



William James (1842-1910)

Plan

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Temperament and philosophy

Pragmatic Method

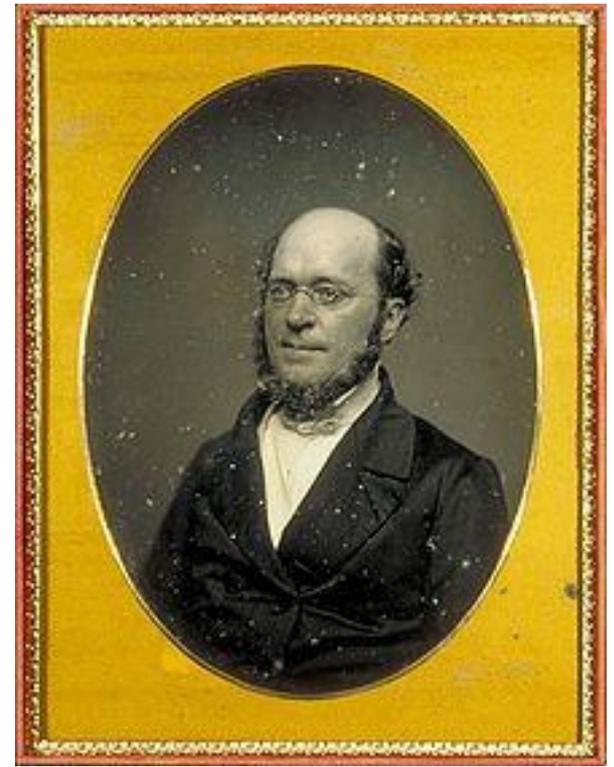
Pragmatism and "Inductive Logic"

Pragmatism and Truth

Pragmatism and Religion

Father: Henry James Sr. (1848-1892)

Follower of Swedenborg (anti-naturalist



In that mysterious gulf of the past into which the present will soon fall and go back and back, yours is still for me the central figure. All my intellectual life I derive from you; and though we have often seemed at odds in the expression thereof I'm sure there's a harmony somewhere, & that our strivings will combine. What my debt to you is goes beyond all my power of estimating,—so early, so penetrating and so constant has been the influence. . . . Good night my sacred old Father. If I don't see you again—Farewell! a blessed farewell! (William to his father, on the latter's deathbed, never read)

Five siblings, include Henry James (1843-1916), the writer (*Portrait of a Lady*, *The Wings of the Dove*, *The Turn of the Screw*),



Alice James (1848-1892), whose diary was published after her death.



Some key dates in William's life

1842	Born
1855-1860	Develops an interest in, and studies, painting
1861	Abandons painting; enters Lawrence Scientific School at Harvard
1864-1869	Harvard Medical School; bouts of severe depression; receives MD but never practices medicine
1872-1873	Teaches physiology at Harvard; resolves his "soul sickness"
1874	Begins teaching psychology at Harvard; establishes first American psychological laboratory
1878	Marries Alice Howe Gibbons
1880	Appointed Assistant Professor of Philosophy at Harvard; continues to teach psychology
1898	Identifies himself as a pragmatist

Some major publications

1890 *The Principles of Psychology* (twelve years after beginning to write it)

“a loathsome, distended, tumefied, bloated, dropsical mass, testifying to nothing but two facts: 1st, that there is no such thing as a *science* of psychology, and 2nd, that W. J. is an incapable” (William James to the publisher)

In fact, it was hugely influential, combining psychology, physiology, and philosophy; introduced the phrase “stream of consciousness”

1897 *The Will to Believe and Other Essays in Popular Philosophy*

1902 *Varieties of Religious Experience*

1907 *Pragmatism*

1909 *A Pluralistic Universe*

1910 *Some Problems of Philosophy*

1912 *Essays in Radical Empiricism*

PRAGMATISM

Lecture I. — The Present Dilemma in Philosophy

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Lecture I: The Present Dilemma in Philosophy

I know that you, ladies and gentlemen, have a philosophy, each and all of you, and that the most interesting and important thing about you is the way in which it determines the perspective in your several worlds. You know the same of me. And yet I confess to a certain tremor at the audacity of the enterprise which I am about to begin. For the philosophy which is so important in each of us is not a technical matter; it is our more or less dumb sense of what life honestly and deeply means. It is only partly got from books; it is our individual way of just seeing and feeling the total push and pressure of the cosmos. I have no right to assume that many of you are students of the cosmos in the classroom sense, yet here I stand desirous of interesting you in a philosophy which to no small extent has to be technically treated. I wish to fill you with sympathy with a contemporaneous tendency in which I profoundly believe, and yet I have to talk like a professor to you who are not students.

