Retain, I pray you, this suspicion about common sense.

The other point is this. Ought not the existence of the various types of thinking which we have reviewed, each so splendid for certain purposes, yet all conflicting still, and neither one of them able to support a claim of absolute veracity, to awaken a presumption favorable to the pragmatistic view that all our theories are INSTRUMENTAL, are mental modes of ADAPTATION to reality, rather than revelations or gnostic answers to some divinely instituted world-enigma? I expressed this view as clearly as I could in the second of these lectures. Certainly the restlessness of the actual theoretic situation, the value for some purposes of each thought-level, and the inability of either to expel the others decisively, suggest this pragmatistic view, which I hope that the next lectures may soon make entirely convincing. May there not after all be a possible ambiguity in truth?

Lecture VI

Pragmatism's Conception of Truth

When Clerk Maxwell was a child it is written that he had a mania for having everything explained to him, and that when people put him off with vague verbal accounts of any phenomenon he would interrupt them impatiently by saying, "Yes; but I want you to tell me the PARTICULAR GO of it!" Had his question been about truth, only a pragmatist could have told him the particular go of it. I believe that our contemporary pragmatists, especially Messrs. Schiller and Dewey, have given the only tenable account of this subject. It is a very ticklish subject, sending subtle rootlets into all kinds of crannies, and hard to treat in the sketchy way that alone befits a public lecture. But the Schiller-Dewey view of truth has been so ferociously attacked by

rationalistic philosophers, and so abominably misunderstood, that here, if anywhere, is the point where a clear and simple statement should be made.

I fully expect to see the pragmatist view of truth run through the classic stages of a theory's career. First, you know, a new theory is attacked as absurd; then it is admitted to be true, but obvious and insignificant; finally it is seen to be so important that its adversaries claim that they themselves discovered it. Our doctrine of truth is at present in the first of these three stages, with symptoms of the second stage having begun in certain quarters. I wish that this lecture might help it beyond the first stage in the eyes of many of you.

Truth, as any dictionary will tell you, is a property of certain of our ideas. It means their 'agreement,' as falsity means their disagreement, with 'reality.' Pragmatists and intellectualists both accept this definition as a matter of course. They begin to quarrel only after the question is raised as to what may precisely be meant by the term 'agreement,' and what by the term 'reality,' when reality is taken as something for our ideas to agree with.

In answering these questions the pragmatists are more analytic and painstaking, the intellectualists more offhand and irreflective. The popular notion is that a true idea must copy its reality. Like other popular views, this one follows the analogy of the most usual experience. Our true ideas of sensible things do indeed copy them. Shut your eyes and think of yonder clock on the wall, and you get just such a true picture or copy of its dial. But your idea of its 'works' (unless you are a clock-maker) is much less of a copy, yet it passes muster, for it in no way clashes with the reality. Even tho it should shrink to the mere word 'works,' that word still serves you truly; and when you speak of the 'time-keeping function' of the clock, or of its spring's 'elasticity,' it is hard to see exactly what your ideas can copy.

You perceive that there is a problem here. Where our ideas cannot copy definitely their object, what does agreement with that object mean? Some idealists seem to say that they are true whenever they are what God means that we ought to think about that object. Others hold the copy-view all through, and speak as if our ideas possessed truth just in proportion as they approach to being copies of the Absolute's eternal way of thinking.

These views, you see, invite pragmatistic discussion. But the great assumption of the intellectualists is that truth means essentially an inert static relation. When you've got your true idea of anything, there's an end of the matter. You're in possession; you KNOW; you have fulfilled your thinking destiny. You are where you ought to be mentally; you have obeyed your categorical imperative; and nothing more need follow on that climax of your rational destiny. Epistemologically you are in stable equilibrium.

Pragmatism, on the other hand, asks its usual question. "Grant an idea or belief to be true," it says, "what concrete difference will its being true make in anyone's actual life? How will the truth be realized? What experiences will be different from those which would obtain if the belief were false? What, in short, is the truth's cash-value in experiential terms?"

The moment pragmatism asks this question, it sees the answer: TRUE IDEAS ARE THOSE THAT WE CAN ASSIMILATE, VALIDATE, CORROBORATE AND VERIFY. FALSE IDEAS ARE THOSE THAT WE CANNOT. That is the practical difference it makes to us to have true ideas; that, therefore, is the meaning of truth, for it is all that truth is known-as.

This thesis is what I have to defend. The truth of an idea is not a stagnant property inherent in it. Truth HAPPENS to an idea. It BECOMES true, is MADE true by events. Its verity is in fact an event, a process: the process namely of its verifying itself, its veri-FICATION. Its validity is the process of its valid-ATION.

