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PHILOSOPHY & THEOLOGY

Everyman, I will go with thee, and be thy guide,
In thy most need to go by thy side

WILLIAM JAMES, brother of Henry James, born in New York in 1842. Educated at Harvard, and became lecturer there in 1872 and later Professor of Philosophy and Psychology. Lived at Cambridge, Mass., and visited Europe on several occasions. Died in 1910.

WILLIAM JAMES

SELECTED PAPERS ON PHILOSOPHY

INTRODUCTION BY

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INTRODUCTION

" He was so commanding a presence, so curious and inquiring, so responsive and expansive, and so generous and reckless of himself and of his own, that every one said of him: 'Here is no musty *savant*, but a man, a great man, a man on the heroic scale, not to serve whom is avarice and sin.'" So James speaks with affection of his own teacher Agassiz, and the words fitly describe the impression he himself made upon his students and associates. There was none who did not come under the spell of his personality, none who did not look forward eagerly to every fresh work from his pen. There was such a sense of life and reality in all that he wrote that reading his works had, in a peculiar sense, the charm of personal intercourse. It was like meeting the man himself and sharing in his faith, his enthusiasm, his vision.

One does not think of James as a man with a philosophy, but rather as one who cleared the decks for all future philosophising. Late in life, to be sure, he labelled his view "pragmatism," modestly declaring this to be a "new name for some old ways of thinking," and dedicating the book in which the view was presented to John Stuart Mill, from whom he first learned the "pragmatic openness of mind." But he is careful to explain that the word stands for a method, and for a theory of truth, rather than for a system of philosophy. And when the view was launched and began to have followers, instinctively he shrank from the use of the label. When a philosophy, even his own, had been ticketed and had become one among many philosophical *isms*, it began to lose some of its vitality.

At very rare intervals in the history of philosophy there have appeared thinkers who, like William James, are too real to be readily classified—thinkers who cut under the distinctions that divide men into schools. When they appear they always speak the language of the people for the simple reason that they are interpreting life as real men live it with a freshness of vision unknown in the schools. The influence of William James has probably travelled further and gone deeper than that of any other American scholar. Into the languages of all

civilised peoples his works have been translated, and everywhere they have met with instant recognition. Honorary degrees, honorary memberships in learned societies and academies, all manner of scholarly distinctions poured in upon him from all quarters. And yet by far the larger part of his published works consists of essays and addresses first delivered to popular or semi-popular audiences; and even his most technical performance, his classic work in psychology, is singularly simple and direct and free from technicalities, and withal readable. The fact is significant, and explains in part the secret of his hold upon his contemporaries. For, though writing for the people, he was never a populariser. He did not have tucked away in his den some profound and recondite system clothed in the polysyllabic profundity which learning too often affects, which, on occasion, he condescended to translate, in diluted doses, for the benefit of laymen. His profoundest thought is in these pages. He could not help being simple and clear, for he lived close to reality in its concrete fulness; and he could not help writing for the people, and not for a special academic guild, because he believed in the people, and because, furthermore, he believed in the mission of philosophy to help the people to interpret life and to lay hold of life's ideals, and thus to "know a good man when they saw him."

James tells us that it was the hours he spent with Agassiz that "so taught him the difference between all possible abstractionists and all livers in the light of the world's concrete fulness" that he was never able to forget it. And the term which, by preference, he used to describe his position was "radical empiricism," a phrase which shows the importance he ascribed to method in philosophising. How far removed this method is from that which commonly passes for empiricism one can best find out by reading the last chapter in his larger *Psychology*. Without going into details, it is enough here to note that for him the method meant simply a recognition of the fact that "the truth of things is after all their living fulness." To lay hold of the facts in their living fulness was what he meant by being radically empirical. But the facts of human nature are so intimate and so familiar that they usually escape observation. Or if they chance to be called to our attention, they are apt to be summarily lumped together under some familiar caption, or forthwith named and classified in a

conventional way, and thus disposed of. James could always "see the familiar as if it were strange," and was thus peculiarly fitted for the rôle of explorer and observer of the familiar, but little known, facts of the inner life. Moreover, he appreciated as few have done the extent to which words and phrases, dogmas and ready-made principles of classification, blind men's vision and dull their senses. To the facts of experience with which psychology and ethics deal he brought the artist's skill in pure appreciation of values, and he possessed a rare gift for describing what he saw. His special contributions to psychology, and his significance in philosophy, are alike due to this trait.

The first lesson of radical empiricism is that the mind never is merely a passive spectator, never is merely a receptacle for data supplied from without. Such a way of viewing experience is to mistake for the mind what a real mind never is, and for data what real data never are. In a striking passage James writes:

"The world's contents are *given* to each of us in an order so foreign to our subjective interests that we can hardly by an effort of the imagination picture to ourselves what it is like. We have to break that order altogether—and by picking out from it the items which concern us, and connecting them with others far away, which we say 'belong' with them, we are able to make out definite threads of sequence and tendency; to foresee particular liabilities and get ready for them; and to enjoy simplicity and harmony in place of what was chaos. . . . Can we realise for an instant what a cross-section of 'll existence at a definite point of time would be? While I talk and the flies buzz, a sea-gull catches a fish at the mouth of the Amazon, a tree falls in the Adirondack wilderness, a man sneezes in Germany, a horse dies in Tartary, and twins are born in France. What does that mean? Does the contemporaneity of these events with one another and with a million others as disjointed, form a rational bond between them, and unite them into anything that means for us a world? Yet just such a collateral contemporaneity, and nothing else, is the real order of the world. It is an order with which we have nothing to do but to get away from it as fast as possible. As I said, we break it; we break it into histories, and we break it into arts, and we break it into sciences; and then we begin to feel at home. We make ten thousand separate serial orders of it, and

on any one of these we react as though the others did not exist."[1]

Other philosophies had indeed noted this truth before. But hitherto philosophy has been too much influenced by the model of mathematics and physics, and has thus tended to think in terms of the contrast between form and matter. To-day biological sciences are in the ascendant, and they furnish a safer model for philosophy inasmuch as they bring us nearer to the facts in their concrete fulness. The contrast is between the living and the dead; and life means growth, development, progress, and time is of the essence of experience. The complexity of experience upon which James laid stress was that which it receives in its time dimension. The time quality of experience is its most significant trait. Everywhere we find fluency and continuity, and in all our interpretations, scientific as well as philosophical, the practical categories are dominant. Our philosophy is essentially forward-looking, and must measure values in results, truth values as well as moral values. Hence James was not interested in truth in the abstract, but rather in the actual process of truth-getting—in what happens when an idea is accepted as true; and he noted that ideas passed for true in proportion to their serviceableness in guiding us through the tangled complexity of experience, in making us at home in the world in which we daily live, and thus masters of it. Science itself was a human construction for human ends. And when it gave itself airs, became sacrosanct and absolute, as it did in the positivism of Herbert Spencer, and in the name of science proceeded to rule out of court all those facts and values of the spiritual life which do not admit of verification through the senses, it ceased to be science, and became a sheer philosophical dogmatism. It was in fact no better than those pretentious idealisms which in the name of abstract reason made all things parts of one inclusive whole, made the world a "block universe," fixed, eternal, perfect, and left no room for what makes life for the individual significant—freedom, choice, novelty, and progress.

Ideals again were not decorations of life in the abstract, highly polished moral ornaments; they were the practical tools of good living. They were not to be measured by the noble language in which they were expressed, nor yet by the subjective feelings or emotions they aroused, but by the way

[1] "Reflex Action and Theism," *The Will to Believe*, etc., pp. 118-9.

they worked, by what they actually accomplished in the prosaic world of dust and dirt and brute fact, for the betterment of character and of the conditions of human life. The truth is that our life, intellectual and moral, is at every turn ruled by ideals, and back of all ideals lies faith—a faith involving a certain element of risk from which none can escape. And much of James's work is spent in defending the faiths by which men actually live, by testing them in the only manner in which their truth can be tested, by the way in which they express themselves in life.

James also possessed in a wonderful degree what might be called sympathetic imagination—the ability to get as it were on the inside of the other fellow's vision; and whenever he ran across, in the work of another thinker, however humble and obscure, evidence of some fresh and original interpretation of genuine experience, he heralded it as a veritable discovery. It was a new document to be reckoned with. He was, in fact, singularly free from what he has called "a certain blindness in human beings." How free, a reading of the *Varieties of Religious Experience* will show. The essay in which he discusses this blindness is, as he says, more than the piece of sentimentalism that at first sight it might appear to be. "It connects itself with a definite view of the world and of our moral relations to it." That view is the pluralistic or individualistic philosophy according to which "the truth is too great for any one actual mind, even though that mind be dubbed 'the absolute,' to know the whole of it. The facts and worths of life need many cognisers to take them in. There is no point of view absolutely public and universal." The practical consequence of this philosophy is, he adds, the "well known democratic respect for the sacredness of individuality."

Perhaps the chief reason for the popularity of James's philosophy is the sense of freedom it brings with it. It is the philosophy of open doors; the philosophy of a new world with a large frontier and, beyond, the enticing unexplored lands where one may still expect the unexpected; a philosophy of hope and promise, a philosophy that invites adventure, since it holds that the dice of experience are not loaded. The older monistic philosophies and religions present by contrast stuffy closed systems and an exhausted universe. They seem to pack the individual into a logical strait-jacket and to represent all history as simply the unfolding of a play that was written to its

very last line from the dawn of creation. These old absolutisms go with the old order of things.

James is an interpreter of the new order of democracy. The most important and interesting thing about a nation, or an historic epoch, as about an individual, was, he held, its "ideals and over-beliefs." And if he is our representative philosopher of democracy, it is not because of his individualism, his appreciation of the unique, the uncommunicable, his hospitality of mind, his respect for humanity in its every honest manifestation, his support of the doctrine of live and let live, his tolerance of all that was not itself intolerant; it is not because of his insistence that professions be measured by their "cash value" in experience, and men by their ability to "make good"; but it is, above all, because of his skill in interpreting those ideals and over-beliefs of his nation and epoch. For these are the things that save democracy from vulgarity and commercialism, that preserve the higher human qualities, and insure for the citizens of a free land the fruits of civilisation—more air, more refinement, and a more liberal perspective.

James was a firm believer in democracy. But he held that democracy was still on trial, and that no one could tell how it would stand the ordeal. "Nothing future," he writes, "is quite secure; states enough have inwardly rotted; and democracy as a whole may undergo self-poisoning. But, on the other hand, democracy is a kind of religion, and we are bound not to admit its failure. Faiths and utopias are the noblest exercise of human reason, and no one with a spark of reason in him will sit down fatalistically before the croaker's picture. The best of us are filled with the contrary vision of a democracy stumbling through every error till its institutions glow with justice and its customs shine with beauty. Our better men *shall* show the way and we *shall* follow them. . . . The ceaseless whisper of the more permanent ideals, the steady tug of truth and justice, give them but time, *must* warp the world in their direction." [1]

CHARLES M. BAKEWELL.

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[1] *Memories and Studies*, pp. 317 ff.

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I

ON A CERTAIN BLINDNESS IN HUMAN BEINGS[1]

OUR judgments concerning the worth of things, big or little, depend on the *feelings* the things arouse in us. Where we judge a thing to be precious in consequence of the *idea* we frame of it, this is only because the idea is itself associated already with a feeling. If we were radically feelingless, and if ideas were the only things our mind could entertain, we should lose all our likes and dislikes at a stroke, and be unable to point to any one situation or experience in life more valuable or significant than any other.

Now the blindness in human beings, of which this discourse will treat, is the blindness with which we all are afflicted in regard to the feelings of creatures and people different from ourselves.

We are practical beings, each of us with limited functions and duties to perform. Each is bound to feel intensely the importance of his own duties and the significance of the situations that call these forth. But this feeling is in each of us a vital secret, for sympathy with which we vainly look to others. The others are too much absorbed in their own vital secrets to take an interest in ours. Hence the stupidity and injustice of our opinions, so far as they deal with the significance of alien lives. Hence the falsity of our judg-

[1] From *Talks to Teachers on Psychology: and to Students on some of Life's Ideals*, 1915, pp. 229–264.

ments, so far as they presume to decide in an absolute way on the value of other persons' conditions or ideals.

Take our dogs and ourselves, connected as we are by a tie more intimate than most ties in this world; and yet, outside of that tie of friendly fondness, how insensible, each of us, to all that makes life significant for the other!—we to the rapture of bones under hedges, or smells of trees and lamp-posts, they to the delights of literature and art. As you sit reading the most moving romance you ever fell upon, what sort of a judge is your fox-terrier of your behaviour? With all his good will toward you, the nature of your conduct is absolutely excluded from his comprehension. To sit there like a senseless statue when you might be taking him to walk and throwing sticks for him to catch! What queer disease is this that comes over you every day, of holding things and staring at them like that for hours together, paralyzed of motion and vacant of all conscious life? The African savages came nearer the truth; but they, too, missed it when they gathered wonderingly round one of our American travellers who, in the interior, had just come into possession of a stray copy of the New York *Commercial Advertiser* and was devouring it column by column. When he got through, they offered him a high price for the mysterious object; and, being asked for what they wanted it, they said: " For an eye medicine "—that being the only reason they could conceive of for the protracted bath which he had given his eyes upon its surface.

The spectator's judgment is sure to miss the root of the matter, and to possess no truth. The subject judged knows a part of the world of reality which the judging spectator fails to see, knows more while the spectator knows less; and, wherever there is conflict of opinion and difference of vision, we are bound to believe that the truer side is the side that feels the more, and not the side that feels the less.

Let me take a personal example of the kind that befalls each one of us daily:—

Some years ago, while journeying in the mountains of

North Carolina, I passed by a large number of "coves," as they call them there, or heads of small valleys between the hills, which had been newly cleared and planted. The impression on my mind was one of unmitigated squalor. The settler had in every case cut down the more manageable trees, and left their charred stumps standing. The larger trees he had girdled and killed, in order that their foliage should not cast a shade. He had then built a log cabin, plastering its chinks with clay, and had set up a tall zigzag rail fence around the scene of his havoc to keep the pigs and cattle out. Finally, he had irregularly planted the intervals between the stumps and trees with Indian corn, which grew among the chips; and there he dwelt with his wife and babes—an axe, a gun, a few utensils, and some pigs and chickens feeding in the woods, being the sum total of his possessions.

The forest had been destroyed; and what had "improved" it out of existence was hideous, a sort of ulcer, without a single element of artificial grace to make up for the loss of Nature's beauty. Ugly, indeed, seemed the life of the squatter, scudding, as the sailors say, under bare poles, beginning again away back where our first ancestors started, and by hardly a single item the better off for all the achievements of the intervening generations.

Talk about going back to nature! I said to myself, oppressed by the dreariness, as I drove by. Talk of a country life for one's old age and for one's children! Never thus, with nothing but the bare ground and one's bare hands to fight the battle! Never, without the best spoils of culture woven in! The beauties and commodities gained by the centuries are sacred. They are our heritage and birthright. No modern person ought to be willing to live a day in such a state of rudimentariness and denudation.