Philosophy is at once the most sublime and the most trivial of human pursuits. It works in the minutest crannies and it opens out the widest vistas. It 'bakes no bread,' as has been said, but it can inspire our souls with courage; and repugnant as its manners, its doubting and challenging, its quibbling and dialectics, often are to common people, no one of us can get along without the far-flashing beams of light it sends over the world's perspectives. These illuminations at least, and the contrast-effects of darkness and mystery that accompany them, give to what it says an interest that is much more than professional.

The history of philosophy is to a great extent that of a certain clash of human temperaments. Undignified as such a treatment may seem to some of my colleagues, I shall have to take account of this clash and explain a good many of the divergencies of philosophers by it. Of whatever temperament a professional philosopher is, he tries, when philosophizing, to sink the fact of his temperament. Temperament is no conventionally recognized reason, so he urges impersonal reasons only for his conclusions. Yet his temperament really gives him a stronger bias than any of his more strictly objective premises. It loads the evidence for him one way or the other, making for a more sentimental or a more hard-hearted view of the universe, just as this fact or that principle would. He trusts his temperament. Wanting a universe that suits it, he believes in any representation of the universe that does suit it. He feels men of opposite temper to be out of key with the world's character, and in his heart considers them incompetent and 'not in it,' in the philosophic business, even though they may far excel him in dialectical ability.

Yet in the forum he can make no claim, on the bare ground of his temperament, to superior discernment or authority. There arises thus a certain insincerity in our philosophic discussions: the potentest of all our premises is never mentioned. I am sure it would contribute to clearness if in these lectures we should break this rule and mention it, and I accordingly feel free to do so.

Now the particular difference of temperament that I have in mind in making these remarks is one that has counted in literature, art, government, and manners as well as in philosophy. In manners we find formalists and free-and-easy persons. In government, authoritarians and anarchists. In literature, purists or academics, and realists. In art, classics and romantics. You recognize these contrasts as familiar; well, in philosophy we have a very similar contrast expressed in the pair of terms 'rationalist' and 'empiricist,' 'empiricist' meaning your lover of facts in all their crude variety, 'rationalist' meaning your devotee to abstract and eternal principles. No one can live an hour without both facts and principles, so it is a difference rather of emphasis; yet it breeds antipathies of the most pungent character between those who lay the emphasis differently; and we shall find it extraordinarily convenient to express a certain contrast in men's ways of taking their universe, by talking of the 'empiricist' and of the 'rationalist' temper. These terms make the contrast simple and massive.

I will write these traits down in two columns. I think you will practically recognize the two types of mental make-up that I mean if I head the columns by the titles 'tender-minded' and 'tough-minded' respectively.

THE TENDER-MINDED.

Rationalistic (going by 'principles')
Intellectualistic,
Idealistic,
Optimistic,
Religious,
Free-willist,
Monistic,
Dogmatical

THE TOUGH-MINDED.

Empiricist (going by 'facts')
Sensationalistic,
Materialistic,
Pessimistic,
Irreligious,
Fatalistic,
Pluralistic,
Sceptical.

The tough think of the tender as sentimentalists and softheads. The tender feel the tough to be unrefined, callous, or brutal. Their mutual reaction is very much like that that takes place when Bostonian tourists mingle with a population like that of Cripple Creek. Each type believes the other to be inferior to itself; but disdain in the one case is mingled with amusement, in the other it has a dash of fear.

And now I come to the first positively important point which I wish to make. Never were as many men of a decidedly empiricist proclivity in existence as there are at the present day. Our children, one may say, are almost born scientific. But our esteem for facts has not neutralized in us all religiousness. It is itself almost religious. Our scientific temper is devout. Now take a man of this type, and let him be also a philosophic amateur, unwilling to mix a hodge-podge system after the fashion of a common layman, and what does he find his situation to be, in this blessed year of our Lord 1906? He wants facts; he wants science; but he also wants a religion.

It is at this point that my own solution begins to appear. I offer the oddly-named thing pragmatism as a philosophy that can satisfy both kinds of demand. It can remain religious like the rationalisms, but at the same time, like the empiricisms, it can preserve the richest intimacy with facts. I hope I may be able to leave many of you with as favorable an opinion of it as I preserve myself.