But what do the words verification and validation themselves pragmatically mean? They again signify certain practical consequences of the verified and validated idea. It is hard to find any one phrase that characterizes these consequences better than the ordinary agreement-formula--just such consequences being what we have

in mind whenever we say that our ideas 'agree' with reality. They lead us, namely, through the acts and other ideas which they instigate, into or up to, or towards, other parts of experience with which we feel all the while--such feeling being among our potentialities--that the original ideas remain in agreement. The connexions and transitions come to us from point to point as being progressive, harmonious, satisfactory. This function of agreeable leading is what we mean by an idea's verification. Such an account is vague and it sounds at first quite trivial, but it has results which it will take the rest of my hour to explain.

Let me begin by reminding you of the fact that the possession of true thoughts means everywhere the possession of invaluable instruments of action; and that our duty to gain truth, so far from being a blank command from out of the blue, or a 'stunt' self-imposed by our intellect, can account for itself by excellent practical reasons.

The importance to human life of having true beliefs about matters of fact is a thing too notorious. We live in a world of realities that can be infinitely useful or infinitely harmful. Ideas that tell us which of them to expect count as the true ideas in all this primary sphere of verification, and the pursuit of such ideas is a primary human duty. The possession of truth, so far from being here an end in itself, is only a preliminary means towards other vital satisfactions. If I am lost in the woods and starved, and find what looks like a cow-path, it is of the utmost importance that I should think of a human habitation at the end of it, for if I do so and follow it, I save myself. The true thought is useful here because the house which is its object is useful. The practical value of true ideas is thus primarily derived from the practical importance of their objects to us. Their objects are, indeed, not important at all times. I may on another occasion have no use for the house; and then my idea of it, however verifiable, will be practically irrelevant, and had better remain latent. Yet since almost any object may some day become temporarily important, the advantage of having a general stock of extra truths, of ideas that shall be true of merely possible situations, is obvious. We store such extra truths away in our memories, and with the overflow we fill our books of reference. Whenever such an extra truth becomes practically relevant to one of our emergencies, it passes from cold-storage to do work in the world, and our belief in it grows active. You can say of it then either that 'it is useful because it is true' or that 'it is true because it is useful.' Both these phrases mean exactly the same thing, namely that here is an idea that gets fulfilled and can be verified. True is the name for whatever idea starts the verification-process, useful is the name for its completed function in experience. True ideas would never have been singled out as such, would never have acquired a class-name, least of all a name suggesting value, unless they had been useful from the outset in this way.

From this simple cue pragmatism gets her general notion of truth as something essentially bound up with the way in which one moment in our experience may lead us towards other moments which it will be worth while to have been led to. Primarily, and on the common-sense level, the truth of a state of mind means this function of A LEADING THAT IS WORTH WHILE. When a moment in our experience, of any kind whatever, inspires us with a thought that is true, that means that sooner or later we dip by that thought's guidance into the particulars of experience again and make advantageous connexion with them. This is a vague enough statement, but I beg you to retain it, for it is essential.

Our experience meanwhile is all shot through with regularities. One bit of it can warn us to get ready for another bit, can 'intend' or be 'significant of' that remoter object. The object's advent is the significance's verification. Truth, in these cases, meaning nothing but eventual verification, is manifestly incompatible with waywardness on our part. Woe to him whose beliefs play fast and loose with the order which realities follow in his experience: they will lead him nowhere or else make false connexions.

By 'realities' or 'objects' here, we mean either things of common sense, sensibly present, or else common-sense relations, such as dates, places, distances, kinds, activities. Following our mental image of a house along the cow-path, we actually come to see the house; we get the image's full verification. SUCH SIMPLY AND FULLY VERIFIED LEADINGS ARE CERTAINLY THE ORIGINALS AND PROTOTYPES OF THE TRUTH-PROCESS. Experience offers indeed other forms of truth-process, but they

are all conceivable as being primary verifications arrested, multiplied or substituted one for another.

Take, for instance, yonder object on the wall. You and I consider it to be a 'clock,' altho no one of us has seen the hidden works that make it one. We let our notion pass for true without attempting to verify. If truths mean verification-process essentially, ought we then to call such unverified truths as this abortive? No, for they form the overwhelmingly large number of the truths we live by. Indirect as well as direct verifications pass muster. Where circumstantial evidence is sufficient, we can go without eye-witnessing. Just as we here assume Japan to exist without ever having been there, because it WORKS to do so, everything we know conspiring with the belief, and nothing interfering, so we assume that thing to be a clock. We USE it as a clock, regulating the length of our lecture by it. The verification of the assumption here means its leading to no frustration or contradiction. VerifiABILITY of wheels and weights and pendulum is as good as verification. For one truth-process completed there are a million in our lives that function in this state of nascency. They turn us TOWARDS direct verification; lead us into the SURROUNDINGS of the objects they envisage; and then, if everything runs on harmoniously, we are so sure that verification is possible that we omit it, and are usually justified by all that happens.