Then I said to the mountaineer who was driving me, "What sort of people are they who have to make these new clearings?" "All of us," he replied. "Why, we ain't happy here unless we are getting one of these coves under cultiva-

tion." I instantly felt that I had been losing the whole inward significance of the situation. Because to me the clearings spoke of naught but denudation, I thought that to those whose sturdy arms and obedient axes had made them they could tell no other story. But, when *they* looked on the hideous stumps, what they thought of was personal victory. The chips, the girdled trees, and the vile split rails spoke of honest sweat, persistent toil and final reward. The cabin was a warrant of safety for self and wife and babes. In short, the clearing, which to me was a mere ugly picture on the retina, was to them a symbol redolent with moral memories and sang a very paean of duty, struggle, and success.

I had been as blind to the peculiar ideality of their conditions as they certainly would also have been to the ideality of mine, had they had a peep at my strange indoor academic ways of life at Cambridge.

Wherever a process of life communicates an eagerness to him who lives it, there the life becomes genuinely significant. Sometimes the eagerness is more knit up with the motor activities, sometimes with the perceptions, sometimes with the imagination, sometimes with reflective thought. But, wherever it is found, there is the zest, the tingle, the excitement of reality; and there *is* "importance" in the only real and positive sense in which importance ever anywhere can be.

Robert Louis Stevenson has illustrated this by a case, drawn from the sphere of the imagination, in an essay which I really think deserves to become immortal, both for the truth of its matter and the excellence of its form.

"Toward the end of September," Stevenson writes, "when school-time was drawing near, and the nights were already black, we would begin to sally from our respective villas, each equipped with a tin bull's-eye lantern. The thing was so well known that it had worn a rut in the commerce of Great Britain; and the grocers, about the due time, began to garnish their windows with

our particular brand of luminary. We wore them buckled to the waist upon a cricket belt, and over them, such was the rigour of the game, a buttoned top-coat. They smelled noisomely of blistered tin. They never burned aright, though they would always burn our fingers. Their use was naught, the pleasure of them merely fanciful, and yet a boy with a bull's-eye under his top-coat asked for nothing more. The fishermen used lanterns about their boats, and it was from them, I suppose, that we had got the hint; but theirs were not bull's-eyes, nor did we ever play at being fishermen. The police carried them at their belts, and we had plainly copied them in that; yet we did not pretend to be policemen. Burglars, indeed, we may have had some haunting thought of; and we had certainly an eye to past ages when lanterns were more common, and to certain story-books in which we had found them to figure very largely. But take it for all in all, the pleasure of the thing was substantive; and to be a boy with a bull's-eye under his top-coat was good enough for us.

"When two of these asses met, there would be an anxious 'Have you got your lantern?' and a gratified 'Yes!' That was the shibboleth, and very needful, too; for, as it was the rule to keep our glory contained, none could recognize a lantern-bearer unless (like the polecat) by the smell. Four or five would sometimes climb into the belly of a ten-man lugger, with nothing but the thwarts above them —for the cabin was usually locked—or chose out some hollow of the links where the wind might whistle overhead. Then the coats would be unbuttoned, and the bull's-eyes discovered; and in the chequering glimmer, under the huge, windy hall of the night, and cheered by a rich steam of toasting tinware, these fortunate young gentlemen would crouch together in the cold sand of the links, or on the scaly bilges of the fishing-boat, and delight them with inappropriate talk. Woe is me that I cannot give some specimens! . . . But the talk was but a condiment, and these gatherings themselves only accidents in the

career of the lantern-bearer. The essence of this bliss was to walk by yourself in the black night, the slide shut, the top-coat buttoned, not a ray escaping, whether to conduct your footsteps or to make your glory public—a mere pillar of darkness in the dark; and all the while, deep down in the privacy of your fool's heart, to know you had a bull's-eye at your belt, and to exult and sing over the knowledge.

"It is said that a poet has died young in the breast of the most stolid. It may be contended rather that a (somewhat minor) bard in almost every case survives, and is the spice of life to his possessor. Justice is not done to the versatility and the unplumbed childishness of man's imagination. His life from without may seem but a rude mound of mud: there will be some golden chamber at the heart of it in which he dwells delighted; and for as dark as his pathway seems to the observer, he will have some kind of bull's-eye at his belt.

". . . There is one fable that touches very near the quick of life,—the fable of the monk who passed into the woods, heard a bird break into song, hearkened for a trill or two, and found himself at his return a stranger at his convent gates; for he had been absent fifty years, and of all his comrades there survived but one to recognize him. It is not only in the woods that this enchanter carols, though perhaps he is native there. He sings in the most doleful places. The miser hears him and chuckles, and his days are moments. With no more apparatus than an evil-smelling lantern, I have evoked him on the naked links. All life that is not merely mechanical is spun out of two strands—seeking for that bird and hearing him. And it is just this that makes life so hard to value, and the delight of each so incommunicable. And it is just a knowledge of this, and a remembrance of those fortunate hours in which the bird *has* sung to *us*, that fills us with such wonder when we turn to the pages of the realist. There, to be sure, we find a picture of life in so far as it consists of mud and of

old iron, cheap desires and cheap fears, that which we are ashamed to remember and that which we are careless whether we forget; but of the note of that time-devouring nightingale we hear no news.

" . . . Say that we came [in such a realistic romance] on some such business as that of my lantern-bearers on the links, and described the boys as very cold, spat upon by flurries of rain, and drearily surrounded, all of which they were; and their talk as silly and indecent, which it certainly was. To the eye of the observer they *are* wet and cold and drearily surrounded; but ask themselves, and they are in the heaven of a recondite pleasure, the ground of which is an ill-smelling lantern.

" For, to repeat, the ground of a man's joy is often hard to hit. It may hinge at times upon a mere accessory, like the lantern; it may reside in the mysterious inwards of psychology. . . . It has so little bond with externals . . . that it may even touch them not, and the man's true life, for which he consents to live, lie together in the field of fancy. . . . In such a case the poetry runs underground. The observer (poor soul, with his documents!) is all abroad. For to look at the man is but to court deception. We shall see the trunk from which he draws his nourishment; but he himself is above and abroad in the green dome of foliage, hummed through by winds and nested in by nightingales. And the true realism were that of the poets, to climb after him like a squirrel, and catch some glimpse of the heaven in which he lives. And the true realism, always and everywhere, is that of the poets: to find out where joy resides, and give it a voice far beyond singing.

" For to miss the joy is to miss all. In the joy of the actors lies the sense of any action. That is the explanation, that the excuse. To one who has not the secret of the lanterns the scene upon the links is meaningless. And hence the haunting and truly spectral unreality of realistic books. . . . In each we miss the personal poetry, the enchanted atmosphere, that rainbow work of fancy that clothes what

is naked and seems to ennoble what is base; in each, life falls dead like dough instead of soaring away like a balloon into the colours of the sunset; each is true, each inconceivable; for no man lives in the external truth among salts and acids, but in the warm, phantasmagoric chamber of his brain, with the painted windows and the storied wall." [1]

These paragraphs are the best thing I know in all Stevenson. "To miss the joy is to miss all." Indeed, it is. Yet we are but finite, and each one of us has some single specialized vocation of his own. And it seems as if energy in the service of its particular duties might be got only by hardening the heart toward everything unlike them. Our deadness toward all but one particular kind of joy would thus be the price we inevitably have to pay for being practical creatures. Only in some pitiful dreamer, some philosopher, poet, or romancer, or when the common practical man becomes a lover, does the hard externality give way, and a gleam of insight into the ejective world, as Clifford called it, the vast world of inner life beyond us, so different from that of outer seeming, illuminate our mind. Then the whole scheme of our customary values gets confounded, then our self is riven and its narrow interests fly to pieces, then a new centre and a new perspective must be found.

The change is well described by my colleague, Josiah Royce:—

"What, then, is our neighbour? Thou hast regarded his thought, his feeling, as somehow different from thine. Thou hast said, 'A pain in him is not like a pain in me, but something far easier to bear.' He seems to thee a little less living than thou; his life is dim, it is cold, it is a pale fire beside thy own burning desires. . . . So, dimly and by instinct hast thou lived with thy neighbour, and hast known him not, being blind. Thou hast made [of him] a thing, no Self at all. Have done with this illusion, and

[1] "The Lantern-bearers," in the volume entitled *Across the Plains*. Abridged in the quotation.

simply try to learn the truth. Pain is pain, joy is joy, everywhere, even as in thee. In all the songs of the forest birds; in all the cries of the wounded and dying, struggling in the captor's power; in the boundless sea where the myriads of water-creatures strive and die; amid all the countless hordes of savage men; in all sickness and sorrow; in all exultation and hope, everywhere, from the lowest to the noblest, the same conscious, burning, wilful life is found, endlessly manifold as the forms of the living creatures, unquenchable as the fires of the sun, real as these impulses that even now throb in thine own little selfish heart. Lift up thy eyes, behold that life, and then turn away, and forget it as thou canst; but, if thou hast *known* that, thou hast begun to know thy duty." [1]

This higher vision of an inner significance in what, until then, we had realized only in the dead external way, often comes over a person suddenly; and, when it does so, it makes an epoch in his history. As Emerson says, there is a depth in those moments that constrains us to ascribe more reality to them than to all other experiences. The passion of love will shake one like an explosion, or some act will awaken a remorseful compunction that hangs like a cloud over all one's later day.

This mystic sense of hidden meaning starts upon us often from non-human natural things. I take this passage from *Obermann*, a French novel that had some vogue in its day: "Paris, March 7.—It was dark and rather cold. I was gloomy, and walked because I had nothing to do. I passed by some flowers placed breast-high upon a wall. A jonquil in bloom was there. It is the strongest expression of desire: it was the first perfume of the year. I felt all the happiness destined for man. This unutterable harmony of souls, the phantom of the ideal world, arose in me complete. I never felt anything so great or so instantaneous. I know not what shape, what analogy, what secret of relation it was that made me see in this flower a limitless beauty . . .

[1] *The Religious Aspect of Philosophy*, pp. 157–162 (abridged).

I shall never enclose in a conception this power, this immensity that nothing will express; this form that nothing will contain; this ideal of a better world which one feels, but which it would seem that nature has not made." [1]

Wordsworth and Shelley are similarly full of this sense of a limitless significance in natural things. In Wordsworth it was a somewhat austere and moral significance—a "lonely cheer."

> "To every natural form, rock, fruit, or flower,
> Even the loose stones that cover the highway,
> I gave a moral life: I saw them feel,
> Or linked them to some feeling: the great mass
> Lay bedded in some quickening soul, and all
> That I beheld respired with inward meaning." [2]

"Authentic tidings of invisible things!" Just what this hidden presence in nature was, which Wordsworth so rapturously felt, and in the light of which he lived, tramping the hills for days together, the poet never could explain logically or in articulate conceptions. Yet to the reader who may himself have had gleaming moments of a similar sort, the verses in which Wordsworth simply proclaims the fact of them come with a heart-satisfying authority:—

> "Magnificent
> The morning rose, in memorable pomp,
> Glorious as e'er I had beheld. In front
> The sea lay laughing at a distance; near,
> The solid mountains shone, bright as the clouds,
> Grain-tinctured, drenched in empyrean light;
> And in the meadows and the lower grounds
> Was all the sweetness of a common dawn—
> Dews, vapours, and the melody of birds,
> And labourers going forth to till the fields.
>
> "Ah! need I say, dear Friend, that to the brim
> My heart was full; I made no vows, but vows
> Were then made for me; bond unknown to me
> Was given, that I should be, else sinning greatly,
> A dedicated Spirit. On I walked
> In thankful blessedness, which yet survives." [3]

[1] De Sénancour, *Obermann*, lettre xxx.
[2] *The Prelude*, book iii. [3] *The Prelude*, book iv.

As Wordsworth walked, filled with his strange inner joy, responsive thus to the secret life of nature round about him, his rural neighbours, tightly and narrowly intent upon their own affairs, their crops and lambs and fences, must have thought him a very insignificant and foolish personage. It surely never occurred to any one of them to wonder what was going on inside of *him* or what it might be worth. And yet that inner life of his carried the burden of a significance that has fed the souls of others, and fills them to this day with inner joy.

Richard Jefferies has written a remarkable autobiographic document entitled *The Story of my Heart.* It tells in many pages of the rapture with which in youth the sense of the life of nature filled him. On a certain hill-top he says:—

" I was utterly alone with the sun and the earth. Lying down on the grass, I spoke in my soul to the earth, the sun, the air, and the distant sea, far beyond sight. . . . With all the intensity of feeling which exalted me, all the intense communion I held with the earth, the sun and sky, the stars hidden by the light, with the ocean—in no manner can the thrilling depth of these feelings be written—with these I prayed as if they were the keys of an instrument. . . . The great sun, burning with light, the strong earth—dear earth —the warm sky, the pure air, the thought of ocean, the inexpressible beauty of all filled me with a rapture, an ecstasy, an inflatus. With this inflatus, too, I prayed. . . . The prayer, this soul-emotion, was in itself not for an object: it was a passion. I hid my face in the grass. I was wholly prostrated, I lost myself in the wrestle, I was rapt and carried away. . . . Had any shepherd accidentally seen me lying on the turf he would only have thought I was resting a few minutes. I made no outward show. Who could have imagined the whirlwind of passion that was going on in me as I reclined there! " [1]

Surely, a worthless hour of life when measured by the

[1] *Op. cit.* Boston, Roberts, 1883, pp. 5, 6

usual standards of commercial value. Yet in what other *kind* of value can the preciousness of any hour, made precious by any standard, consist, if it consist not in feelings of excited significance like these, engendered in some one, by what the hour contains?

Yet so blind and dead does the clamour of our own practical interests make us to all other things, that it seems almost as if it were necessary to become worthless as a practical being, if one is to hope to attain to any breadth of insight into the impersonal world of worths as such, to have any perception of life's meaning on a large objective scale. Only your mystic, your dreamer, or your insolvent tramp or loafer can afford so sympathetic an occupation, an occupation which will change the usual standards of human value in the twinkling of an eye, giving to foolishness a place ahead of power, and laying low in a minute the distinctions which it takes a hard-working conventional man a lifetime to build up. You may be a prophet at this rate; but you cannot be a worldly success.

Walt Whitman, for instance, is accounted by many of us a contemporary prophet. He abolishes the usual human distinctions, brings all conventionalisms into solution, and loves and celebrates hardly any human attributes save those elementary ones common to all members of the race. For this he becomes a sort of ideal tramp, a rider on omnibus-tops and ferry-boats, and, considered either practically or academically, a worthless, unproductive being. His verses are but ejaculations—things mostly without subject or verb, a succession of interjections on an immense scale. He felt the human crowd as rapturously as Wordsworth felt the mountains, felt it as an overpoweringly significant presence, simply to absorb one's mind in which should be business sufficient and worthy to fill the days of a serious man. As he crosses Brooklyn ferry, this is what he feels:—

"Flood-tide below me! I watch you, face to face;
Clouds of the west! sun there half an hour high! I see you also face to face.