Lecture II: What Pragmatism Means

SOME years ago, being with a camping party in the mountains, I returned from a solitary ramble to find every one engaged in a ferocious metaphysical dispute. The corpus of the dispute was a squirrel- a live squirrel supposed to be clinging to one side of a tree-trunk; while over against the tree's opposite side a human being was imagined to stand. This human witness tries to get sight of the squirrel by moving rapidly round the tree, but no matter how fast he goes, the squirrel moves as fast in the opposite direction, and always keeps the tree between himself and the man, so that never a glimpse of him is caught. The resultant metaphysical problem now is this: Does the man go round the squirrel or not? He goes round the tree, sure enough, and the squirrel is on the tree; but does he go round the squirrel? In the unlimited leisure of the wilderness, discussion had been worn threadbare. Everyone had taken sides, and was obstinate; and the numbers on both sides were even. Each side, when I appeared therefore appealed to me to make it a majority.

Mindful of the scholastic adage that whenever you meet a contradiction you must make a distinction, I immediately sought and found one, as follows: "Which party is right," I said, "depends on what you practically mean by 'going round' the squirrel. If, you mean passing from the north of him to the east, then to the south, then to the west, and then to the north of him again, obviously the man does go round him, for he occupies these successive positions. But if on the contrary you mean being first in front of him, then on the right of him, then behind him, then on his left, and finally in front again, it is quite as obvious that the man fails to go round him, for by the compensating movements the squirrel makes, he keeps his belly turned towards the man all the time, and his back turned away. Make the distinction, and there is no occasion for any farther dispute. You are both right and both wrong according as you conceive the verb 'to go round' in one practical fashion or the other."

I tell this trivial anecdote because it is a peculiarly simple example of what I wish now to speak of as the pragmatic method. The pragmatic method is primarily a method of settling metaphysical disputes that otherwise might be interminable. Is the world one or many?- fated or free?- material or spiritual?- here are notions either of which may or may not hold good of the world; and disputes over such notions are unending. The pragmatic method in such cases is to try to interpret each notion by tracing its respective practical consequences. What difference would it practically make to any one if this notion rather than that notion were true? If no practical difference whatever can be traced, then the alternatives mean practically the same thing, and all dispute is idle. Whenever a dispute is serious, we ought to be able to show some practical difference that must follow from one side or the other's being right.

This is the principle of Peirce, the principle of pragmatism.

It is astonishing to see how many philosophical disputes collapse into insignificance the moment you subject them to this simple test of tracing a concrete consequence. There can be no difference anywhere that doesn't make a difference elsewhere- no difference in abstract truth that doesn't express itself in a difference in concrete fact and in conduct consequent upon that fact, imposed on somebody, somehow, somewhere, and somewhen. The whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life, if this world-formula or that world-formula be the true one.

The criterion which we use to test the genuineness of apparent statements of fact is the criterion of verifiability. We say that a sentence is factually significant to any given person, if, and only if, he knows how to verify the proposition which it purports to express—that is, if he knows what observations would lead him, under certain conditions, to accept the proposition as being true, or reject it as being false. If, on the other hand, the putative proposition is of such a character that the assumption of its truth, or falsehood, is consistent with any assumption whatsoever concerning the nature of his future experience, then, as far as he is concerned, it is, if not a tautology, a mere pseudo-proposition. The sentence expressing it may be emotionally significant to him; but it is not literally significant. (Ayer, *Language, Truth, and Logic*, 1935)

Materialism vs Spiritualism

Materialism explain[s] higher phenomena by lower ones, leaving the destinies of the world at the mercy of its blinder parts and forces. It is in this wider sense of the word that materialism is opposed to spiritualism or theism. The laws of physical nature are what run things, materialism says. The highest productions of human genius might be ciphered by one who had complete acquaintance with the facts, out of their physiological conditions, regardless whether nature be there only for our minds, as idealists contend, or not. Our minds in any case would have to record the kind of nature it is, and write it down as operating through blind laws of physics. This is the complexion of present day materialism, which may better be called naturalism. Over against it stands 'theism,' or what in a wide sense may be termed 'spiritualism.' Spiritualism says that mind not only witnesses and records things, but also runs and operates them: the world being thus guided, not by its lower, but by its higher element.

Treated as it often is, this question becomes little more than a conflict between aesthetic preferences. Matter is gross, coarse, crass, muddy; spirit is pure, elevated, noble; and since it is more consonant with the dignity of the universe to give the primacy in it to what appears superior, spirit must be affirmed as the ruling principle. To treat abstract principles as finalities, before which our intellects may come to rest in a state of admiring contemplation, is the great rationalist failing. Spiritualism, as often held, may be simply a state of admiration for one kind, and of dislike for another kind, of abstraction. I remember a worthy spiritualist professor who always referred to materialism as the 'mud-philosophy,' and deemed it thereby refuted.