Truth lives, in fact, for the most part on a credit system. Our thoughts and beliefs 'pass,' so long as nothing challenges them, just as bank-notes pass so long as nobody refuses them. But this all points to direct face-to-face verifications somewhere, without which the fabric of truth collapses like a financial system with no cash-basis whatever. You accept my verification of one thing, I yours of another. We trade on each other's truth. But beliefs verified concretely by SOMEBODY are the posts of the whole superstructure.

Another great reason--beside economy of time--for waiving complete verification in the usual business of life is that all things exist in kinds and not singly. Our world is found once for all to have that peculiarity. So that when we have once directly verified our ideas about one specimen of a kind, we consider ourselves free to apply them to other specimens without verification. A mind that habitually discerns the kind of thing before it, and acts by the law of the kind immediately, without pausing to verify, will be a 'true' mind in ninety-nine out of a hundred emergencies, proved so by its conduct fitting everything it meets, and getting no refutation.

INDIRECTLY OR ONLY POTENTIALLY VERIFYING PROCESSES MAY THUS BE TRUE AS WELL AS FULL VERIFICATION-PROCESSES. They work as true processes would work, give us the same advantages, and claim our recognition for the same reasons. All this on the common-sense level of, matters of fact, which we are alone considering.

But matters of fact are not our only stock in trade. RELATIONS AMONG PURELY MENTAL IDEAS form another sphere where true and false beliefs obtain, and here the beliefs are absolute, or unconditional. When they are true they bear the name either of definitions or of principles. It is either a principle or a definition that 1 and 1 make 2, that 2 and 1 make 3, and so on; that white differs less from gray than it does from black; that when the cause begins to act the effect also commences. Such propositions hold of all possible 'ones,' of all conceivable 'whites' and 'grays' and 'causes.' The objects here are mental objects. Their relations are perceptually obvious at a glance, and no sense-verification is necessary. Moreover, once true, always true, of those same mental objects. Truth here has an 'eternal' character. If you can find a concrete thing anywhere that is 'one' or 'white' or 'gray,' or an 'effect,' then your principles will everlastingly apply to it. It is but a case of ascertaining the kind, and then applying the law of its kind to the particular object. You are sure to get truth if you can but name the kind rightly, for your mental relations hold good of everything of that kind without exception. If you then, nevertheless, failed to get truth concretely, you would say that you had classed your real objects wrongly.

In this realm of mental relations, truth again is an affair of leading. We relate one abstract idea with another, framing in the end great systems of logical and mathematical truth, under the respective terms of which the sensible facts of experience eventually arrange themselves, so that our eternal truths hold good of realities also. This marriage of fact and theory is endlessly fertile. What we say is here already true in advance of

special verification, IF WE HAVE SUBSUMED OUR OBJECTS RIGHTLY. Our ready-made ideal framework for all sorts of possible objects follows from the very structure of our thinking. We can no more play fast and loose with these abstract relations than we can do so with our sense-experiences. They coerce us; we must treat them consistently, whether or not we like the results. The rules of addition apply to our debts as rigorously as to our assets. The hundredth decimal of pi, the ratio of the circumference to its diameter, is predetermined ideally now, tho no one may have computed it. If we should ever need the figure in our dealings with an actual circle we should need to have it given rightly, calculated by the usual rules; for it is the same kind of truth that those rules elsewhere calculate.

Between the coercions of the sensible order and those of the ideal order, our mind is thus wedged tightly. Our ideas must agree with realities, be such realities concrete or abstract, be they facts or be they principles, under penalty of endless inconsistency and frustration. So far, intellectualists can raise no protest. They can only say that we have barely touched the skin of the matter.

Realities mean, then, either concrete facts, or abstract kinds of things and relations perceived intuitively between them. They furthermore and thirdly mean, as things that new ideas of ours must no less take account of, the whole body of other truths already in our possession. But what now does 'agreement' with such three-fold realities mean?--to use again the definition that is current.

Here it is that pragmatism and intellectualism begin to part company. Primarily, no doubt, to agree means to copy, but we saw that the mere word 'clock' would do instead of a mental picture of its works, and that of many realities our ideas can only be symbols and not copies. 'Past time,' 'power,' 'spontaneity'--how can our mind copy such realities?