Crowds of men and women attired in the usual costumes! how
curious you are to me!
On the ferry-boats, the hundreds and hundreds that cross, returning
home, are more curious to me than you suppose;
And you that shall cross from shore to shore years hence, are more
to me, and more in my meditations, than you might suppose.
Others will enter the gates of the ferry, and cross from shore to shore;
Others will watch the run of the flood-tide;
Others will see the shipping of Manhattan north and west, and the
heights of Brooklyn to the south and east;
Others will see the islands large and small;
Fifty years hence, others will see them as they cross, the sun half
an hour high.
A hundred years hence, or ever so many hundred years hence, others
will see them,
Will enjoy the sunset, the pouring in of the flood-tide, the falling
back to the sea of the ebb-tide.
It avails not, neither time nor place—distance avails not.
Just as you feel when you look on the river and sky, so I felt;
Just as any of you is one of a living crowd, I was one of a crowd;
Just as you are refresh'd by the gladness of the river and the bright
flow, I was refresh'd;
Just as you stand and lean on the rail, yet hurry with the swift
current, I stood, yet was hurried;
Just as you look on the numberless masts of ships, and the thick-
stemmed pipes of steamboats, I looked.
I too many and many a time cross'd the river, the sun half an hour
high;
I watched the Twelfth-month sea-gulls—I saw them high in the air,
with motionless wings, oscillating their bodies,
I saw how the glistening yellow lit up parts of their bodies, and left
the rest in strong shadow,
I saw the slow-wheeling circles, and the gradual edging toward the
south,
Saw the white sails of schooners and sloops, saw the ships at anchor,
The sailors at work in the rigging, or out astride the spars;
The scallop-edged waves in the twilight, the ladled cups, the frolic-
some crests and glistening;
The stretch afar growing dimmer and dimmer, the grey walls of the
granite store-houses by the docks;
On the neighbouring shores, the fires from the foundry chimneys
burning high . . . into the night,
Casting their flicker of black . . . into the clefts of streets.
These, and all else, were to me the same as they are to you."[1]

And so on, through the rest of a divinely beautiful poem. And, if you wish to see what this hoary loafer considered the most worthy way of profiting by life's heaven-sent

[1] *Crossing Brooklyn Ferry* (abridged).

opportunities, read the delicious volume of his letters to a young car-conductor who had become his friend:—

"NEW YORK, *Oct.* 9, 1868.

"DEAR PETE,—It is splendid here this forenoon—bright and cool. I was out early taking a short walk by the river only two squares from where I live. . . . Shall I tell you about [my life] just to fill up? I generally spend the forenoon in my room writing, etc., then take a bath, fix up, and go out about twelve and loaf somewhere or call on some one down town or on business, or perhaps, if it is very pleasant and I feel like it, ride a trip with some driver friend on Broadway, from 23rd Street to Bowling Green, three miles each way. (Every day I find I have plenty to do, every hour is occupied with something.) You know it is a never-ending amusement and study and recreation for me to ride a couple of hours on a pleasant afternoon on a Broadway stage in this way. You see everything as you pass, a sort of living, endless panorama—shops and splendid buildings and great windows: on the broad sidewalks crowds of women richly dressed continually passing, altogether different, superior in style and looks from any to be seen anywhere else—in fact a perfect stream of people—men, too, dressed in high style, and plenty of foreigners—and then in the streets the thick crowd of carriages, stages, carts, hotel and private coaches, and in fact all sorts of vehicles and many first-class teams, mile after mile, and the splendour of such a great street and so many tall, ornamental, noble buildings, many of them of white marble, and the gaiety and motion on every side: you will not wonder how much attraction all this is on a fine day to a great loafer like me, who enjoys so much seeing the busy world move by him and exhibiting itself for his amusement while he takes it easy and just looks on and observes." [1]

Truly a futile way of passing the time, some of you may say, and not altogether creditable to a grown-up man. And

[1] *Calamus*, Boston, 1897, pp. 41, 42.

yet, from the deepest point of view, who knows the more of truth and who knows the less—Whitman on his omnibus-top, full of the inner joy with which the spectacle inspires him, or you, full of the disdain which the futility of his occupation excites?

When your ordinary Brooklynite or New Yorker, leading a life replete with too much luxury, or tired and careworn about his personal affairs, crosses the ferry or goes up Broadway, *his* fancy does not thus "soar away into the colours of the sunset," as did Whitman's, nor does he inwardly realize at all the indisputable fact that this world never did anywhere or at any time contain more of essential divinity, or of eternal meaning, than is embodied in the fields of vision over which his eyes so carelessly pass. There is life; and there, a step away, is death. There is the only kind of beauty there ever was. There is the old human struggle and its fruits together. There is the text and the sermon, the real and the ideal in one. But to the jaded and unquickened eye it is all dead and common, pure vulgarism, flatness, and disgust. "Hech! it is a sad sight!" says Carlyle, walking at night with some one who appeals to him to note the splendour of the stars. And that very repetition of the scene to new generations of men in *secula seculorum*, that eternal recurrence of the common order, which so fills a Whitman with mystic satisfaction, is to a Schopenhauer, with the emotional anaesthesia, the feeling of "awful inner emptiness" from out of which he views it all, the chief ingredient of the tedium it instils. What is life on the largest scale, he asks, but the same recurrent inanities, the same dog barking, the same fly buzzing for evermore? Yet of the kind of fibre of which such inanities consist is the material woven of all the excitements, joys, and meanings that ever were, or ever shall be, in this world.

To be rapt with satisfied attention, like Whitman, to the mere spectacle of the world's presence is one way, and the most fundamental way, of confessing one's sense of its unfathomable significance and importance. But how

can one attain to the feeling of the vital significance of an experience if one have it not to begin with? There is no receipt which one can follow. Being a secret and a mystery, it often comes in mysteriously unexpected ways. It blossoms sometimes from out of the very grave wherein we imagined that our happiness was buried. Benvenuto Cellini, after a life all in the outer sunshine, made of adventures and artistic excitements, suddenly finds himself cast into a dungeon in the Castle of San Angelo. The place is horrible. Rats and wet and mould possess it. His leg is broken and his teeth fall out, apparently with scurvy. But his thoughts turn to God as they have never turned before. He gets a Bible, which he reads during the one hour in the twenty-four in which a wandering ray of daylight penetrates his cavern. He has religious visions. He sings psalms to himself and composes hymns. And thinking, on the last day of July, of the festivities customary on the morrow in Rome, he says to himself: "All these past years I celebrated this holiday with the vanities of the world: from this year henceforward I will do it with the divinity of God. And then I said to myself, 'Oh, how much more happy I am for this present life of mine than for all those things remembered!'"[1]

But the great understander of these mysterious ebbs and flows is Tolstoi. They throb all through his novels. In his *War and Peace*, the hero, Peter, is supposed to be the richest man in the Russian empire. During the French invasion he is taken prisoner and dragged through much of the retreat. Cold, vermin, hunger, and every form of misery assail him, the result being a revelation to him of the real scale of life's values. "Here only, and for the first time, he appreciated, because he was deprived of it, the happiness of eating when he was hungry, of drinking when he was thirsty, of sleeping when he was sleepy, and of talking when he felt the desire to exchange some words. . . . Later in life he always recurred with joy to this month of captivity, and never failed to

[1] *Vita*, lib. ii. chap. iv.

speak with enthusiasm of the powerful and ineffaceable sensations, and especially of the moral calm which he had experienced at this epoch. When at daybreak, on the morrow of his imprisonment, he saw [I abridge here Tolstoi's description] the mountains with their wooded slopes disappearing in the greyish mist; when he felt the cool breeze caress him; when he saw the light drive away the vapours, and the sun rise majestically behind the clouds and cupolas, and the crosses, the dew, the distance, the river, sparkle in the splendid, cheerful rays,—his heart overflowed with emotion. This emotion kept continually with him and increased a hundred-fold as the difficulties of his situation grew graver. . . . He learnt that man is meant for happiness and that this happiness is in him, in the satisfaction of the daily needs of existence, and that unhappiness is the fatal result, not of our need but of our abundance. . . . When calm reigned in the camp, and the embers paled and little by little went out, the full moon had reached the zenith. The woods and the fields round about lay clearly visible; and, beyond the inundation of light which filled them, the view plunged into the limitless horizon. Then Peter cast his eyes upon the firmament, filled at that hour with myriads of stars. 'All that is mine,' he thought. 'All that is in me, is me! And that is what they think they have taken prisoner! That is what they have shut up in a cabin!' So he smiled and turned in to sleep among his comrades." [1]

The occasion and the experience, then, are nothing. It all depends on the capacity of the soul to be grasped, to have its life-currents absorbed by what is given. "Crossing a bare common," says Emerson, "in snow puddles, at twilight, under a clouded sky, without having in my thoughts any occurrence of special good fortune, I have enjoyed a perfect exhilaration. I am glad to the brink of fear."

Life is always worth living, if one have such responsive sensibilities. But we of the highly educated classes (so

[1] *La Guerre et la Paix*, Paris, 1884, vol. iii. pp. 268, 275, 316.

called) have most of us got far, far away from Nature. We are trained to seek the choice, the rare, the exquisite exclusively, and to overlook the common. We are stuffed with abstract conceptions and glib with verbalities and verbosities; and in the culture of these higher functions the peculiar sources of joy connected with our simpler functions often dry up, and we grow stone-blind and insensible to life's more elementary and general goods and joys.

The remedy under such conditions is to descend to a more profound and primitive level. To be imprisoned or ship-wrecked or forced into the army would permanently show the good of life to many an over-educated pessimist. Living in the open air and on the ground, the lop-sided beam of the balance slowly rises to the level line; and the over-sensibilities and insensibilities even themselves out. The good of all the artificial schemes and fevers fades and pales; and that of seeing, smelling, tasting, sleeping, and daring and doing with one's body, grows and grows. The savages and children of nature, to whom we deem ourselves so much superior, certainly are alive where we are often dead, along these lines; and, could they write as glibly as we do, they would read us impressive lectures on our impatience for improvement and on our blindness to the fundamental static goods of life. "Ah! my brother," said a chieftain to his white guest, "thou wilt never know the happiness of both thinking of nothing and doing nothing. This, next to sleep, is the most enchanting of all things. Thus we were before our birth, and thus we shall be after death. Thy people . . . when they have finished reaping one field, they begin to plough another; and, if the day were not enough, I have seen them plough by moonlight. What is their life to ours—the life that is as naught to them? Blind that they are, they lose it all! But we live in the present." [1]

The intense interest that life can assume when brought down to the non-thinking level, the level of pure sensorial

[1] Quoted by Lotze, *Microcosmus*, English translation, vol. ii. p. 240.

perception, has been beautifully described by a man who *can* write, Mr. W. H. Hudson, in his volume *Idle Days in Patagonia.*

"I spent the greater part of one winter," says this admirable author, "at a point on the Rio Negro seventy or eighty miles from the sea.

". . . It was my custom to go out every morning on horseback with my gun and, followed by one dog, to ride away from the valley; and no sooner would I climb the terrace and plunge into the gray, universal thicket than I would find myself as completely alone as if five hundred instead of only five miles separated me from the valley and river. So wild and solitary and remote seemed that gray waste, stretching away into infinitude, a waste untrodden by man, and where the wild animals are so few that they have made no discoverable path in the wilderness of thorns. . . . Not once nor twice nor thrice, but day after day I returned to this solitude, going to it in the morning as if to attend a festival, and leaving it only when hunger and thirst and the westering sun compelled me. And yet I had no object in going,—no motive which could be put into words; for, although I carried a gun, there was nothing to shoot,—the shooting was all left behind in the valley. . . . Sometimes I would pass a whole day without seeing one mammal, and perhaps not more than a dozen birds of any size. The weather at that time was cheerless, generally with a gray film of cloud spread over the sky, and a bleak wind, often cold enough to make my bridle-hand quite numb. . . . At a slow pace, which would have seemed intolerable under other circumstances, I would ride about for hours together at a stretch. On arriving at a hill, I would slowly ride to its summit, and stand there to survey the prospect. On every side it stretched away in great undulations, wild and irregular. How gray it all was! Hardly less so near at hand than on the haze-wrapped horizon where the hills were dim and the outline obscured by distance. Descending from my outlook, I would take up my aimless wanderings again, and

visit other elevations to gaze on the same landscape from another point; and so on for hours. And at noon I would dismount, and sit or lie on my folded poncho for an hour or longer. One day in these rambles I discovered a small grove composed of twenty or thirty trees, growing at a convenient distance apart, that had evidently been resorted to by a herd of deer or other wild animals. This grove was on a hill differing in shape from other hills in its neighbourhood; and, after a time, I made a point of finding and using it as a resting-place every day at noon. I did not ask myself why I made choice of that one spot, sometimes going out of my way to sit there, instead of sitting down under any one of the millions of trees and bushes on any other hillside. I thought nothing about it, but acted unconsciously. Only afterwards it seemed to me that, after having rested there once, each time I wished to rest again, the wish came associated with the image of that particular clump of trees, with polished stems and clean bed of sand beneath; and in a short time I formed a habit of returning, animal like, to repose at that same spot.

"It was, perhaps, a mistake to say that I would sit down and rest, since I was never tired; and yet, without being tired, that noon-day pause, during which I sat for an hour without moving, was strangely grateful. All day there would be no sound, not even the rustling of a leaf. One day, while *listening* to the silence, it occurred to my mind to wonder what the effect would be if I were to shout aloud. This seemed at the time a horrible suggestion which almost made me shudder. But during those solitary days it was a rare thing for any thought to cross my mind. In the state of mind I was in, thought had become impossible. My state was one of *suspense and watchfulness;* yet I had no expectation of meeting an adventure, and felt as free from apprehension as I feel now while sitting in a room in London. The state seemed familiar rather than strange, and accompanied by a strong feeling of elation; and I did not know that some thing had come between me and my intellect until I re-

turned to my former self—to thinking and the old insipid existence [again].

" I had undoubtedly *gone back;* and that state of intense watchfulness or alertness, rather, with suspension of the higher intellectual faculties, represented the mental state of the pure savage. He thinks little, reasons little, having a surer guide in his [mere sensory perceptions]. He is in perfect harmony with nature, and is nearly on a level, mentally, with the wild animals he preys on, and which in their turn sometimes prey on him." [1]

For the spectator, such hours as Mr. Hudson writes of form a mere tale of emptiness, in which nothing happens, nothing is gained, and there is nothing to describe. They are meaningless and vacant tracts of time. To him who feels their inner secret, they tingle with an importance that unutterably vouches for itself. I am sorry for the boy or girl, or man or woman, who has never been touched by the spell of this mysterious sensorial life, with its irrationality, if so you like to call it, but its vigilance and its supreme felicity. The holidays of life are its most vitally significant portions, because they are, or at least should be, covered with just this kind of magically irresponsible spell.