And first of all I call your attention to a curious fact. It makes not a single jot of difference so far as the past of the world goes, whether we deem it to have been the work of matter or whether we think a divine spirit was its author. Imagine, in fact, the entire contents of the world to be once for all irrevocably given. Imagine it to end this very moment, and to have no future; and then let a theist and a materialist apply their rival explanations to its history. The theist shows how a God made it; the materialist shows, and we will suppose with equal success, how it resulted from blind physical forces. Then let the pragmatist be asked to choose between their theories. How can he apply his test if a world is already completed? Concepts for him are things to come back into experience with, things to make us look for differences. But by hypothesis there is to be no more experience and no possible differences can now be looked for. Both theories have shown all their consequences and, by the hypothesis we are adopting, these are identical. The pragmatist must consequently say that the two theories, in spite of their different-sounding names, mean exactly the same thing, and that the dispute is purely verbal. [I am supposing, of course, that the theories have been equally successful in their explanations of what is.]

Thus if no future detail of experience or conduct is to be deduced from our hypothesis, the debate between materialism and theism becomes quite idle and insignificant. Matter and God in that event mean exactly the same thing- the power, namely, neither more nor less, that could make just this completed world- and the wise man is he who in such a case would turn his back on such a supererogatory discussion. Accordingly, most men instinctively, and positivists and scientists deliberately, do turn their backs on philosophical disputes from which nothing in the line of definite future consequences can be seen to follow.

Accordingly, in every genuine metaphysical debate some practical issue, however conjectural and remote, is involved. To realize this, revert with me to our question, and place yourselves this time in the world we live in, in the world that has a future, that is yet uncompleted whilst we speak. In this unfinished world the alternative of 'materialism or theism?' is intensely practical.

How, indeed, does the program differ for us, according as we consider that the facts of experience up to date are purposeless configurations of blind atoms moving according to eternal laws, or that on the other hand they are due to the providence of God? As far as the past facts go, indeed, there is no difference.

But philosophy is prospective also, and, after finding what the world has been and done, and yielded, still asks the further question 'what does the world promise?'

Theism and materialism, so indifferent when taken retrospectively, point, when we take them prospectively, to wholly different outlooks of experience. For, according to the theory of mechanical evolution, the laws of redistribution of matter and motion, though they are certainly to thank for all the good hours which our organisms have ever yielded us and for all the ideals which our minds now frame, are yet fatally certain to undo their work again, and to redissolve everything that they have once evolved. You all know the picture of the last state of the universe, which evolutionary science foresees.

The notion of God, on the other hand, however inferior it may be in clearness to those mathematical notions so current in mechanical philosophy, has at least this practical superiority over them, that it guarantees an ideal order that shall be permanently preserved. A world with a God in it to say the last word, may indeed burn up or freeze, but we then think of him as still mindful of the old ideals and sure to bring them elsewhere to fruition; so that, where he is, tragedy is only provisional and partial, and shipwreck and dissolution not the absolutely final things.

Even whilst admitting that spiritualism and materialism make different prophecies of the world's future, you may yourselves pooh-pooh the difference as something so infinitely remote as to mean nothing for a sane mind. The essence of a sane mind, you may say, is to take shorter views, and to feel no concern about such chimeras as the latter end of the world. Well, I can only say that if you say this, you do injustice to human nature. Religious melancholy is not disposed of by a simple flourish of the word insanity. The absolute things, the last things, the overlapping things, are the truly philosophic concerns; all superior minds feel seriously about them, and the mind with the shortest views is simply the mind of the more shallow man.

Pragmatism represents a perfectly familiar attitude in philosophy, the empiricist attitude, but it represents it, as it seems to me, both in a more radical and in a less objectionable form than it has ever yet assumed. A pragmatist turns his back resolutely and once for all upon a lot of inveterate habits dear to professional philosophers. He turns away from abstraction and insufficiency, from verbal solutions, from bad a priori reasons, from fixed principles, closed systems, and pretended absolutes and origins. He turns towards concreteness and adequacy, towards facts, towards action and towards power. That means the empiricist temper regnant and the rationalist temper sincerely given up. It means the open air and possibilities of nature, as against dogma, artificiality, and the pretence of finality in truth.

At the same time it does not stand for any special results. It is a method only. But the general triumph of that method would mean an enormous change in what I called in my last lecture the 'temperament' of philosophy. Teachers of the ultra-rationalistic type would be frozen out, much as the courtier type is frozen out in republics, as the ultramontane type of priest is frozen out in protestant lands. Science and metaphysics would come much nearer together, would in fact work absolutely hand in hand.