To 'agree' in the widest sense with a reality, CAN ONLY MEAN TO BE GUIDED EITHER STRAIGHT UP TO IT OR INTO ITS SURROUNDINGS, OR TO BE PUT INTO SUCH WORKING TOUCH WITH IT AS TO HANDLE EITHER IT OR SOMETHING CONNECTED WITH IT BETTER THAN IF WE DISAGREED. Better either intellectually or practically! And often agreement will only mean the negative fact that nothing contradictory from the quarter of that reality comes to interfere with the way in which our ideas guide us elsewhere. To copy a reality is, indeed, one very important way of agreeing with it, but it is far from being essential. The essential thing is the process of being guided. Any idea that helps us to DEAL, whether practically or intellectually, with either the reality or its belongings, that doesn't entangle our progress in frustrations, that FITS, in fact, and adapts our life to the reality's whole setting, will agree sufficiently to meet the requirement. It will hold true of that reality.

Thus, NAMES are just as 'true' or 'false' as definite mental pictures are. They set up similar verification-processes, and lead to fully equivalent practical results.

All human thinking gets discursified; we exchange ideas; we lend and borrow verifications, get them from one another by means of social intercourse. All truth thus gets verbally built out, stored up, and made available for everyone. Hence, we must TALK consistently just as we must THINK consistently: for both in talk and thought we deal with kinds. Names are arbitrary, but once understood they must be kept to. We mustn't now call Abel 'Cain' or Cain 'Abel.' If we do, we ungear ourselves from the whole book of Genesis, and from all its connexions with the universe of speech and fact down to the present time. We throw ourselves out of whatever truth that entire system of speech and fact may embody.

The overwhelming majority of our true ideas admit of no direct or face-to-face verification--those of past history, for example, as of Cain and Abel. The stream of time can be remounted only verbally, or verified indirectly by the present prolongations or effects of what the past harbored. Yet if they agree with these verbalities and effects, we can know that our ideas of the past are true. AS TRUE AS PAST TIME ITSELF WAS, so true was Julius Caesar, so true were antediluvian monsters, all in their proper dates and settings. That past time itself was, is guaranteed by its coherence with everything that's present. True as the present is,

the past was also.

Agreement thus turns out to be essentially an affair of leading-- leading that is useful because it is into quarters that contain objects that are important. True ideas lead us into useful verbal and conceptual quarters as well as directly up to useful sensible termini. They lead to consistency, stability and flowing human intercourse. They lead away from excentricity and isolation, from foiled and barren thinking. The untrammelled flowing of the leading- process, its general freedom from clash and contradiction, passes for its indirect verification; but all roads lead to Rome, and in the end and eventually, all true processes must lead to the face of directly verifying sensible experiences SOMEWHERE, which somebody's ideas have copied.

Such is the large loose way in which the pragmatist interprets the word agreement. He treats it altogether practically. He lets it cover any process of conduction from a present idea to a future terminus, provided only it run prosperously. It is only thus that 'scientific' ideas, flying as they do beyond common sense, can be said to agree with their realities. It is, as I have already said, as if reality were made of ether, atoms or electrons, but we mustn't think so literally. The term 'energy' doesn't even pretend to stand for anything 'objective.' It is only a way of measuring the surface of phenomena so as to string their changes on a simple formula.

Yet in the choice of these man-made formulas we cannot be capricious with impunity any more than we can be capricious on the common-sense practical level. We must find a theory that will WORK; and that means something extremely difficult; for our theory must mediate between all previous truths and certain new experiences. It must derange common sense and previous belief as little as possible, and it must lead to some sensible terminus or other that can be verified exactly. To 'work' means both these things; and the squeeze is so tight that there is little loose play for any hypothesis. Our theories are wedged and controlled as nothing else is. Yet sometimes alternative theoretic formulas are equally compatible with all the truths we know, and then we choose between them for subjective reasons. We choose the kind of theory to which we are already partial; we follow 'elegance' or 'economy.' Clerk Maxwell somewhere says it would be "poor scientific taste" to choose the more complicated of two equally well-evidenced conceptions; and you will all agree with him. Truth in science is what gives us the maximum possible sum of satisfactions, taste included, but consistency both with previous truth and with novel fact is always the most imperious claimant.

I have led you through a very sandy desert. But now, if I may be allowed so vulgar an expression, we begin to taste the milk in the cocoanut. Our rationalist critics here discharge their batteries upon us, and to reply to them will take us out from all this dryness into full sight of a momentous philosophical alternative.