And now what is the result of all these considerations and quotations? It is negative in one sense, but positive in another. It absolutely forbids us to be forward in pronouncing on the meaninglessness of forms of existence other than our own; and it commands us to tolerate, respect, and indulge those whom we see harmlessly interested and happy in their own ways, however unintelligible these may be to us. Hands off: neither the whole of truth nor the whole of good is revealed to any single observer, although each observer gains a partial superiority of insight from the peculiar position in which he stands. Even prisons and sick-rooms have their special revelations. It is enough to ask of each of us that he should be faithful to his own opportunities and make the most of his own blessings, without presuming to regulate the rest of the vast field.

[1] *Op. cit.* pp. 210–222 (abridged).

II

THE GOSPEL OF RELAXATION[1]

I WISH in the following hour to take certain psychological doctrines and show their practical applications to mental hygiene—to the hygiene of our American life more particularly. Our people, especially in academic circles, are turning towards psychology nowadays with great expectations; and if psychology is to justify them, it must be by showing fruits in the pedagogic and therapeutic lines.

The reader may possibly have heard of a peculiar theory of the emotions, commonly referred to in psychological literature as the Lange-James theory. According to this theory, our emotions are mainly due to those organic stirrings that are aroused in us in a reflex way by the stimulus of the exciting object or situation. An emotion of fear, for example, or surprise, is not a direct effect of the object's presence on the mind, but an effect of that still earlier effect, the bodily commotion which the object suddenly excites; so that, were this bodily commotion suppressed, we should not so much *feel* fear as call the situation fearful; we should not feel surprise, but coldly recognize that the object was indeed astonishing. One enthusiast has even gone so far as to say that when we feel sorry it is because we weep, when we feel afraid it is because we run away, and not conversely. Some of you may perhaps be acquainted with the paradoxical formula. Now, whatever exaggeration may possibly lurk in this account of our emotions (and I doubt myself whether the exaggeration be very great), it is certain that the main core of it is

[1] From *Talks to Teachers on Psychology: and to Students on some of Life's Ideals*, 1915, pp. 199–228.

true, and that the mere giving way to tears, for example, or to the outward expression of an anger-fit, will result for the moment in making the inner grief or anger more acutely felt. There is, accordingly, no better known or more generally useful precept in the moral training of youth, or in one's personal self-discipline, than that which bids us pay primary attention to what we do and express, and not to care too much for what we feel. If we only check a cowardly impulse in time, for example, or if we only *don't* strike the blow or rip out with the complaining or insulting word that we shall regret as long as we live, our feelings themselves will presently be the calmer and better, with no particular guidance from us on their own account. Action seems to follow feeling, but really action and feeling go together; and by regulating the action, which is under the more direct control of the will, we can indirectly regulate the feeling, which is not.

Thus the sovereign voluntary path to cheerfulness, if our spontaneous cheerfulness be lost, is to sit up cheerfully, to look round cheerfully, and to act and speak as if cheerfulness were already there. If such conduct does not make you soon feel cheerful, nothing else on that occasion can. So to feel brave, act as if we *were* brave, use all our will to that end, and a courage-fit will very likely replace the fit of fear. Again, in order to feel kindly toward a person to whom we have been inimical, the only way is more or less deliberately to smile, to make sympathetic inquiries, and to force ourselves to say genial things. One hearty laugh together will bring enemies into a closer communion of heart than hours spent on both sides in inward wrestling with the mental demon of uncharitable feeling. To wrestle with a bad feeling only pins our attention on it, and keeps it still fastened in the mind: whereas, if we act as if from some better feeling, the old bad feeling soon folds its tent like an Arab and silently steals away.

The best manuals of religious devotion accordingly reiterate the maxim that we must let our feelings go, and

pay no regard to them whatever. In an admirable and widely successful little book called *The Christian's Secret of a Happy Life*, by Mrs. Hannah Whitall Smith, I find this lesson on almost every page. *Act* faithfully and you really have faith, no matter how cold and even how dubious you may feel. "It is your purpose God looks at," writes Mrs. Smith, "not your feelings about that purpose; and your purpose, or will, is therefore the only thing you need attend to. . . . Let your emotions come or let them go, just as God pleases, and make no account of them either way. . . . They really have nothing to do with the matter. They are not the indicators of your spiritual state, but are merely the indicators of your temperament or of your present physical condition."

But you all know these facts already, so I need no longer press them on your attention. From our acts and from our attitudes ceaseless inpouring currents of sensation come, which help to determine from moment to moment what our inner states shall be; that is a fundamental law of psychology which I will therefore proceed to assume.

A Viennese neurologist of considerable reputation has recently written about the *Binnenleben*, as he terms it, or buried life of human beings. No doctor, this writer says, can get into really profitable relations with a nervous patient until he gets some sense of what the patient's *Binnenleben* is, of the sort of unuttered inner atmosphere in which his consciousness dwells alone with the secrets of its prison-house. This inner personal tone is what we can't communicate or describe articulately to others; but the wraith and ghost of it, so to speak, are often what our friends and intimates feel as our most characteristic quality. In the unhealthy-minded, apart from all sorts of old regrets, ambitions checked by shames, and aspirations obstructed by timidities, it consists mainly of bodily discomforts not distinctly localized by the sufferer, but breeding a general self-mistrust and sense that things are not as they should be with him. Half the thirst for alcohol that exists in the

world exists simply because alcohol acts as a temporary anaesthetic and effacer to all these morbid feelings that never ought to be in a human being at all. In the healthy-minded, on the contrary, there are no fears or shames to discover; and the sensations that pour in from the organism only help to swell the general vital sense of security and readiness for anything that may turn up.

Consider, for example, the effects of a well-toned *motor-apparatus*, nervous and muscular, on our general personal self-consciousness, the sense of elasticity and efficiency that results. They tell us that in Norway the life of the woman has lately been entirely revolutionized by the new order of muscular feelings with which the use of the *ski*, or long snow-shoes, as a sport for both sexes, has made the women acquainted. Fifteen years ago the Norwegian women were, even more than the women of other lands, votaries of the old-fashioned ideal of femininity, "the domestic angel," the "gentle and refining influence" sort of thing. Now these sedentary fireside tabby-cats of Norway have been trained, they say, by the snow-shoes into lithe and audacious creatures, for whom no night is too dark or height too giddy, and who are not only saying good-bye to the traditional feminine pallor and delicacy of constitution, but actually taking the lead in every educational and social reform. I cannot but think that the tennis and tramping and skating habits and the bicycle craze which are so rapidly extending among our dear sisters and daughters in this country are going also to lead to a sounder and heartier moral tone, which will send its tonic breath through all our American life.

I hope that here in America more and more the ideal of the well-trained and vigorous body will be maintained neck by neck with that of the well-trained and vigorous mind as the two coequal halves of the higher education for men and women alike. The strength of the British Empire lies in the strength of character of the individual Englishman, taken all alone by himself. And that strength, I am per-

suaded, is perennially nourished and kept up by nothing so much as by the national worship, in which all classes meet, of athletic outdoor life and sport

I recollect, years ago, reading a certain work by an American doctor on hygiene and the laws of life and the type of future humanity. I have forgotten its author's name and its title, but I remember well an awful prophecy that it contained about the future of our muscular system. Human perfection, the writer said, means ability to cope with the environment; but the environment will more and more require mental power from us, and less and less will ask for bare brute strength. Wars will cease, machines will do our heavy work, man will become more and more a mere director of nature's energies, and less and less an exerter of energy on his own account. So that, if the *homo sapiens* of the future can only digest his food and think, what need will he have of well-developed muscles at all? And why, pursued this writer, should we not even now be satisfied with a more delicate and intellectual type of beauty than that which pleased our ancestors? Nay, I have heard a fanciful friend make a still further advance in this "new-man" direction. With our future food, he says, itself prepared in liquid form from the chemical elements of the atmosphere, pepsinated or half-digested in advance, and sucked up through a glass tube from a tin can, what need shall we have of teeth, or stomachs even? They may go, along with our muscles and our physical courage, while, challenging ever more and more our proper admiration, will grow the gigantic domes of our crania, arching over our spectacled eyes, and animating our flexible little lips to those floods of learned and ingenious talk which will constitute our most congenial occupation.

I am sure that your flesh creeps at this apocalyptic vision. Mine certainly did so; and I cannot believe that our muscular vigour will ever be a superfluity. Even if the day ever dawns in which it will not be needed for fighting the old heavy battles against Nature, it will

still always be needed to furnish the background of sanity, serenity, and cheerfulness to life, to give moral elasticity to our disposition, to round off the wiry edge of our fretfulness, and make us good-humoured and easy of approach. Weakness is too apt to be what the doctors call irritable weakness. And that blessed internal peace and confidence, that *acquiescentia in seipso*, as Spinoza used to call it, that wells up from every part of the body of a muscularly well-trained human being, and soaks the indwelling soul of him with satisfaction, is, quite apart from every consideration of its mechanical utility, an element of spiritual hygiene of supreme significance.

And now let me go a step deeper into mental hygiene and try to enlist your insight and sympathy in a cause which I believe is one of paramount patriotic importance to us Yankees. Many years ago a Scottish medical man, Dr. Clouston, a mad-doctor as they call him there, or what we should call an asylum physician (the most eminent one in Scotland), visited this country, and said something that has remained in my memory ever since. "You Americans," he said, "wear too much expression on your faces. You are living like an army with all its reserves engaged in action. The duller countenances of the British population betoken a better scheme of life. They suggest stores of reserved nervous force to fall back upon, if any occasion should arise that requires it. This inexcitability, this presence at all times of power not used, I regard," continued Dr. Clouston, "as the great safeguard of our British people. The other thing in you gives me a sense of insecurity, and you ought somehow to tone yourselves down. You really do carry too much expression, you take too intensely the trivial moments of life."

Now Dr. Clouston is a trained reader of the secrets of the soul as expressed upon the countenance, and the observation of his which I quote seems to me to mean a great deal. And all Americans who stay in Europe long enough to get accustomed to the spirit that reigns and expresses itself

there, so unexcitable as compared with ours, make a similar observation when they return to their native shores. They find a wild-eyed look upon their compatriots' faces, either of too desperate eagerness and anxiety or of too intense responsiveness and good-will. It is hard to say whether the men or the women show it most. It is true that we do not all feel about it as Dr. Clouston felt. Many of us, far from deploring it, admire it. We say: "What intelligence it shows! How different from the stolid cheeks, the codfish eyes, the slow, inanimate demeanour we have been seeing in the British Isles!" Intensity, rapidity, vivacity of appearance are indeed with us something of a nationally accepted ideal; and the medical notion of "irritable weakness" is not the first thing suggested by them to our mind, as it was to Dr. Clouston's. In a weekly paper not very long ago I remember reading a story in which, after describing the beauty and interest of the heroine's personality, the author summed up her charms by saying that to all who looked upon her an impression as of "bottled lightning" was irresistibly conveyed.

Bottled lightning, in truth, is one of our American ideals, even of a young girl's character! Now it is most ungracious, and it may seem to some persons unpatriotic, to criticize in public the physical peculiarities of one's own people, of one's own family, so to speak. Besides, it may be said, and said with justice, that there are plenty of bottled-lightning temperaments in other countries, and plenty of phlegmatic temperaments here; and that, when all is said and done, the more or less of tension about which I am making such a fuss is a very small item in the sum total of a nation's life, and not worth solemn treatment at a time when agreeable rather than disagreeable things should be talked about. Well, in one sense the more or less of tension in our faces and in our unused muscles *is* a small thing: not much mechanical work is done by these contractions. But it is not always the material size of a thing that measures

its importance: often it is its place and function. One of the most philosophical remarks I ever heard made was by an unlettered workman who was doing some repairs at my house many years ago. "There is very little difference between one man and another," he said, "when you go to the bottom of it. But what little there is, is very important." And the remark certainly applies to this case. The general over-contraction may be small when estimated in foot-pounds, but its importance is immense on account of its *effects on the over-contracted person's spiritual life*. This follows as a necessary consequence from the theory of our emotions to which I made reference at the beginning of this article. For by the sensations that so incessantly pour in from the over-tense excited body the over-tense and excited habit of mind is kept up; and the sultry, threatening, exhausting, thunderous inner atmosphere never quite clears away. If you never wholly give yourself up to the chair you sit in, but always keep your leg-and-body-muscles half contracted for a rise; if you breathe eighteen or nineteen instead of sixteen times a minute, and never quite breathe out at that—what mental mood *can* you be in but one of inner panting and expectancy, and how can the future and its worries possibly forsake your mind? On the other hand, how can they gain admission to your mind if your brow be unruffled, your respiration calm and complete, and your muscles all relaxed?

Now what is the cause of this absence of repose, this bottled-lightning quality in us Americans? The explanation of it that is usually given is that it comes from the extreme dryness of our climate and the acrobatic performances of our thermometer, coupled with the extraordinary progressiveness of our life, the hard work, the railroad speed, the rapid success, and all the other things we know so well by heart. Well, our climate is certainly exciting, but hardly more so than that of many parts of Europe, where nevertheless no bottled-lightning girls are found. And the work done and the pace of life are as

extreme in every great capital of Europe as they are here. To me both of these pretended causes are utterly insufficient to explain the facts.

To explain them, we must go not to physical geography, but to psychology and sociology. The latest chapter both in sociology and in psychology to be developed in a manner that approaches adequacy is the chapter on the imitative impulse. First Bagehot, then Tarde, then Royce and Baldwin here, have shown that invention and imitation, taken together, form, one may say, the entire warp and woof of human life, in so far as it is social. The American over-tension and jerkiness and breathlessness and intensity and agony of expression are primarily social, and only secondarily physiological, phenomena. They are *bad habits*, nothing more or less, bred of custom and example, born of the imitation of bad models and the cultivation of false personal ideals. How are idioms acquired, how do local peculiarities of phrase and accent come about? Through an accidental example set by some one, which struck the ears of others, and was quoted and copied till at last every one in the locality chimed in. Just so it is with national tricks of vocalization or intonation, with national manners, fashions of movement and gesture, and habitual expression of face. We, here in America, through following a succession of pattern-setters whom it is now impossible to trace, and through influencing each other in a bad direction, have at last settled down collectively into what, for better or worse, is our own characteristic national type—a type with the production of which, so far as these habits go, the climate and conditions have had practically nothing at all to do.