Metaphysics has usually followed a very primitive kind of quest. You know how men have always hankered after unlawful magic, and you know what a great part in magic words have always played. If you have his name, or the formula of incantation that binds him, you can control the spirit, genie, afrite, or whatever the power may be. Solomon knew the names of all the spirits, and having their names, he held them subject to his will. So the universe has always appeared to the natural mind as a kind of enigma, of which the key must be sought in the shape of some illuminating or power-bringing word or name. That word names the universe's principle, and to possess it is after a fashion to possess the universe itself. 'God,' 'Matter,' 'Reason,' 'the Absolute,' 'Energy,' are so many solving names. You can rest when you have them. You are at the end of your metaphysical quest.

But if you follow the pragmatic method, you cannot look on any such word as closing your quest. You must bring out of each word its practical cash-value, set it at work within the stream of your experience. It appears less as a solution, then, than as a program for more work, and more particularly as an indication of the ways in which existing realities may be changed.

These words, it seems to me, give us a particular picture of the essence of human language. It is this: the individual words in language name objects—sentences are combinations of such names.—In this picture of language we find the roots of the following idea: Every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands. (Wittgenstein, *Philosophical Investigations*, 1953, §1)

It is interesting to compare the multiplicity of the tools in language and of the ways they are used, the multiplicity of kinds of word and sentence, with what logicians have said about the structure of language. (PI, §23)

Look at the word "to think" as a tool. (PI, §360)

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

No particular results then, so far, but only an attitude of orientation, is what the pragmatic method means. The attitude of looking away from first things, principles, 'categories,' supposed necessities; and of looking towards last things, fruits, consequences, facts.
(James)

The ideal, as we think of it, is unshakable. You can never get outside it; you must always turn back. There is no outside; outside you cannot breathe.—Where does this idea come from? It is like a pair of glasses on our nose through which we see whatever we look at. It never occurs to us to take them off. (Wittgenstein, PI, §103)

"But this is how it is———" I say to myself over and over again. I feel as though, if only I could fix my gaze absolutely sharply on this fact, get it in focus, I must grasp the essence of the matter. (PI, §113)

A picture held us captive. And we could not get outside it, for it lay in our language and language seemed to repeat it to us inexorably. (PI, §115)

When philosophers use a word—"knowledge", "being", "object", "I", "proposition", "name"—and try to grasp the essence of the thing, one must always ask oneself: is the word ever actually used in this way in the language-game which is its original home?—What we do is to bring words back from their metaphysical to their everyday use. (PI, §116)

One of the most successfully cultivated branches of philosophy in our time is what is called inductive logic, the study of the conditions under which our sciences have evolved. Writers on this subject have begun to show a singular unanimity as to what the laws of nature and elements of fact mean, when formulated by mathematicians, physicists and chemists. When the first mathematical, logical, and natural uniformities, the first laws, were discovered, men were so carried away by the clearness, beauty and simplification that resulted, that they believed themselves to have deciphered authentically the eternal thoughts of the Almighty. ... He thought the archetypes of all things, and devised their variations; and when we rediscover any one of these his wondrous institutions, we seize his mind in its very literal intention. (James)

But as the sciences have developed farther the notion has gained ground that most, perhaps all, of our laws are only approximations. The laws themselves, moreover, have grown so numerous that there is no counting them; and so many rival formulations are proposed in all the branches of science that investigators have become accustomed to the notion that no theory is absolutely a transcript of reality, but that any one of them may from some point of view be useful. Their great use is to summarize old facts and to lead to new ones. They are only a man-made language, a conceptual shorthand, as some one calls them, in which we write our reports of nature; and languages, as is well known, tolerate much choice of expression and many dialects.

Riding now on the front of this wave of scientific logic Messrs. Schiller and Dewey appear with their pragmatistic account of what truth everywhere signifies. Everywhere, these teachers say, 'truth' in our ideas and beliefs means the same thing that it means in science. It means, they say, nothing but this, that ideas (which themselves are but parts of our experience) become true just in so far as they help us to get into satisfactory relation with other parts of our experience, to summarize them and get about among them by conceptual short-cuts instead of following the interminable succession of particular phenomena. Any idea upon which we can ride, so to speak; any idea that will carry us prosperously from any one part of our experience to any other part, linking things satisfactorily, working securely, simplifying, saving labor; is true for just so much, true in so far forth, true instrumentally. This is the 'instrumental' view of truth taught so successfully at Chicago, the view that truth in our ideas means their power to 'work,' promulgated so brilliantly at Oxford.

Messrs. Dewey, Schiller and their allies, in reaching this general conception of all truth, have only followed the example of geologists, biologists and philologists. In the establishment of these other sciences, the successful stroke was always to take some simple process actually observable in operation- as denudation by weather, say, or variation from parental type, or change of dialect by incorporation of new words and pronunciations- and then to generalize it, making it apply to all times, and produce great results by summing its effects through the ages.