Our account of truth is an account of truths in the plural, of processes of leading, realized in rebus, and having only this quality in common, that they PAY. They pay by guiding us into or towards some part of a system that dips at numerous points into sense-percepts, which we may copy mentally or not, but with which at any rate we are now in the kind of commerce vaguely designated as verification. Truth for us is simply a collective name for verification-processes, just as health, wealth, strength, etc., are names for other processes connected with life, and also pursued because it pays to pursue them. Truth is MADE, just as health, wealth and strength are made, in the course of experience.

Here rationalism is instantaneously up in arms against us. I can imagine a rationalist to talk as follows:

"Truth is not made," he will say; "it absolutely obtains, being a unique relation that does not wait upon any process, but shoots straight over the head of experience, and hits its reality every time. Our belief that yon thing on the wall is a clock is true already, altho no one in the whole history of the world should verify it. The bare quality of standing in that transcendent relation is what makes any thought true that possesses it, whether or not there be verification. You pragmatists put the cart before the horse in making truth's being reside in verification-processes. These are merely signs of its being, merely our lame ways of ascertaining after the fact, which of our ideas already has possessed the wondrous quality. The quality itself is timeless, like all essences and natures. Thoughts partake of it directly, as they partake of falsity or of irrelevancy. It can't be

analyzed away into pragmatic consequences."

The whole plausibility of this rationalist tirade is due to the fact to which we have already paid so much attention. In our world, namely, abounding as it does in things of similar kinds and similarly associated, one verification serves for others of its kind, and one great use of knowing things is to be led not so much to them as to their associates, especially to human talk about them. The quality of truth, obtaining *ante rem*, pragmatically means, then, the fact that in such a world innumerable ideas work better by their indirect or possible than by their direct and actual verification. Truth *ante rem* means only verifiability, then; or else it is a case of the stock rationalist trick of treating the NAME of a concrete phenomenal reality as an independent prior entity, and placing it behind the reality as its explanation. Professor Mach quotes somewhere an epigram of Lessing's:

Sagt Hanschen Schlau zu Vetter Fritz, "Wie kommt es, Vetter Fritzen, Dass grad' die Reichsten in der Welt, Das meiste Geld besitzen?"

Hanschen Schlau here treats the principle 'wealth' as something distinct from the facts denoted by the man's being rich. It antedates them; the facts become only a sort of secondary coincidence with the rich man's essential nature.

In the case of 'wealth' we all see the fallacy. We know that wealth is but a name for concrete processes that certain men's lives play a part in, and not a natural excellence found in Messrs. Rockefeller and Carnegie, but not in the rest of us.

Like wealth, health also lives in rebus. It is a name for processes, as digestion, circulation, sleep, etc., that go on happily, tho in this instance we are more inclined to think of it as a principle and to say the man digests and sleeps so well BECAUSE he is so healthy.

With 'strength' we are, I think, more rationalistic still, and decidedly inclined to treat it as an excellence pre-existing in the man and explanatory of the herculean performances of his muscles.

With 'truth' most people go over the border entirely, and treat the rationalistic account as self-evident. But really all these words in TH are exactly similar. Truth exists *ante rem* just as much and as little as the other things do.

The scholastics, following Aristotle, made much of the distinction between habit and act. Health in *actu* means, among other things, good sleeping and digesting. But a healthy man need not always be sleeping, or always digesting, any more than a wealthy man need be always handling money, or a strong man always lifting weights. All such qualities sink to the status of 'habits' between their times of exercise; and similarly truth becomes a habit of certain of our ideas and beliefs in their intervals of rest from their verifying activities. But those activities are the root of the whole matter, and the condition of there being any habit to exist in the intervals.

'The true,' to put it very briefly, is only the expedient in the way of our thinking, just as 'the right' is only the expedient in the way of our behaving. Expedient in almost any fashion; and expedient in the long run and on the whole of course; for what meets expediently all the experience in sight won't necessarily meet all farther experiences equally satisfactorily. Experience, as we know, has ways of BOILING OVER, and making us correct our present formulas.

The 'absolutely' true, meaning what no farther experience will ever alter, is that ideal vanishing-point towards which we imagine that all our temporary truths will some day converge. It runs on all fours with the perfectly wise man, and with the absolutely complete experience; and, if these ideals are ever realized, they will all be realized together. Meanwhile we have to live to-day by what truth we can get to-day, and be ready to-morrow

to call it falsehood. Ptolemaic astronomy, euclidean space, aristotelian logic, scholastic metaphysics, were expedient for centuries, but human experience has boiled over those limits, and we now call these things only relatively true, or true within those borders of experience. 'Absolutely' they are false; for we know that those limits were casual, and might have been transcended by past theorists just as they are by present thinkers.

When new experiences lead to retrospective judgments, using the past tense, what these judgments utter WAS true, even tho no past thinker had been led there. We live forwards, a Danish thinker has said, but we understand backwards. The present sheds a backward light on the world's previous processes. They may have been truth-processes for the actors in them. They are not so for one who knows the later revelations of the story.