This type, which we have thus reached by our imitativeness, we now have fixed upon us, for better or worse. Now no type can be *wholly* disadvantageous; but, so far as our type follows the bottled-lightning fashion, it cannot be wholly good. Dr. Clouston was certainly right in thinking that eagerness, breathlessness, and anxiety are not signs

of strength: they are signs of weakness and of bad co-ordination. The even forehead, the slab-like cheek, the cod-fish eye, may be less interesting for the moment; but they are more promising signs than intense expression is of what we may expect of their possessor in the long run. Your dull, unhurried worker gets over a great deal of ground, because he never goes backward or breaks down. Your intense, convulsive worker breaks down and has bad moods so often that you never know where he may be when you most need his help—he may be having one of his "bad days." We say that so many of our fellow-countrymen collapse, and have to be sent abroad to rest their nerves, because they work so hard. I suspect that this is an immense mistake. I suspect that neither the nature nor the amount of our work is accountable for the frequency and severity of our breakdowns, but that their cause lies rather in those absurd feelings of hurry and having no time, in that breathlessness and tension, that anxiety of feature, and that solicitude for results, that lack of inner harmony and ease, in short, by which with us the work is so apt to be accompanied, and from which a European who should do the same work would nine times out of ten be free. These perfectly wanton and unnecessary tricks of inner attitude and outer manner in us, caught from the social atmosphere, kept up by tradition, and idealized by many as the admirable way of life, are the last straws that break the American camel's back, the final overflowers of our measure of wear and tear and fatigue.

The voice, for example, in a surprisingly large number of us has a tired and plaintive sound. Some of us are really tired (for I do not mean absolutely to deny that our climate has a tiring quality); but far more of us are not tired at all, or would not be tired at all unless we had got into a wretched trick of feeling tired, by following the prevalent habits of vocalization and expression. And if talking high and tired, and living excitedly and hurriedly, would only enable us to *do* more by the way, even while breaking us down in

the end, it would be different. There would be some compensation, some excuse, for going on so. But the exact reverse is the case. It is your relaxed and easy worker, who is in no hurry and quite thoughtless most of the while of consequences, who is your efficient worker; and tension and anxiety, and present and future, all mixed up together in our mind at once, are the surest drags upon steady progress and hindrances to our success. My colleague, Professor Münsterberg, an excellent observer, who came here recently, has written some notes on America to German papers. He says in substance that the appearance of unusual energy in America is superficial and illusory, being really due to nothing but the habits of jerkiness and bad co-ordination for which we have to thank the defective training of our people. I think myself that it is high time for old legends and traditional opinions to be changed; and that, if any one should begin to write about Yankee inefficiency and feebleness, and inability to do anything with time except to waste it, he would have a very pretty paradoxical little thesis to sustain, with a great many facts to quote, and a great deal of experience to appeal to in its proof.

Well, my friends, if our dear American character is weakened by all this over-tension—and I think, whatever reserves you may make, that you will agree as to the main facts—where does the remedy lie? It lies, of course, where lay the origins of the disease. If a vicious fashion and taste are to blame for the thing, the fashion and taste must be changed. And, though it is no small thing to inoculate seventy millions of people with new standards, yet, if there is to be any relief, that will have to be done. We must change ourselves from a race that admires jerk and snap for their own sakes, and looks down upon low voices and quiet ways as dull, to one that, on the contrary, has calm for its ideal, and for their own sakes loves harmony, dignity, and ease.

So we go back to the psychology of imitation again.

There is only one way to improve ourselves, and that is by some of us setting an example which the others may pick up and imitate till the new fashion spreads from east to west. Some of us are in more favourable positions than others to set new fashions. Some are much more striking personally and imitable, so to speak. But no living person is sunk so low as not to be imitated by somebody. Thackeray somewhere says of the Irish nation that there never was an Irishman so poor that he didn't have a still poorer Irishman living at his expense; and, surely, there is no human being whose example doesn't work contagiously in *some* particular. The very idiots at our public institutions imitate each other's peculiarities. And, if you should individually achieve calmness and harmony in your own person, you may depend upon it that a wave of imitation will spread from you, as surely as the circles spread outward when a stone is dropped into a lake.

Fortunately, we shall not have to be absolute pioneers. Even now in New York they have formed a society for the improvement of our national vocalisation, and one perceives its machinations already in the shape of various newspaper paragraphs intended to stir up dissatisfaction with the awful thing that it is. And, better still than that, because more radical and general is the gospel of relaxation, as one may call it, preached by Miss Annie Payson Call, of Boston, in her admirable little volume called *Power through Repose*, a book that ought to be in the hands of every teacher and student in America of either sex. You need only be followers, then, on a path already opened up by others. But of one thing be confident: others still will follow you.

And this brings me to one more application of psychology to practical life, to which I will call attention briefly and then close. If one's example of easy and calm ways is to be effectively contagious, one feels by instinct that the less voluntarily one aims at getting imitated, the more unconscious one keeps in the matter, the more likely one is to

succeed. *Become the imitable thing* and you may then discharge your minds of all responsibility for the imitation. The laws of social nature will take care of that result. Now the psychological principle on which this precept reposes is a law of very deep and wide-spread importance in the conduct of our lives, and at the same time a law which we Americans most grievously neglect. Stated technically, the law is this: that *strong feeling about one's self tends to arrest the free association of one's objective ideas and motor processes.* We get the extreme example of this in the mental disease called melancholia.

A melancholic patient is filled through and through with intensely painful emotion about himself. He is threatened, he is guilty, he is doomed, he is annihilated, he is lost. His mind is fixed as if in a clamp on these feelings of his own situation, and in all the books on insanity you may read that the usual varied flow of his thoughts has ceased. His associative processes, to use the technical phrase, are inhibited; and his ideas stand stock-still, shut up to their one monotonous function of reiterating inwardly the fact of the man's desperate estate. And this inhibitive influence is not due to the mere fact that his emotion is *painful.* Joyous emotions about the self also stop the association of our ideas. A saint in ecstasy is as motionless and irresponsive and one-idea'd as a melancholiac. And, without going as far as ecstatic saints, we know how in every one a great or sudden pleasure may paralyze the flow of thought. Ask young people returning from a party or a spectacle, and all excited about it, what it was. "Oh, it was *fine!* it was *fine!* it was *fine!*" is all the information you are likely to receive until the excitement has calmed down. Probably every one of my hearers has been made temporarily half-idiotic by some great success or piece of good fortune. "*Good! Good! Good!*" is all we can at such times say to ourselves until we smile at our own very foolishness.

Now from all this we can draw an extremely practical conclusion. If, namely, we wish our trains of ideation and

volition to be copious and varied and effective, we must form the habit of freeing them from the inhibitive influence of reflection upon them, of egoistic preoccupation about their results. Such a habit, like other habits, can be formed. Prudence and duty and self-regard, emotions of ambition and emotions of anxiety, have, of course, a needful part to play in our lives. But confine them as far as possible to the occasions when you are making your general resolutions and deciding on your plans of campaign, and keep them out of the details. When once a decision is reached and execution is the order of the day, dismiss absolutely all responsibility and care about the outcome. *Unclamp*, in a word, your intellectual and practical machinery, and let it run free; and the service it will do you will be twice as good. Who are the scholars who get " rattled " in the recitation-room? Those who think of the possibilities of failure and feel the great importance of the act. Who are those who do recite well? Often those who are most indifferent. *Their* ideas reel themselves out of their memory of their own accord. Why do we hear the complaint so often that social life in New England is either less rich and expressive or more fatiguing than it is in some other parts of the world? To what is the fact, if fact it be, due unless to the over-active conscience of the people, afraid of either saying something too trivial and obvious, or something insincere, or something unworthy of one's interlocutor, or something in some way or other not adequate to the occasion? How can conversation possibly steer itself through such a sea of responsibilities and inhibitions as this? On the other hand, conversation does flourish and society is refreshing, and neither dull on the one hand nor exhausting from its effort on the other, wherever people forget their scruples and take the brakes off their hearts, and let their tongues wag as automatically and irresponsibly as they will.

They talk much in pedagogic circles to-day about the duty of the teacher to prepare for every lesson in advance.

To some extent this is useful. But we Yankees are assuredly not those to whom such a general doctrine should be preached. We are only too careful as it is. The advice I should give to most teachers would be in the words of one who is herself an admirable teacher. Prepare yourself in the *subject so well that it shall be always on tap :* then in the class-room trust your spontaneity and fling away all further care.

My advice to students, especially to girl students, would be somewhat similar. Just as a bicycle chain may be too tight, so may one's carefulness and conscientiousness be so tense as to hinder the running of one's mind. Take, for example, periods when there are many successive days of examination impending. One ounce of good nervous tone in an examination is worth many pounds of anxious study for it in advance. If you want really to do your best in an examination, fling away the book the day before, say to yourself, " I won't waste another minute on this miserable thing, and I don't care an iota whether I succeed or not." Say this sincerely, and feel it; and go out to play, or go to bed and sleep, and I am sure the results next day will encourage you to use the method permanently. I have heard this advice given to a student by Miss Call, whose book on muscular relaxation I quoted a moment ago. In her later book, entitled *As a Matter of Course,* the gospel of moral relaxation, of dropping things from the mind, and not " caring," is preached with equal success. Not only our preachers, but our friends the theosophists and mind-curers of various religious sects are also harping on this string. And with the doctors, the Delsarteans, the various mind-curing sects, and such writers as Mr. Dresser, Prentice Mulford, Mr. Horace Fletcher, and Mr. Trine to help, and the whole band of school-teachers and magazine-readers chiming in, it really looks as if a good start might be made in the direction of changing our American mental habit into something more indifferent and strong.

Worry means always and invariably inhibition of associa-

tions and loss of effective power. Of course, the sovereign cure for worry is religious faith; and this, of course, you also know. The turbulent billows of the fretful surface leave the deep parts of the ocean undisturbed, and to him who has a hold on vaster and more permanent realities the hourly vicissitudes of his personal destiny seem relatively insignificant things. The really religious person is accordingly unshakable and full of equanimity, and calmly ready for any duty that the day may bring forth. This is charmingly illustrated by a little work with which I recently became acquainted, "The Practice of the Presence of God, the Best Ruler of a Holy Life, by Brother Lawrence, being Conversations and Letters of Nicholas Herman of Lorraine, translated from the French." [1] I extract a few passages, the conversations being given in indirect discourse. Brother Lawrence was a Carmelite friar, converted at Paris in 1666. "He said that he had been footman to M. Fieubert, the Treasurer, and that he was a great awkward fellow, who broke everything. That he had desired to be received into a monastery, thinking that he would there be made to smart for his awkwardness and the faults he should commit, and so he should sacrifice to God his life, with its pleasures; but that God had disappointed him, he having met with nothing but satisfaction in that state. . . .

"That he had long been troubled in mind from a certain belief that he should be damned; that all the men in the world could not have persuaded him to the contrary; but that he had thus reasoned with himself about it: *I engaged in a religious life only for the love of God, and I have endeavoured to act only for Him; whatever becomes of me, whether I be lost or saved, I will always continue to act purely for the love of God. I shall have this good at least, that till death I shall have done all that is in me to love Him.* . . . That since then he had passed his life in perfect liberty and continual joy.

"That when an occasion of practising some virtue offered,

[1] Fleming H. Revell Company, New York.

he addressed himself to God, saying, 'Lord, I cannot do this unless thou enablest me;' and that then he received strength more than sufficient. That, when he had failed in his duty, he only confessed his fault, saying to God, 'I shall never do otherwise, if You leave me to myself; it is You who must hinder my failing and mend what is amiss.' That after this he gave himself no further uneasiness about it.

"That he had been lately sent into Burgundy to buy the provision of wine for the society, which was a very unwelcome task for him, because he had no turn for business, and because he was lame, and could not go about the boat but by rolling himself over the casks. That, however, he gave himself no uneasiness about it, nor about the purchase of the wine. That he said to God, 'It was his business he was about,' and that he afterward found it well performed. That he had been sent into Auvergne, the year before, upon the same account; that he could not tell how the matter passed, but that it proved very well.

"So, likewise, in his business in the kitchen (to which he had naturally a great aversion), having accustomed himself to do everything there for the love of God, and with prayer upon all occasions, for his grace to do his work well, he had found everything easy during fifteen years that he had been employed there.

"That he was very well pleased with the post he was now in, but that he was as ready to quit that as the former, since he was always pleasing himself in every condition by doing little things for the love of God.

"That the goodness of God assured him he would not forsake him utterly, and that he would give him strength to bear whatever evil he permitted to happen to him; and, therefore, that he feared nothing, and had no occasion to consult with anybody about his state. That, when he had attempted to do it, he had always come away more perplexed."

The simple-heartedness of the good Brother Lawrence,

and the relaxation of all unnecessary solicitudes and anxieties in him, is a refreshing spectacle.

The need of feeling responsible all the live-long day has been preached long enough in our New England. Long enough exclusively, at any rate—long enough to the female sex. What our girl students and woman teachers most need nowadays is not the exacerbation but rather the toning-down of their moral tensions. Even now I fear that some one of my fair hearers may be making an undying resolve to become strenuously relaxed, cost what it will, for the remainder of her life. It is needless to say that that is not the way to do it. The way to do it, paradoxical as it may seem, is genuinely not to care whether you are doing it or not. Then, possibly, by the grace of God, you may all at once find that you *are* doing it, and, having learned what the trick feels like, you may (again by the grace of God) be enabled to go on.

And that something like this may be the happy experience of all my hearers is, in closing, my most earnest wish.

III

THE ENERGIES OF MEN[1]

EVERY ONE knows what it is to start a piece of work, either intellectual or muscular, feeling stale—or *oold*, as an Adirondack guide once put it to me. And everybody knows what it is to " warm up " to his job. The process of warming up gets particularly striking in the phenomenon known as " second wind." On usual occasions we make a practice of stopping an occupation as soon as we meet the first effective layer (so to call it) of fatigue. We have then walked, played, or worked " enough," so we desist. That amount of fatigue is an efficacious obstruction on this side of which our usual life is cast. But if an unusual necessity forces us to press onward, a surprising thing occurs. The fatigue gets worse up to a certain critical point, when gradually or suddenly it passes away, and we are fresher than before. We have evidently tapped a level of new energy, masked until then by the fatigue-obstacle usually obeyed. There may be layer after layer of this experience. A third and a fourth " wind " may supervene. Mental activity shows the phenomenon as well as physical, and in exceptional cases we may find, beyond the very extremity of fatigue-distress, amounts of ease and power that we never dreamed ourselves

[1] This was the title originally given to the Presidential Address delivered before the American Philosophical Association at Columbia University, December 28, 1906, and published as there delivered in the *Philosophical Review* for January 1907. The address was later published, after slight alteration, in the *American Magazine* for October 1907, under the title " The Powers of Men." The more popular form is here reprinted under the title which the author himself preferred.

From *Memories and Studies*, 1912, pp. 229–264.

to own—sources of strength habitually not taxed at all, because habitually we never push through the obstruction, never pass those early critical points.