The observable process which Schiller and Dewey particularly singled out for generalization is the familiar one by which any individual settles into new opinions. The process here is always the same. The individual has a stock of old opinions already, but he meets a new experience that puts them to a strain. Somebody contradicts them; or in a reflective moment he discovers that they contradict each other; or he hears of facts with which they are incompatible; or desires arise in him which they cease to satisfy. The result is an inward trouble to which his mind till then had been a stranger, and from which he seeks to escape by modifying his previous mass of opinions. He saves as much of it as he can, for in this matter of belief we are all extreme conservatives. So he tries to change first this opinion, and then that (for they resist change very variously), until at last some new idea comes up which he can graft upon the ancient stock with a minimum of disturbance of the latter, some idea that mediates between the stock and the new experience and runs them into one another most felicitously and expediently.

This new idea is then adopted as the true one. It preserves the older stock of truths with a minimum of modification, stretching them just enough to make them admit the novelty, but conceiving that in ways as familiar as the case leaves possible. An outree explanation, violating all our preconceptions, would never pass for a true account of a novelty. We should scratch round industriously till we found something less eccentric. The most violent revolutions in an individual's beliefs leave most of his old order standing. Time and space, cause and effect, nature and history, and one's own biography remain untouched. New truth is always a go-between, a smoother-over of transitions. It marries old opinion to new fact so as ever to show a minimum of jolt, a maximum of continuity. We hold a theory true just in proportion to its success in solving this 'problem of maxima and minima.' But success in solving this problem is eminently a matter of approximation. We say this theory solves it on the whole more satisfactorily than that theory; but that means more satisfactorily to ourselves, and individuals will emphasize their points of satisfaction differently. To a certain degree, therefore, everything here is plastic.

Now Dewey and Schiller proceed to generalize this observation and to apply it to the most ancient parts of truth. They also once were plastic. They also were called true for human reasons. They also mediated between still earlier truths and what in those days were novel observations. Purely objective truth, truth in whose establishment the function of giving human satisfaction in marrying previous parts of experience with newer parts played no role whatever, is nowhere to be found. The reasons why we call things true is the reason why they are true, for 'to be true' means only to perform this marriage-function.

Common sense appears thus as a perfectly definite stage in our understanding of things, a stage that satisfies in an extraordinarily successful way the purposes for which we think.

But when we look back, and speculate as to how the common-sense categories may have achieved their wonderful supremacy, no reason appears why it may not have been by a process just like that by which the conceptions due to Democritus, Berkeley, or Darwin, achieved their similar triumphs in more recent times. In other words, they may have been successfully discovered by prehistoric geniuses whose names the night of antiquity has covered up; they may have been verified by the immediate facts of experience which they first fitted; and then from fact to fact and from man to man they may have spread, until all language rested on them and we are now incapable of thinking naturally in any other terms. Such a view would only follow the rule that has proved elsewhere so fertile, of assuming the vast and remote to conform to the laws of formation that we can observe at work in the small and near.

Science and critical philosophy thus burst the bounds of common sense. With science naif realism ceases: 'Secondary' qualities become unreal; primary ones alone remain. With critical philosophy, havoc is made of everything. The common-sense categories one and all cease to represent anything in the way of being; they are but sublime tricks of human thought, our ways of escaping bewilderment in the midst of sensation's irremediable flow.

The totality of our so-called knowledge or beliefs, from the most casual matters of geography and history to the profoundest laws of atomic physics or even of pure mathematics and logic, is a man-made fabric which impinges on experience only along the edges. Or, to change the figure, total science is like a field of force whose boundary conditions are experience. A conflict with experience at the periphery occasions readjustments in the interior of the field. Truth values have to be redistributed over some of our statements. Re-evaluation of some statements entails re-evaluation of others, because of their logical interconnections -- the logical laws being in turn simply certain further statements of the system, certain further elements of the field. Having re-evaluated one statement we must re-evaluate some others, whether they be statements logically connected with the first or whether they be the statements of logical connections themselves. But the total field is so undetermined by its boundary conditions, experience, that there is much latitude of choice as to what statements to re-evaluate in the light of any single contrary experience. No particular experiences are linked with any particular statements in the interior of the field, except indirectly through considerations of equilibrium affecting the field as a whole. (W. V. Quine, "Two Dogmas of Empiricism", 1951)