This regulative notion of a potential better truth to be established later, possibly to be established some day absolutely, and having powers of retroactive legislation, turns its face, like all pragmatist notions, towards concreteness of fact, and towards the future. Like the half-truths, the absolute truth will have to be MADE, made as a relation incidental to the growth of a mass of verification-experience, to which the half-true ideas are all along contributing their quota.

I have already insisted on the fact that truth is made largely out of previous truths. Men's beliefs at any time are so much experience funded. But the beliefs are themselves parts of the sum total of the world's experience, and become matter, therefore, for the next day's funding operations. So far as reality means experienceable reality, both it and the truths men gain about it are everlastingly in process of mutation-mutation towards a definite goal, it may be--but still mutation.

Mathematicians can solve problems with two variables. On the Newtonian theory, for instance, acceleration varies with distance, but distance also varies with acceleration. In the realm of truth- processes facts come independently and determine our beliefs provisionally. But these beliefs make us act, and as fast as they do so, they bring into sight or into existence new facts which re- determine the beliefs accordingly. So the whole coil and ball of truth, as it rolls up, is the product of a double influence. Truths emerge from facts; but they dip forward into facts again and add to them; which facts again create or reveal new truth (the word is indifferent) and so on indefinitely. The 'facts' themselves meanwhile are not TRUE. They simply ARE. Truth is the function of the beliefs that start and terminate among them.

The case is like a snowball's growth, due as it is to the distribution of the snow on the one hand, and to the successive pushes of the boys on the other, with these factors co-determining each other incessantly.

The most fateful point of difference between being a rationalist and being a pragmatist is now fully in sight. Experience is in mutation, and our psychological ascertainments of truth are in mutation--so much rationalism will allow; but never that either reality itself or truth itself is mutable. Reality stands complete and ready-made from all eternity, rationalism insists, and the agreement of our ideas with it is that unique unanalyzable virtue in them of which she has already told us. As that intrinsic excellence, their truth has nothing to do with our experiences. It adds nothing to the content of experience. It makes no difference to reality itself; it is supervenient, inert, static, a reflexion merely. It doesn't EXIST, it HOLDS or OBTAINS, it belongs to another dimension from that of either facts or fact-relations, belongs, in short, to the epistemological dimension--and with that big word rationalism closes the discussion.

Thus, just as pragmatism faces forward to the future, so does rationalism here again face backward to a past eternity. True to her inveterate habit, rationalism reverts to 'principles,' and thinks that when an abstraction once is named, we own an oracular solution.

The tremendous pregnancy in the way of consequences for life of this radical difference of outlook will only become apparent in my later lectures. I wish meanwhile to close this lecture by showing that rationalism's sublimity does not save it from inanity.

When, namely, you ask rationalists, instead of accusing pragmatism of desecrating the notion of truth, to define it themselves by saying exactly what THEY understand by it, the only positive attempts I can think of are these two:

1. "Truth is just the system of propositions which have an un-conditional claim to be recognized as valid." [Footnote: A. E. Taylor, *Philosophical Review*, vol. xiv, p. 288.]

2. Truth is a name for all those judgments which we find ourselves under obligation to make by a kind of imperative duty. [Footnote: H. Rickert, *Der Gegenstand der Erkenntnis*, chapter on 'Die Urtheilsnothwendigkeit.']

The first thing that strikes one in such definitions is their unutterable triviality. They are absolutely true, of course, but absolutely insignificant until you handle them pragmatically. What do you mean by 'claim' here, and what do you mean by 'duty'? As summary names for the concrete reasons why thinking in true ways is overwhelmingly expedient and good for mortal men, it is all right to talk of claims on reality's part to be agreed with, and of obligations on our part to agree. We feel both the claims and the obligations, and we feel them for just those reasons.

But the rationalists who talk of claim and obligation EXPRESSLY SAY THAT THEY HAVE NOTHING TO DO WITH OUR PRACTICAL INTERESTS OR PERSONAL REASONS. Our reasons for agreeing are psychological facts, they say, relative to each thinker, and to the accidents of his life. They are his evidence merely, they are no part of the life of truth itself. That life transacts itself in a purely logical or epistemological, as distinguished from a psychological, dimension, and its claims antedate and exceed all personal motivations whatsoever. Tho neither man nor God should ever ascertain truth, the word would still have to be defined as that which OUGHT to be ascertained and recognized.

There never was a more exquisite example of an idea abstracted from the concretes of experience and then used to oppose and negate what it was abstracted from.