For many years I have mused on the phenomenon of second wind, trying to find a physiological theory. It is evident that our organism has stored-up reserves of energy that are ordinarily not called upon, but that may be called upon: deeper and deeper strata of combustible or explosible material, discontinuously arranged, but ready for use by any one who probes so deep, and repairing themselves by rest as well as do the superficial strata. Most of us continue living unnecessarily near our surface. Our energy-budget is like our nutritive budget. Physiologists say that a man is in "nutritive equilibrium" when day after day he neither gains nor loses weight. But the odd thing is that this condition may obtain on astonishingly different amounts of food. Take a man in nutritive equilibrium, and systematically increase or lessen his rations. In the first case he will begin to gain weight, in the second case to lose it. The change will be greatest on the first day, less on the second, less still on the third; and so on, till he has gained all that he will gain, or lost all that he will lose, on that altered diet. He is now in nutritive equilibrium again, but with a new weight; and this neither lessens nor increases because his various combustion-processes have adjusted themselves to the changed dietary. He gets rid, in one way or another, of just as much N, C, H, etc., as he takes in *per diem*.

Just so one can be in what I might call "efficiency-equilibrium" (neither gaining nor losing power when once the equilibrium is reached) on astonishingly different quantities of work, no matter in what direction the work may be measured. It may be physical work, intellectual work, moral work, or spiritual work.

Of course there are limits: the trees don't grow into the sky. But the plain fact remains that men the world over possess amounts of resource which only very excep-

tional individuals push to their extremes of use. But the very same individual, pushing his energies to their extreme, may in a vast number of cases keep the pace up day after day, and find no "reaction" of a bad sort, so long as decent hygienic conditions are preserved. His more active rate of energizing does nor wreck him; for the organism adapts itself, and as the rate of waste augments, augments correspondingly the rate of repair.

I say the *rate* and not the *time* of repair. The busiest man needs no more hours of rest than the idler. Some years ago Professor Patrick, of the Iowa State University, kept three young men awake for four days and nights. When his observations on them were finished, the subjects were permitted to sleep themselves out. All awoke from this sleep completely refreshed, but the one who took longest to restore himself from his long vigil only slept one-third more time than was regular with him.

If my reader will put together these two conceptions, first, that few men live at their maximum of energy, and second, that any one may be in vital equilibrium at very different rates of energizing, he will find, I think, that a very pretty practical problem of national economy, as well as of individual ethics, opens upon his view. In rough terms, we may say that a man who energizes below his normal maximum fails by just so much to profit by his chance at life; and that a nation filled with such men is inferior to a nation run at higher pressure. The problem is, then, how can men be trained up to their most useful pitch of energy? And how can nations make such training most accessible to all their sons and daughters. This, after all, is only the general problem of education, formulated in slightly different terms.

"Rough" terms, I said just now, because the words "energy" and "maximum" may easily suggest only *quantity* to the reader's mind, whereas in measuring the human energies of which I speak, qualities as well as quantities have to be taken into account. Every one feels

that his total *power* rises when he passes to a higher *qualitative* level of life.

Writing is higher than walking, thinking is higher than writing, deciding higher than thinking, deciding "no" higher than deciding "yes"—at least the man who passes from one of these activities to another will usually say that each later one involves a greater element of *inner work* than the earlier ones, even though the total heat given out or the foot-pounds expended by the organism may be less. Just how to conceive this inner work physiologically is as yet impossible, but psychologically we all know what the word means. We need a particular spur or effort to start us upon inner work; it tires us to sustain it; and when long sustained, we know how easily we lapse. When I speak of "energizing," and its rates and levels and sources, I mean therefore our inner as well as our outer work.

Let no one think, then, that our problem of individual and national economy is solely that of the maximum of pounds raisable against gravity, the maximum of locomotion, or of agitation of any sort, that human beings can accomplish. That might signify little more than hurrying and jumping about in inco-ordinated ways; whereas inner work, though it so often reinforces outer work, quite as often means its arrest. To relax, to say to ourselves (with the "new thoughters") "Peace! be still!" is sometimes a great achievement of inner work. When I speak of human energizing in general, the reader must therefore understand that sum-total of activities, some outer and some inner, some muscular, some emotional, some moral, some spiritual, of whose waxing and waning in himself he is at all times so well aware. How to keep it at an appreciable maximum? How not to let the level lapse? That is the great problem. But the work of men and women is of innumerable kinds, each kind being, as we say, carried on by a particular faculty; so the great problem splits into two sub-problems, thus:—

(1) What are the limits of human faculty in various directions?

(2) By what diversity of means, in the differing types of human beings, may the faculties be stimulated to their best results?

Read in one way, these two questions sound both trivial and familiar: there is a sense in which we have all asked them ever since we were born. Yet *as a methodical programme of scientific inquiry*, I doubt whether they have ever been seriously taken up. If answered fully, almost the whole of mental science and of the science of conduct would find a place under them. I propose, in what follows, to press them on the reader's attention in an informal way.

The first point to agree upon in this enterprise is that *as a rule men habitually use only a small part of the powers which they actually possess and which they might use under appropriate conditions.*

Every one is familiar with the phenomenon of feeling more or less alive on different days. Every one knows on any given day that there are energies slumbering in him which the incitements of that day do not call forth, but which he might display if these were greater. Most of us feel as if a sort of cloud weighed upon us, keeping us below our highest notch of clearness in discernment, sureness in reasoning, or firmness in deciding. Compared with what we ought to be, we are only half awake. Our fires are damped, our drafts are checked. We are making use of only a small part of our possible mental and physical resources. In some persons this sense of being cut off from their rightful resources is extreme, and we then get the formidable neurasthenic and psychasthenic conditions, with life grown into one tissue of impossibilities, that so many medical books describe.

Stating the thing broadly, the human individual thus lives usually far within his limits; he possesses powers of various sorts which he habitually fails to use. He energizes below his *maximum*, and he behaves below his *optimum*.

In elementary faculty, in co-ordination, in power of *inhibition* and control, in every conceivable way, his life is contracted like the field of vision of an hysteric subject—but with less excuse, for the poor hysteric is diseased, while in the rest of us it is only an inveterate *habit*—the habit of inferiority to our full self—that is bad.

Admit so much, then, and admit also that the charge of being inferior to their full self is far truer of some men than of others; then the practical question ensues: *to what do the better men owe their escape? and, in the fluctuations which all men feel in their own degree of energizing, to what are the improvements due, when they occur?*

In general terms the answer is plain:

Either some unusual stimulus fills them with emotional excitement, or some unusual idea of necessity induces them to make an extra effort of will. *Excitements, ideas, and efforts*, in a word, are what carry us over the dam.

In those "hyperesthetic" conditions which chronic invalidism so often brings in its train, the dam has changed its normal place. The slightest functional exercise gives a distress which the patient yields to and stops. In such cases of "habit-neurosis" a new range of power often comes in consequence of the "bullying-treatment," of efforts which the doctor obliges the patient, much against his will, to make. First comes the very extremity of distress, then follows unexpected relief. There seems no doubt that *we are each and all of us to some extent victims of habit-neurosis.* We have to admit the wider potential range and the habitually narrow actual use. We live subject to arrest by degrees of fatigue which we have come only from habit to obey. Most of us may learn to push the barrier farther off, and to live in perfect comfort on much higher levels of power.

Country people and city people, as a class, illustrate this difference. The rapid rate of life, the number of decisions in an hour, the many things to keep account of, in a busy city man's or woman's life, seem monstrous to a

country brother. He doesn't see how we live at all. A day in New York or Chicago fills him with terror. The danger and noise make it appear like a permanent earthquake. But *settle* him there, and in a year or two he will have caught the pulse-beat. He will vibrate to the city's rhythms; and if he only succeeds in his avocation, whatever that may be, he will find a joy in all the hurry and the tension, he will keep the pace as well as any of us, and get as much out of himself in any week as he ever did in ten weeks in the country.

The stimuli of those who successfully respond and undergo the transformation here, are duty, the example of others, and crowd-pressure and contagion. The transformation, moreover, is a chronic one: the new level of energy becomes permanent. The duties of new offices of trust are constantly producing this effect on the human beings appointed to them. The physiologists call a stimulus "dynamogenic" when it increases the muscular contractions of men to whom it is applied; but appeals can be dynamogenic morally as well as muscularly. We are witnessing here in America to-day the dynamogenic effect of a very exalted political office upon the energies of an individual who had already manifested a healthy amount of energy before the office came.

Humbler examples show perhaps still better what chronic effects duty's appeal may produce in chosen individuals. John Stuart Mill somewhere says that women excel men in the power of keeping up sustained moral excitement. Every case of illness nursed by wife or mother is a proof of this; and where can one find greater examples of sustained endurance than in those thousands of poor homes where the woman successfully holds the family together and keeps it going by taking all the thought and doing all the work—nursing, teaching, cooking, washing, sewing, scrubbing, saving, helping neighbours, "choring" outside —where does the catalogue end? If she does a bit of scolding now and then who can blame her? But often she does just

the reverse; keeping the children clean and the man good-tempered, and soothing and smoothing the whole neighbourhood into finer shape.

Eighty years ago a certain Montyon left to the Académie Française a sum of money to be given in small prizes to the best examples of "virtue" of the year. The academy's committees, with great good sense, have shown a partiality to virtues simple and chronic, rather than to her spasmodic and dramatic flights; and the exemplary housewives reported on have been wonderful and admirable enough. In Paul Bourget's report for this year we find numerous cases, of which this is a type: Jeanne Chaix, eldest of six children; mother insane, father chronically ill. Jeanne, with no money but her wages at a pasteboard-box factory, directs the household, brings up the children, and successfully maintains the family of eight, which thus subsists, morally as well as materially, by the sole force of her valiant will. In some of these French cases charity to outsiders is added to the inner family burden; or helpless relatives, young or old, are adopted, as if the strength were inexhaustible and ample for every appeal. Details are too long to quote here; but human nature, responding to the call of duty, appears nowhere sublimer than in the person of these humble heroines of family life.

Turning from more chronic to acuter proofs of human nature's reserves of power, we find that the stimuli that carry us over the usually effective dam are most often the classic emotional ones, love, anger, crowd-contagion or despair. Despair lames most people, but it wakes others fully up. Every siege or shipwreck or polar expedition brings out some hero who keeps the whole company in heart. Last year there was a terrible colliery explosion at Courrières in France. Two hundred corpses, if I remember rightly, were exhumed. After twenty days of excavation, the rescuers heard a voice. "*Me voici*," said the first man unearthed. He proved to be a collier named Nemy, who had taken command of thirteen others in the darkness,

disciplined them and cheered them, and brought them out alive. Hardly any of them could see or speak or walk when brought into the day. Five days later, a different type of vital endurance was unexpectedly unburied in the person of one Berton who, isolated from any but dead companions, had been able to sleep away most of his time.

A new position of responsibility will usually show a man to be a far stronger creature than was supposed. Cromwell's and Grant's careers are the stock examples of how war will wake a man up. I owe to Professor C. E. Norton, my colleague, the permission to print part of a private letter from Colonel Baird-Smith written shortly after the six weeks' siege of Delhi, in 1857, for the victorious issue of which that excellent officer was chiefly to be thanked. He writes as follows:

". . . My poor wife had some reason to think that war and disease between them had left very little of a husband to take under nursing when she got him again. An attack of camp-scurvy had filled my mouth with sores, shaken every joint in my body, and covered me all over with sores and livid spots, so that I was marvellously unlovely to look upon. A smart knock on the ankle-joint from the splinter of a shell that burst in my face, in itself a mere *bagatelle* of a wound, had been of necessity neglected under the pressing and incessant calls upon me, and had grown worse and worse till the whole foot below the ankle became a black mass and seemed to threaten mortification. I insisted, however, on being allowed to use it till the place was taken, mortification or no; and though the pain was sometimes horrible, I carried my point and kept up to the last. On the day after the assault I had an unlucky fall on some bad ground, and it was an open question for a day or two whether I hadn't broken my arm at the elbow. Fortunately it turned out to be only a severe sprain, but I am still conscious of the wrench it gave me. To crown the whole pleasant catalogue, I was worn to a shadow by a constant diarrhœa, and consumed as much opium as would have

done credit to my father-in-law [Thomas De Quincey]. However, thank God, I have a good share of Tapleyism in me and come out strong under difficulties. I think I may confidently say that no man ever saw me out of heart, or ever heard one croaking word from me even when our prospects were gloomiest. We were sadly scourged by the cholera, and it was almost appalling to me to find that out of twenty-seven officers present, I could only muster fifteen for the operations of the attack. However, it was done, and after it was done came the collapse. Don't be horrified when I tell you that for the whole of the actual siege, and in truth for some little time before, I almost lived on brandy. Appetite for food I had none, but I forced myself to eat just sufficient to sustain life, and I had an incessant craving for brandy as the strongest stimulant I could get. Strange to say, I was quite unconscious of its affecting me in the slightest degree. *The excitement of the work was so great that no lesser one seemed to have any chance against it, and I certainly never found my intellect clearer or my nerves stronger in my life.* It was only my wretched body that was weak, and the moment the real work was done by our becoming complete masters of Delhi, I broke down without delay and discovered that if I wished to live I must continue no longer the system that had kept me up until the crisis was passed. With it passed away as if in a moment all desire to stimulate, and a perfect loathing of my late staff of life took possession of me."

Such experiences show how profound is the alteration in the manner in which, under excitement, our organism will sometimes perform its physiological work. The processes of repair become different when the reserves have to be used, and for weeks and months the deeper use may go on.

Morbid cases, here as elsewhere, lay the normal machinery bare. In the first number of Dr. Morton Prince's *Journal of Abnormal Psychology*, Dr. Janet has discussed five cases of morbid impulse, with an explanation that is precious

for my present point of view. One is a girl who eats, eats, eats, all day. Another walks, walks, walks, and gets her food from an automobile that escorts her. Another is a dipsomaniac. A fourth pulls out her hair. A fifth wounds her flesh and burns her skin. Hitherto such freaks of impulse have received Greek names (as bulimia, dromomania, etc.) and been scientifically disposed of as "episodic syndromata of hereditary degeneration." But it turns out that Janet's cases are all what he calls psychasthenics, or victims of a chronic sense of weakness, torpor, lethargy, fatigue, insufficiency, impossibility, unreality, and powerlessness of will; and that in each and all of them the particular activity pursued, deleterious though it be, has the temporary result of raising the sense of vitality and making the patient feel alive again. These things reanimate: they would reanimate *us*, but it happens that in each patient the particular freak-activity chosen is the only thing that does reanimate; and therein lies the morbid state. The way to treat such persons is to discover to them more usual and useful ways of throwing their stores of vital energy into gear.

Colonel Baird-Smith, needing to draw on altogether extraordinary stores of energy, found that brandy and opium were ways of throwing them into gear.

Such cases are humanly typical. We are all to some degree oppressed, unfree. We don't come to our own. It is there, but we don't get at it. The threshold must be made to shift. Then many of us find that an eccentric activity—a "spree," say—relieves. There is no doubt that to some men sprees and excesses of almost any kind are medicinal, temporarily at any rate, in spite of what the moralists and doctors say.