If this view is right, it is misleading to speak of the empirical content of an individual statement -- especially if it be a statement at all remote from the experiential periphery of the field. Furthermore it becomes folly to seek a boundary between synthetic statements, which hold contingently on experience, and analytic statements which hold come what may. Any statement can be held true come what may, if we make drastic enough adjustments elsewhere in the system. Even a statement very close to the periphery can be held true in the face of recalcitrant experience by pleading hallucination or by amending certain statements of the kind called logical laws. Conversely, by the same token, no statement is immune to revision. Revision even of the logical law of the excluded middle has been proposed as a means of simplifying quantum mechanics; and what difference is there in principle between such a shift and the shift whereby Kepler superseded Ptolemy, or Einstein Newton, or Darwin Aristotle. (Quine, *ibid.*)

There are thus at least three well-characterized levels, stages or types of thought about the world we live in [common sense, science, and philosophy], and the notions of one stage have one kind of merit, those of another stage another kind. It is impossible, however, to say that any stage as yet in sight is absolutely more true than any other. Common sense is the more consolidated stage, because it got its innings first, and made all language into its ally. Whether it or science be the more august stage may be left to private judgment. (James)

There is no ringing conclusion possible when we compare these types of thinking, with a view to telling which is the more absolutely true. Their naturalness, their intellectual economy, their fruitfulness for practice, all start up as distinct tests of their veracity, and as a result we get confused. Common sense is better for one sphere of life, science for another, philosophic criticism for a third; but whether either be truer absolutely, Heaven only knows. Just now, if I understand the matter rightly, we are witnessing a curious reversion to the common sense way of looking at physical nature, in the philosophy of science favored by such men as Mach, Ostwald and Duhem. According to these teachers no hypothesis is truer than any other in the sense of being a more literal copy of reality. They are all but ways of talking on our part, to be compared solely from the point of view of their use. The only literally true thing is reality; and the only reality we know is, for these logicians, sensible reality, the flux of our sensations and emotions as they pass.

What I have said of the theory of truth will, I am sure, have appeared obscure and unsatisfactory to most of you by reason of its brevity. I shall make amends for that hereafter. In a lecture on 'common sense' I shall try to show what I mean by truths grown petrified by antiquity. In another lecture I shall expatiate on the idea that our thoughts become true in proportion as they successfully exert their go-between function. In a third I shall show how hard it is to discriminate subjective from objective factors in Truth's development. You may not follow me wholly in these lectures; and if you do, you may not wholly agree with me. But you will, I know, regard me at least as serious, and treat my effort with respectful consideration.

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 any one'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 can not. 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.

There are two elements in Dr Schiller's philosophy, both present in this book, but important to disentangle. There is, on the one hand, the insistence on risk and adventure, on the uncertainty of all our beliefs, and the impossibility of removing all reason for doubt. This element is very valuable, and calculated to keep thought fresh and living. ... The other element in his philosophy is subjectivism, or what he calls humanism, the doctrine that man is the measure of all things. The value of this element is much more open to question. It leads him to be content with ... a theory of truth which does not demand that a true belief shall in any way correspond with fact. Much of the attractiveness of pragmatism, to some scientific minds, is undoubtedly due to the former element; they accept the subjectivism, because they believe it inseparably bound up with the other. If, however, his belief is erroneous, it becomes highly important to separate out the two elements; and, whatever may be thought of the second, the value of the first is such that Dr. Schiller's attack on formal logic is likely to be useful to many who would not otherwise have escaped from the traditional nonsense. (Bertrand Russell's review of Schiller's *Formal Logic*)

Issues regarding truth

When do we say that a proposition or belief is true?

When are we justified in holding that a given proposition or belief is true?

What is it for a proposition to be true?

Criterion for truth vs the nature of truth.

Russell agreed with pragmatists regarding the criterion of truth, disagrees with them regarding the nature of truth; for Russell truth is a matter of correspondence to reality.

When we talk of reality 'independent' of human thinking, then, it seems a thing very hard to find. It reduces to the notion of what is just entering into experience and yet to be named, or else to some imagined aboriginal presence in experience, before any belief about the presence had arisen, before any human conception had been applied. It is what is absolutely dumb and evanescent, the merely ideal limit of our minds. We may glimpse it, but we never grasp it; what we grasp is always some substitute for it which previous human thinking has peptonized and cooked for our consumption.

What shall we call a thing anyhow? It seems quite arbitrary, for we carve out everything, just as we carve out constellations, to suit our human purposes. For me, this whole 'audience' is one thing, which grows now restless, now attentive. I have no use at present for its individual units, so I don't consider them. So of an 'army,' of a 'nation.' But in your own eyes, ladies and gentlemen, to call you 'audience' is an accidental way of taking you. The permanently real things for you are your individual persons. To an anatomist, again, those persons are but organisms, and the real things are the organs. Not the organs, so much as their constituent cells, say the histologists; not the cells, but their molecules, say in turn the chemists. We break the flux of sensible reality into things, then, at our will. We create the subjects of our true as well as of our false propositions. We create the predicates also.