Philosophy and common life abound in similar instances. The 'sentimentalist fallacy' is to shed tears over abstract justice and generosity, beauty, etc., and never to know these qualities when you meet them in the street, because there the circumstances make them vulgar. Thus I read in the privately printed biography of an eminently rationalistic mind: "It was strange that with such admiration for beauty in the abstract, my brother had no enthusiasm for fine architecture, for beautiful painting, or for flowers." And in almost the last philosophic work I have read, I find such passages as the following: "Justice is ideal, solely ideal. Reason conceives that it ought to exist, but experience shows that it cannot. ... Truth, which ought to be, cannot be. ... Reason is deformed by experience. As soon as reason enters experience, it becomes contrary to reason."

The rationalist's fallacy here is exactly like the sentimentalist's. Both extract a quality from the muddy particulars of experience, and find it so pure when extracted that they contrast it with each and all its muddy instances as an opposite and higher nature. All the while it is THEIR nature. It is the nature of truths to be validated, verified. It pays for our ideas to be validated. Our obligation to seek truth is part of our general obligation to do what pays. The payments true ideas bring are the sole why of our duty to follow them.

Identical whys exist in the case of wealth and health. Truth makes no other kind of claim and imposes no other kind of ought than health and wealth do. All these claims are conditional; the concrete benefits we gain are what we mean by calling the pursuit a duty. In the case of truth, untrue beliefs work as perniciously in the long run as true beliefs work beneficially. Talking abstractly, the quality 'true' may thus be said to grow absolutely precious, and the quality 'untrue' absolutely damnable: the one may be called good, the other bad, unconditionally. We ought to think the true, we ought to shun the false, imperatively.

But if we treat all this abstraction literally and oppose it to its mother soil in experience, see what a

preposterous position we work ourselves into.

We cannot then take a step forward in our actual thinking. When shall I acknowledge this truth and when that? Shall the acknowledgment be loud?--or silent? If sometimes loud, sometimes silent, which NOW? When may a truth go into cold-storage in the encyclopedia? and when shall it come out for battle? Must I constantly be repeating the truth 'twice two are four' because of its eternal claim on recognition? or is it sometimes irrelevant? Must my thoughts dwell night and day on my personal sins and blemishes, because I truly have them?--or may I sink and ignore them in order to be a decent social unit, and not a mass of morbid melancholy and apology?

It is quite evident that our obligation to acknowledge truth, so far from being unconditional, is tremendously conditioned. Truth with a big T, and in the singular, claims abstractly to be recognized, of course; but concrete truths in the plural need be recognized only when their recognition is expedient. A truth must always be preferred to a falsehood when both relate to the situation; but when neither does, truth is as little of a duty as falsehood. If you ask me what o'clock it is and I tell you that I live at 95 Irving Street, my answer may indeed be true, but you don't see why it is my duty to give it. A false address would be as much to the purpose.

With this admission that there are conditions that limit the application of the abstract imperative, THE PRAGMATISTIC TREATMENT OF TRUTH SWEEPS BACK UPON US IN ITS FULNESS. Our duty to agree with reality is seen to be grounded in a perfect jungle of concrete expediencies.

When Berkeley had explained what people meant by matter, people thought that he denied matter's existence. When Messrs. Schiller and Dewey now explain what people mean by truth, they are accused of denying ITS existence. These pragmatists destroy all objective standards, critics say, and put foolishness and wisdom on one level. A favorite formula for describing Mr. Schiller's doctrines and mine is that we are persons who think that by saying whatever you find it pleasant to say and calling it truth you fulfil every pragmatistic requirement.

I leave it to you to judge whether this be not an impudent slander. Pent in, as the pragmatist more than anyone else sees himself to be, between the whole body of funded truths squeezed from the past and the coercions of the world of sense about him, who so well as he feels the immense pressure of objective control under which our minds perform their operations? If anyone imagines that this law is lax, let him keep its commandment one day, says Emerson. We have heard much of late of the uses of the imagination in science. It is high time to urge the use of a little imagination in philosophy. The unwillingness of some of our critics to read any but the silliest of possible meanings into our statements is as discreditable to their imaginations as anything I know in recent philosophic history. Schiller says the true is that which 'works.' Thereupon he is treated as one who limits verification to the lowest material utilities. Dewey says truth is what gives 'satisfaction.' He is treated as one who believes in calling everything true which, if it were true, would be pleasant.