But when the normal tasks and stimulations of life don't put a man's deeper levels of energy on tap, and he requires distinctly deleterious excitements, his constitution verges on the abnormal. The normal opener of deeper and deeper levels of energy is the will. The difficulty is to use it, to

make the effort which the word volition implies. But if we *do* make it (or if a god, though he were only the god Chance, makes it through us), it will act dynamogenically on us for a month. It is notorious that a single successful effort of moral volition, such as saying " no " to some habitual temptation, or performing some courageous act, will launch a man on a higher level of energy for days and weeks, will give him a new range of power. " In the act of uncorking the whisky bottle which I had brought home to get drunk upon," said a man to me, " I suddenly found myself running out into the garden, where I smashed it on the ground. I felt so happy and uplifted after this act that for two months I wasn't tempted to touch a drop."

The emotions and excitements due to usual situations are the usual inciters of the will. But these act discontinuously; and in the intervals the shallower levels of life tend to close in and shut us off. Accordingly the best practical knowers of the human soul have invented the thing known as methodical ascetic discipline to keep the deeper levels constantly in reach. Beginning with easy tasks, passing to harder ones, and exercising day by day, it is, I believe, admitted that disciples of asceticism can reach very high levels of freedom and power of will.

Ignatius Loyola's spiritual exercises must have produced this result in innumerable devotees. But the most venerable ascetic system, and the one whose results have the most voluminous experimental corroboration is undoubtedly the Yoga system in Hindustan. From time immemorial, by Hatha Yoga, Raja Yoga, Karma Yoga, or whatever code of practice it might be, Hindu aspirants to perfection have trained themselves, month in and out, for years. The result claimed, and certainly in many cases accorded by impartial judges, is strength of character, personal power, unshakability of soul. In an article in the *Philosophical Review*,[1] from which I am largely copying here, I have

[1] " The Energies of Men," *Philosophical Review*, vol. xvi. No. 1, January 1907. [Cf. note on p. 40.]

quoted at great length the experience with " Hatha Yoga " of a very gifted European friend of mine who, by persistently carrying out for several months its methods of fasting from food and sleep, its exercises in breathing and thought-concentration, and its fantastic posture-gymnastics, seems to have succeeded in waking up deeper and deeper levels of will and moral and intellectual power in himself, and to have escaped from a decidedly menacing brain-condition of the "circular" type, from which he had suffered for years.

Judging by my friend's letters, of which the last I have is written fourteen months after the Yoga training began, there can be no doubt of his relative regeneration. He has undergone material trials with indifference, travelled third-class on Mediterranean steamers, and fourth-class on African trains, living with the poorest Arabs and sharing their unaccustomed food, all with equanimity. His devotion to certain interests has been put to heavy strain, and nothing is more remarkable to me than the changed moral tone with which he reports the situation. A profound modification has unquestionably occurred in the running of his mental machinery. The gearing has changed, and his will is available otherwise than it was.

My friend is a man of very peculiar temperament. Few of us would have had the will to start upon the Yoga training, which, once started, seemed to conjure the further will-power needed out of itself. And not all of those who could launch themselves would have reached the same results. The Hindus themselves admit that in some men the results may come without call or bell. My friend writes to me: " You are quite right in thinking that religious crises, love-crises, indignation-crises may awaken in a very short time powers similar to those reached by years of patient Yoga-practice."

Probably most medical men would treat this individual's case as one of what it is fashionable now to call by the name of " self-suggestion," or " expectant attention "—as if those phrases were explanatory, or meant more than the

fact that certain men can be influenced, while others cannot be influenced, by certain sorts of *ideas*. This leads me to say a word about ideas considered as dynamogenic agents, or stimuli for unlocking what would otherwise be unused reservoirs of individual power.

One thing that ideas do is to contradict other ideas and keep us from believing them. An idea that thus negates a first idea may itself in turn be negated by a third idea, and the first idea may thus regain its natural influence over our belief and determine our behaviour. Our philosophic and religious development proceeds thus by credulities, negations, and the negating of negations.

But whether for arousing or for stopping belief, ideas may fail to be efficacious, just as a wire at one time alive with electricity may at another time be dead. Here our insight into causes fails us, and we can only note results in general terms. In general, whether a given idea shall be a live idea depends more on the person into whose mind it is injected than on the idea itself. Which is the suggestive idea for this person, and which for that one? Mr. Fletcher's disciples regenerate themselves by the idea (and the fact) that they are chewing, and re-chewing, and super-chewing their food. Dr. Dewey's pupils regenerate themselves by going without their breakfast—a fact, but also an ascetic idea. Not every one can use *these* ideas with the same success.

But apart from such individually varying susceptibilities, there are common lines along which men simply as men tend to be inflammable by ideas. As certain objects naturally awaken love, anger, or cupidity, so certain ideas naturally awaken the energies of loyalty, courage, endurance, or devotion. When these ideas are effective in an individual's life, their effect is often very great indeed. They may transfigure it, unlocking innumerable powers which, but for the idea, would never have come into play. " Fatherland," " the Flag," " the Union," " Holy Church," " the Monroe Doctrine," " Truth," " Science," " Liberty,"

Garibaldi's phrase, "Rome or Death," etc., are so many examples of energy-releasing ideas. The social nature of such phrases is an essential factor of their dynamic power. They are forces of detent in situations in which no other force produces equivalent effects, and each is a force of detent only in a specific group of men.

The memory that an oath or vow has been made will nerve one to abstinences and efforts otherwise impossible; witness the "pledge" in the history of the temperance movement. A mere promise to his sweetheart will clean up a youth's life all over—at any rate for a time. For such effects an educated susceptibility is required. The idea of one's "honour," for example, unlocks energy only in those of us who have had the education of a "gentleman," so called.

That delightful being, Prince Pueckler-Muskau, writes to his wife from England that he has invented "a sort of artificial resolution respecting things that are difficult of performance. My device," he continues, "is this: *I give my word of honour most solemnly to myself* to do or to leave undone this or that. I am of course extremely cautious in the use of this expedient, but when once the word is given, even though I afterwards think I have been precipitate or mistaken, I hold it to be perfectly irrevocable, whatever inconveniences I foresee likely to result. If I were capable of breaking my word after such mature consideration, I should lose all respect for myself—and what man of sense would not prefer death to such an alternative? . . . When the mysterious formula is pronounced, no alteration in my own view, nothing short of physical impossibilities, must, for the welfare of my soul, alter my will. . . . I find something very satisfactory in the thought that man has the power of framing such props and weapons out of the most trivial materials, indeed out of nothing, merely by the force of his will, which thereby truly deserves the name of omnipotent." [1]

[1] *Tour in England, Ireland, and France*, Philadelphia, 1833, p. 435.

Conversions, whether they be political, scientific, philosophic, or religious, form another way in which bound energies are let loose. They unify us, and put a stop to ancient mental interferences. The result is freedom, and often a great enlargement of power. A belief that thus settles upon an individual always acts as a challenge to his will. But, for the particular challenge to operate, he must be the right challenge*e*. In religious conversions we have so fine an adjustment that the idea may be in the mind of the challengee for years before it exerts effects; and why it should do so then is often so far from obvious that the event is taken for a miracle of grace, and not a natural occurrence. Whatever it is, it may be a high-water mark of energy, in which "noes," once impossible, are easy, and in which a new range of "yeses" gains the right of way.

We are just now witnessing a very copious unlocking of energies by ideas in the persons of those converts to "New Thought," "Christian Science," "Metaphysical Healing," or other forms of spiritual philosophy, who are so numerous among us to-day. The ideas here are healthy-minded and optimistic; it is quite obvious that a wave of religious activity, analogous in some repects to the spread of early Christianity, Buddhism, and Mohammedanism, is passing over our American world. The common feature of these optimistic faiths is that they all tend to the suppression of what Mr. Horace Fletcher calls "fearthought." Fearthought he defines as the "self-suggestion of inferiority"; so that one may say that these systems all operate by the suggestion of power. And the power, small or great, comes in various shapes to the individual,—power, as he will tell you, not to "mind" things that used to vex him, power to concentrate his mind, good cheer, good temper—in short, to put it mildly, a firmer, more elastic moral tone.

The most genuinely saintly person I have ever known is a friend of mine now suffering from cancer of the breast—I hope that she may pardon my citing her here as an example of what ideas can do. Her ideas have kept her a practically

well woman for months after she should have given up and gone to bed. They have annulled all pain and weakness and given her a cheerful active life, unusually beneficent to others to whom she has afforded help. Her doctors, acquiescing in results they could not understand, have had the good sense to let her go her own way.

How far the mind-cure movement is destined to extend its influence, or what intellectual modifications it may yet undergo, no one can foretell. It is essentially a religious movement, and to academically nurtured minds its utterances are tasteless and often grotesque enough. It also incurs the natural enmity of medical politicians, and of the whole trades-union wing of that profession. But no unprejudiced observer can fail to recognize its importance as a social phenomenon to-day, and the higher medical minds are already trying to interpret it fairly, and make its power available for their own therapeutic ends.

Dr. Thomas Hyslop, of the great West Riding Asylum in England, said last year to the British Medical Association that the best sleep-producing agent which his practice had revealed to him was *prayer*. I say this, he added (I am sorry here that I must quote from memory), purely as a medical man. The exercise of prayer, in those who habitually exert it, must be regarded by us doctors as the most adequate and normal of all the pacifiers of the mind and calmers of the nerves.

But in few of us are functions not tied up by the exercise of other functions. Relatively few medical men and scientific men, I fancy, can pray. Few can carry on any living commerce with "God." Yet many of us are well aware of how much freer and abler our lives would be, were such important forms of energizing not sealed up by the critical atmosphere in which we have been reared. There are in every one potential forms of activity that actually are shunted out from use. Part of the imperfect vitality under which we labour can thus be easily explained. One part of our mind dams up—even *damns* up!—the other parts.

Conscience makes cowards of us all. Social conventions prevent us from telling the truth after the fashion of the heroes and heroines of Bernard Shaw. We all know persons who are models of excellence, but who belong to the extreme philistine type of mind. So deadly is their intellectual respectability that we can't converse about certain subjects at all, can't let our minds play over them, can't even mention them in their presence. I have numbered among my dearest friends persons thus inhibited intellectually, with whom I would gladly have been able to talk freely about certain interests of mine, certain authors, say, as Bernard Shaw, Chesterton, Edward Carpenter, H. G. Wells, but it wouldn't do, it made them too uncomfortable, they wouldn't play, I had to be silent. An intellect thus tied down by literality and decorum makes on one the same sort of an impression that an able-bodied man would who should habituate himself to do his work with only one of his fingers, locking up the rest of his organism and leaving it unused.

I trust that by this time I have said enough to convince the reader both of the truth and of the importance of my thesis. The two questions, first, that of the possible extent of our powers; and, second, that of the various avenues of approach to them, the various keys for unlocking them in diverse individuals, dominate the whole problem of individual and national education. We need a topography of the limits of human power, similar to the chart which oculists use of the field of human vision. We need also a study of the various types of human being with reference to the different ways in which their energy-reserves may be appealed to and set loose. Biographies and individual experiences of every kind may be drawn upon for evidence here.[1]

[1] "This would be an absolutely concrete study. . . . The limits of power must be limits that have been realized in actual persons, and the various ways of unlocking the reserves of power must have been exemplified in individual lives. . . . So here is a programme of concrete individual psychology. . . . It is replete with interesting facts, and points to practical issues superior in importance to anything we know."—*From the address as originally delivered before the Philosophical Association*; see *Philosophical Review*, xvi. 1, 19.

IV

HABIT[1]

"HABIT a second nature! Habit is ten times nature," the Duke of Wellington is said to have exclaimed; and the degree to which this is true no one probably can appreciate as well as one who is a veteran soldier himself. The daily drill and the years of discipline end by fashioning a man completely over again, as to most of the possibilities of his conduct.

"There is a story," says Prof. Huxley, "which is credible enough, though it may not be true, of a practical joker who, seeing a discharged veteran carrying home his dinner, suddenly called out 'Attention!' whereupon the man instantly brought his hands down, and lost his mutton and potatoes in the gutter. The drill had been thorough, and its effects had become embodied in the man's nervous structure."

Riderless cavalry-horses, at many a battle, have been seen to come together and go through their customary evolutions at the sound of the bugle-call. Most domestic beasts seem machines almost pure and simple, undoubtingly, unhesitatingly doing from minute to minute the duties they have been taught, and giving no sign that the possibility of an alternative ever suggests itself to their mind. Men grown old in prison have asked to be readmitted after being once set free. In a railroad accident a menagerie-tiger, whose cage had broken open, is said to have emerged, but presently crept back again, as if too much bewildered by his new responsibilities, so that he was without difficulty secured.

[1] From *Psychology, Briefer Course*, 1893, pp. 142–150.

Habit is thus the enormous fly-wheel of society, its most precious conservative agent. It alone is what keeps us all within the bounds of ordinance, and saves the children of fortune from the envious uprisings of the poor. It alone prevents the hardest and most repulsive walks of life from being deserted by those brought up to tread therein. It keeps the fisherman and the deck-hand at sea through the winter; it holds the miner in his darkness, and nails the countryman to his log-cabin and his lonely farm through all the months of snow; it protects us from invasion by the natives of the desert and the frozen zone. It dooms us all to fight out the battle of life upon the lines of our nurture or our early choice, and to make the best of a pursuit that disagrees, because there is no other for which we are fitted, and it is too late to begin again. It keeps different social strata from mixing. Already at the age of twenty-five you see the professional mannerism settling down on the young commercial traveller, on the young doctor, on the young minister, on the young counsellor-at-law. You see the little lines of cleavage running through the character, the tricks of thought, the prejudices, the ways of the "shop," in a word, from which the man can by-and-by no more escape than his coat-sleeve can suddenly fall into a new set of folds. On the whole, it is best he should not escape. It is well for the world that in most of us, by the age of thirty, the character has set like plaster, and will never soften again.

If the period between twenty and thirty is the critical one in the formation of intellectual and professional habits, the period below twenty is more important still for the fixing of *personal* habits, properly so called, such as vocalisation and pronunciation, gesture, motion, and address. Hardly ever is a language learned after twenty spoken without a foreign accent; hardly ever can a youth transferred to the society of his betters unlearn the nasality and other vices of speech bred in him by the associations of his growing years. Hardly ever, indeed, no matter how much

money there may be in his pocket, can he ever learn to *dress* like a gentleman-born. The merchants offer their wares as eagerly to him as to the veriest "swell," but he simply *cannot* buy the right things. An invisible law, as strong as gravitation, keeps him within his orbit, arrayed this year as he was the last; and how his better-clad acquaintances contrive to get the things they wear will be for him a mystery till his dying day.