Lotze has in several places made a deep suggestion. We naively assume, he says, a relation between reality and our minds which may be just the opposite of the true one. Reality, we naturally think, stands ready-made and complete, and our intellects supervene with the one simple duty of describing it as it is already. But may not our descriptions, Lotze asks, be themselves important additions to reality? And may not previous reality itself be there, far less for the purpose of reappearing unaltered in our knowledge, than for the very purpose of stimulating our minds to such additions as shall enhance the universe's total value.

The import of the difference between pragmatism and rationalism is now in sight throughout its whole extent. The essential contrast is that for rationalism reality is ready-made and complete from all eternity, while for pragmatism it is still in the making, and awaits part of its complexion from the future. On the one side the universe is absolutely secure, on the other it is still pursuing its adventures.

I imagine that many of you at this point begin to indulge in guesses at the goal to which I am tending. I have undermined the authority of mysticism, you say, and the next thing I shall probably do is to seek to discredit that of philosophy. Religion, you expect to hear me conclude, is nothing but an affair of faith, based either on vague sentiment, or on that vivid sense of the reality of things unseen of which in my second lecture and in the lecture on Mysticism I gave so many examples. It is essentially private and individualistic; it always exceeds our powers of formulation; and although attempts to pour its contents into a philosophic mould will probably always go on, men being what they are, yet these attempts are always secondary processes which in no way add to the authority, or warrant the veracity, of the sentiments from which they derive their own stimulus and borrow whatever glow of conviction they may themselves possess. In short, you suspect that I am planning to defend feeling at the expense of reason, to rehabilitate the primitive and unreflective, and to dissuade you from the hope of any Theology worthy of the name. (James, *Varieties of Religious Experience*)

To a certain extent I have to admit that you guess rightly. I do believe that feeling is the deeper source of religion, and that philosophic and theological formulas are secondary products, like translations of a text into another tongue. But all such statements are misleading from their brevity, and it will take the whole hour for me to explain to you exactly what I mean.

If ... we apply the principle of pragmatism to God's metaphysical attributes, strictly so called, as distinguished from his moral attributes, I think that, even were we forced by a coercive logic to believe them, we still should have to confess them to be destitute of all intelligible significance. Take God's necessity, for example; or his immateriality; his "simplicity" or superiority to the kind of inner variety and succession which we find in finite beings, his indivisibility, and lack of the inner distinctions of being and activity, substance and accident, potentiality and actuality, and the rest; his repudiation of inclusion in a genus; his actualized infinity; his "personality," apart from the moral qualities which it may comport; his relations to evil being permissive and not positive; his self-sufficiency, self-love, and absolute felicity in himself:—candidly speaking, how do such qualities as these make any definite connection with our life? And if they severally call for no distinctive adaptations of our conduct, what vital difference can it possibly make to a man's religion whether they be true or false?

For my own part, although I dislike to say aught that may grate upon tender associations, I must frankly confess that even though these attributes were faultlessly deduced, I cannot conceive of its being of the smallest consequence to us religiously that any one of them should be true. Pray, what specific act can I perform in order to adapt myself the better to God's simplicity? Or how does it assist me to plan my behavior, to know that his happiness is anyhow absolutely complete?

So much for the metaphysical attributes of God! From the point of view of practical religion, the metaphysical monster which they offer to our worship is an absolutely worthless invention of the scholarly mind.

What shall we now say of the attributes called moral? Pragmatically, they stand on an entirely different footing. They positively determine fear and hope and expectation, and are foundations for the saintly life. It needs but a glance at them to show how great is their significance.

God's holiness, for example: being holy, God can will nothing but the good. Being omnipotent, he can secure its triumph. Being omniscient, he can see us in the dark. Being just, he can punish us for what he sees. Being loving, he can pardon too. Being unalterable, we can count on him securely. These qualities enter into connection with our life, it is highly important that we should be informed concerning them. That God's purpose in creation should be the manifestation of his glory is also an attribute which has definite relations to our practical life. Among other things it has given a definite character to worship in all Christian countries. If dogmatic theology really does prove beyond dispute that a God with characters like these exists, she may well claim to give a solid basis to religious sentiment. But verily, how stands it with her arguments?

It stands with them as ill as with the arguments for his existence. ... To prove God's goodness by the scholastic argument that there is no non-being in his essence would sound to such a witness simply silly.

We must therefore, I think, bid a definitive good-bye to dogmatic theology. In all sincerity our faith must do without that warrant.