Our critics certainly need more imagination of realities. I have honestly tried to stretch my own imagination and to read the best possible meaning into the rationalist conception, but I have to confess that it still completely baffles me. The notion of a reality calling on us to 'agree' with it, and that for no reasons, but simply because its claim is 'unconditional' or 'transcendent,' is one that I can make neither head nor tail of. I try to imagine myself as the sole reality in the world, and then to imagine what more I would 'claim' if I were allowed to. If you suggest the possibility of my claiming that a mind should come into being from out of the void inane and stand and COPY me, I can indeed imagine what the copying might mean, but I can conjure up no motive. What good it would do me to be copied, or what good it would do that mind to copy me, if farther consequences are expressly and in principle ruled out as motives for the claim (as they are by our rationalist authorities) I cannot fathom. When the Irishman's admirers ran him along to the place of banquet in a sedan chair with no bottom, he said, "Faith, if it wasn't for the honor of the thing, I might as well have come on foot." So here: but for the honor of the thing, I might as well have remained uncopied. Copying is one genuine mode of knowing (which for some strange reason our contemporary transcendentalists seem to be tumbling

over each other to repudiate); but when we get beyond copying, and fall back on unnamed forms of agreeing that are expressly denied to be either copyings or leadings or fittings, or any other processes pragmatically definable, the WHAT of the 'agreement' claimed becomes as unintelligible as the why of it. Neither content nor motive can be imagine for it. It is an absolutely meaningless abstraction. [Footnote: I am not forgetting that Professor Rickert long ago gave up the whole notion of truth being founded on agreement with reality. Reality, according to him, is whatever agrees with truth, and truth is founded solely on our primal duty. This fantastic flight, together with Mr. Joachim's candid confession of failure in his book *The Nature of Truth*, seems to me to mark the bankruptcy of rationalism when dealing with this subject. Rickert deals with part of the pragmatistic position under the head of what he calls 'Relativismus.' I cannot discuss his text here. Suffice it to say that his argumentation in that chapter is so feeble as to seem almost incredible in so generally able a writer.]

Surely in this field of truth it is the pragmatists and not the rationalists who are the more genuine defenders of the universe's rationality.

Lecture VII

Pragmatism and Humanism

What hardens the heart of everyone I approach with the view of truth sketched in my last lecture is that typical idol of the tribe, the notion of THE Truth, conceived as the one answer, determinate and complete, to the one fixed enigma which the world is believed to propound. For popular tradition, it is all the better if the answer be oracular, so as itself to awaken wonder as an enigma of the second order, veiling rather than revealing what its profundities are supposed to contain. All the great single-word answers to the world's riddle, such as God, the One, Reason, Law, Spirit, Matter, Nature, Polarity, the Dialectic Process, the Idea, the Self, the Oversoul, draw the admiration that men have lavished on them from this oracular role. By amateurs in philosophy and professionals alike, the universe is represented as a queer sort of petrified sphinx whose appeal to man consists in a monotonous challenge to his divining powers. THE Truth: what a perfect idol of the rationalistic mind! I read in an old letter--from a gifted friend who died too young--these words: "In everything, in science, art, morals and religion, there MUST be one system that is right and EVERY other wrong." How characteristic of the enthusiasm of a certain stage of youth! At twenty-one we rise to such a challenge and expect to find the system. It never occurs to most of us even later that the question 'what is THE truth?' is no real question (being irrelative to all conditions) and that the whole notion of THE truth is an abstraction from the fact of truths in the plural, a mere useful summarizing phrase like THE Latin Language or THE Law.

Common-law judges sometimes talk about the law, and school-masters talk about the latin tongue, in a way to make their hearers think they mean entities pre-existent to the decisions or to the words and syntax, determining them unequivocally and requiring them to obey. But the slightest exercise of reflexion makes us see that, instead of being principles of this kind, both law and latin are results. Distinctions between the lawful and the unlawful in conduct, or between the correct and incorrect in speech, have grown up incidentally among the interactions of men's experiences in detail; and in no other way do distinctions between the true and the false in belief ever grow up. Truth grafts itself on previous truth, modifying it in the process, just as idiom grafts itself on previous idiom, and law on previous law. Given previous law and a novel case, and the judge will twist them into fresh law. Previous idiom; new slang or metaphor or oddity that hits the public taste--and presto, a new idiom is made. Previous truth; fresh facts--and our mind finds a new truth.

All the while, however, we pretend that the eternal is unrolling, that the one previous justice, grammar or truth is simply fulgurating, and not being made. But imagine a youth in the courtroom trying cases with his abstract notion of 'the' law, or a censor of speech let loose among the theatres with his idea of 'the' mother-tongue, or a professor setting up to lecture on the actual universe with his rationalistic notion of 'the Truth' with a big T, and what progress do they make? Truth, law, and language fairly boil away from them at the least touch of novel fact. These things MAKE THEMSELVES as we go. Our rights, wrongs, prohibitions, penalties, words,