The great thing, then, in all education, is to *make our nervous system our ally instead of our enemy.* It is to fund and capitalize our acquisitions, and live at ease upon the interest of the fund. *For this we must make automatic and habitual, as early as possible, as many useful actions as we can,* and guard against the growing into ways that are likely to be disadvantageous to us, as we should guard against the plague. The more of the details of our daily life we can hand over to the effortless custody of automatism the more our higher powers of mind will be set free for their own proper work. There is no more miserable human being than one in whom nothing is habitual but indecision, and for whom the lighting of every cigar, the drinking of every cup, the time of rising and going to bed every day, and the beginning of every bit of work, are subjects of express volitional deliberation. Full half the time of such a man goes to the deciding, or regretting, of matters which ought to be so ingrained in him as practically not to exist for his consciousness at all. If there be such daily duties not yet ingrained in any one of my readers, let him begin this very hour to set the matter right.

In Professor Bain's chapter on "The Moral Habits there are some admirable practical remarks laid down. Two great maxims emerge from his treatment. The first is that in the acquisition of a new habit, or the leaving off of an old one, we must take care to *launch ourselves with as strong and decided an initiative as possible.* Accumulate all the possible circumstances which shall re-enforce the right motives; put yourself assiduously in conditions that

encourage the new way; make engagements incompatible with the old; take a public pledge, if the case allows; in short, envelop your resolution with every aid you know. This will give your new beginning such a momentum that the temptation to break down will not occur as soon as it otherwise might; and every day during which a breakdown is postponed adds to the chances of its not occurring at all.

The second maxim is: *Never suffer an exception to occur till the new habit is securely rooted in your life.* Each lapse is like the letting fall of a ball of string which one is carefully winding up; a single slip undoes more than a great many turns will wind again. *Continuity* of training is the great means of making the nervous system act infallibly right. As Professor Bain says:—

"The peculiarity of the moral habits, contradistinguishing them from the intellectual acquisitions, is the presence of two hostile powers, one to be gradually raised into the ascendant over the other. It is necessary, above all things, in such a situation, never to lose a battle. Every gain on the wong side undoes the effect of many conquests on the right. The essential precaution, therefore, is so to regulate the two opposing powers that the one may have a series of uninterrupted successes, until repetition has fortified it to such a degree as to enable it to cope with the opposition, under any circumstances. This is the theoretically best career of mental progress."

The need of securing success at the *outset* is imperative. Failure at first is apt to damp the energy of all future attempts, whereas past experiences of success nerve one to future vigour. Goethe says to a man who consulted him about an enterprise but mistrusted his own powers: "Ach! you need only blow on your hands!" And the remark illustrates the effect on Goethe's spirits of his own habitually successful career.

The question of "tapering-off," in abandoning such habits as drink and opium-indulgence comes in here, and is a question about which experts differ within certain

limits, and in regard to what may be best for an individual case. In the main, however, all expert opinion would agree that abrupt acquisition of the new habit is the best way, *if there be a real possibility of carrying it out.* We must be careful not to give the will so stiff a task as to insure its defeat at the very outset; but, *provided one can stand it,* a sharp period of suffering, and then a free time, is the best thing to aim at, whether in giving up a habit like that of opium, or in simply changing one's hours of rising or work. It is surprising how soon a desire will die of inanition if it be *never* fed.

"One must first learn, unmoved, looking neither to the right nor left, to walk firmly on the strait and narrow path, before one can begin 'to make one's self over again.' He who every day makes a fresh resolve is like one who, arriving at the edge of the ditch he is to leap, forever stops and returns for a fresh run. Without *unbroken* advance there is no such thing as *accumulation* of the ethical forces possible, and to make this possible, and to exercise us and habituate us in it, is the sovereign blessing of regular work." [1]

A third maxim may be added to the preceding pair: *Seize the very first possible opportunity to act on every resolution you make, and on every emotional prompting you may experience in the direction of the habits you aspire to gain.* It is not in the moment of their forming, but in the moment of their producing *motor effects,* that resolves and aspirations communicate the new "set" to the brain. As the author last quoted remarks:—

"The actual presence of the practical opportunity alone furnishes the fulcrum upon which the lever can rest, by means of which the moral will may multiply its strength and raise itself aloft. He who has no solid ground to press against will never get beyond the stage of empty gesture-making."

No matter how full a reservoir of *maxims* one may

[1] J. Bahnsen, *Beiträge zu Charakterologie,* 1867, vol i. p. 209.

possess, and no matter how good one's *sentiments* may be, if one have not taken advantage of every concrete opportunity to *act*, one's character may remain entirely unaffected for the better. With mere good intentions, hell is proverbially paved. And this is an obvious consequence of the principles we have laid down. "A character," as J. S. Mill says, "is a completely fashioned will"; and a will, in the sense in which he means it, is an aggregate of tendencies to act in a firm and prompt and definite way upon all the principal emergencies of life. A tendency to act only becomes effectively ingrained in us in proportion to the uninterrupted frequency with which the actions actually occur, and the brain "grows" to their use. When a resolve or a fine glow of feeling is allowed to evaporate without bearing practical fruit it is worse than a chance lost; it works so as positively to hinder future resolutions and emotions from taking the normal path of discharge. There is no more contemptible type of human character than that of the nerveless sentimentalist and dreamer, who spends his life in a weltering sea of sensibility and emotion, but who never does a manly concrete deed. Rousseau, inflaming all the mothers of France, by his eloquence, to follow Nature and nurse their babies themselves, while he sends his own children to the foundling hospital, is the classical example of what I mean. But every one of us in his measure, whenever, after glowing for an abstractly formulated Good, he practically ignores some actual case, among the squalid "other particulars" of which that same Good lurks disguised, treads straight on Rousseau's path. All Goods are disguised by the vulgarity of their concomitants in this work-a-day world; but woe to him who can only recognize them when he thinks them in their pure and abstract form! The habit of excessive novel-reading and theatre-going will produce true monsters in this line. The weeping of the Russian lady over the fictitious personages in the play, while her coachman is freezing to death on his seat outside is the sort of thing that everywhere happens on

a less glaring scale. Even the habit of excessive indulgence in music, for those who are neither performers themselves nor musically gifted enough to take it in a purely intellectual way, has probably a relaxing effect upon the character. One becomes filled with emotions which habitually pass without prompting to any deed, and so the inertly sentimental condition is kept up. The remedy would be, never to suffer one's self to have an emotion at a concert without expressing it afterward in *some* active way. Let the expression be the least thing in the world—speaking genially to one's grandmother, or giving up one's seat in a horse-car, if nothing more heroic offers—but let it not fail to take place.

These latter cases make us aware that it is not simply *particular lines* of discharge, but also *general forms* of discharge, that seem to be grooved out by habit in the brain. Just as, if we let our emotions evaporate, they get into a way of evaporating; so there is reason to suppose that if we often flinch from making an effort, before we know it the effort-making capacity will be gone; and that, if we suffer the wandering of our attention, presently it will wander all the time. Attention and effort are, as we shall see later, but two names for the same psychic fact. To what brain-processes they correspond we do not know. The strongest reason for believing that they do depend on brain-processes at all, and are not pure acts of the spirit, is just this fact, that they seem in some degree subject to the law of habit, which is a material law. As a final practical maxim, relative to these habits of the will, we may, then, offer something like this: *Keep the faculty of effort alive in you by a little gratuitous exercise every day.* That is, be systematically ascetic or heroic in little unnecessary points, do every day or two something for no other reason than that you would rather not do it, so that when the hour of dire need draws nigh, it may find you not unnerved and untrained to stand the test. Asceticism of this sort is like the insurance which a man pays on his house and goods. The tax does

him no good at the time, and possibly may never bring him a return. But if the fire *does* come, his having paid it will be his salvation from ruin. So with the man who has daily inured himself to habits of concentrated attention, energetic volition, and self-denial in unnecessary things. He will stand like a tower when everything rocks around him, and when his softer fellow-mortals are winnowed like chaff in the blast.

The physiological study of mental conditions is thus the most powerful ally of hortatory ethics. The hell to be endured hereafter, of which theology tells, is no worse than the hell we make for ourselves in this world by habitually fashioning our characters in the wrong way. Could the young but realize how soon they will become mere walking bundles of habits, they would give more heed to their conduct while in the plastic state. We are spinning our own fates, good or evil, and never to be undone. Every smallest stroke of virtue or of vice leaves its never so little scar. The drunken Rip Van Winkle, in Jefferson's play, excuses himself for every fresh dereliction by saying, "I won't count this time!" Well! he may not count it and a kind Heaven may not count it; but it is being counted none the less. Down among his nerve-cells and fibres the molecules are counting it, registering and storing it up to be used against him when the next temptation comes. Nothing we ever do is, in strict scientific literalness, wiped out. Of course this has its good side as well as its bad one. As we become permanent drunkards by so many separate drinks, so we become saints in the moral, and authorities and experts in the practical and scientific spheres, by so many separate acts and hours of work. Let no youth have any anxiety about the upshot of his education, whatever the line of it may be. If he keep faithfully busy each hour of the working day, he may safely leave the final result to itself. He can with perfect certainty count on waking up some fine morning, to find himself one of the competent ones of his generation, in whatever pursuit he may have

singled out. Silently, between all the details of his business, the *power of judging* in all that class of matter will have built itself up within him as a possession that will never pass away. Young people should know this truth in advance. The ignorance of it has probably engendered more discouragement and faint-heartedness in youths embarking on arduous careers than all other causes put together.

V

THE WILL[1]

I AM far from denying the exceeding prominence and importance of the part which pleasures and pains, both felt and represented, play in the motivation of our conduct. But I must insist that it is no exclusive part, and that co-ordinately with these mental objects innumerable others have an exactly similar impulsive and inhibitive power.

If one must have a single name for the condition upon which the impulsive and inhibitive quality of objects depends, one had better call it their *interest*. "The interesting" is a title which covers not only the pleasant and the painful, but also the morbidly fascinating, the tediously haunting, and even the simply habitual, inasmuch as the attention usually travels on habitual lines, and what-we-attend-to and what-interests-us are synonymous terms. It seems as if we ought to look for the secret of an idea's impulsiveness, not in any peculiar relations which it may have with paths of motor discharge—for *all* ideas have relations with some such paths—but rather in a preliminary phenomenon, the *urgency, namely, with which it is able to compel attention and dominate in consciousness*. Let it once so dominate, let no other ideas succeed in displacing it, and whatever motor effects belong to it by nature will inevitably occur—its impulsion, in short, will be given to boot, and will manifest itself as a matter of course. This is what we have seen in instinct, in emotion, in common ideo-motor action, in hypnotic suggestion, in morbid impulsion, and in *voluntas invita*—the impelling idea is simply the one which possesses the attention. It is the

[1] From *Psychology*, vol. ii. pp. 558–579 (with omissions).

same where pleasure and pain are the motor spurs—they drive other thoughts from consciousness at the same time that they instigate their own characteristic "volitional" effects. And this is also what happens at the moment of the *fiat*, in all the five types of "decision" which we have described. In short, one does not see any case in which the steadfast occupancy of consciousness does not appear to be the prime condition of impulsive power. It is still more obviously the prime condition of inhibitive power. What checks our impulses is the mere thinking of reasons to the contrary—it is their bare presence to the mind which gives the veto, and makes acts, otherwise seductive, impossible to perform. If we could only *forget* our scruples, our doubts, our fears, what exultant energy we should for a while display!

In closing in, therefore, after all these preliminaries, upon the more *intimate* nature of the volitional process, we find ourselves driven more and more exclusively to consider the conditions which make ideas prevail in the mind. With the prevalence, once there as a fact, of the motive idea the *psychology* of volition properly stops. The movements which ensue are exclusively physiological phenomena, following according to physiological laws upon the neural events to which the idea corresponds. The *willing* terminates with the prevalence of the idea; and whether the act then follows or not is a matter quite immaterial, so far as the willing itself goes. I will to write, and the act follows. I will to sneeze, and it does not. I will that the distant table slide over the floor towards me; it also does not. My willing representation can no more instigate my sneezing-centre than it can instigate the table to activity. But in both cases it is as true and good willing as it was when I willed to write.[1] In a word, volition is a psychic

[1] This sentence is written from the author's own consciousness. But many persons say that where they disbelieve in the effects ensuing, as in the case of the table, they cannot will it. They "cannot exert a volition that a table should move." This personal difference may be partly verbal. Different people may attach different

or moral fact pure and simple, and is absolutely completed when the stable state of the idea is there. The supervention of motion is a supernumerary phenomenon depending on executive ganglia whose function lies outside the mind.

We thus find that *we reach the heart of our inquiry into volition when we ask by what process it is that the thought of any given object comes to prevail stably in the mind.* Where thoughts prevail without effort, we have sufficiently studied in the several chapters on sensation, association, and attention, the laws of their advent before consciousness and of their stay. We will not go over that ground again, for we know that interest and association are the words, let their worth be what it may, on which our explanations must perforce rely. Where, on the other hand, the prevalence of the thought is accompanied by the phenomenon of effort, the case is much less clear. Already in the chapter on attention we postponed the final consideration of voluntary attention with effort to a later place. We have now brought things to a point at which we see that attention with effort is all that any case of volition implies. *The essential achievement of the will, in short, when it is most "voluntary," is to* ATTEND *to a difficult object and hold it fast before the mind.* The so doing *is* the *fiat;* and it is a mere physiological incident that when the object is thus attended to, immediate motor consequences should ensue. A *resolve,* whose contemplated motor consequences are not to ensue until some possibly far-distant future condition shall have been fulfilled, involves all the psychic elements of a motor fiat except the word "*now*"; and it is the same

connotations to the word "will." But I incline to think that we differ psychologically as well. When one knows that he has no power one's desire of a thing is called a *wish* and not a will. The sense of impotence inhibits the volition. Only by abstracting from the thought of the impossibility am I able energetically to imagine strongly the table sliding over the floor, make the bodily "effort" which I do, and to will it to come towards me. It may be that some people are unable to perform this abstraction, and that the image of the table stationary on the floor inhibits the contradictory image of its moving, which is the object to be willed.

with many of our purely theoretic beliefs. We saw in effect in the appropriate chapter, how in the last resort belief means only a peculiar sort of occupancy of the mind, and relation to the self felt in the thing believed; and we know in the case of many beliefs how constant an effort of the attention is required to keep them in this situation and protect them from displacement by contradictory ideas.

Effort of attention is thus the essential phenomenon of will. Every reader must know by his own experience that this is so, for every reader must have felt some fiery passion's grasp. What constitutes the difficulty for a man labouring under an unwise passion of acting as if the passion were unwise? Certainly there is no physical difficulty. It is as easy physically to avoid a fight as to begin one, to pocket one's money as to squander it on one's cupidities, to walk away from as towards a coquette's door. The difficulty is mental; it is that of getting the idea of the wise action to stay before our mind at all. When any strong emotional state whatever is upon us the tendency is for no images but such as are congruous with it to come up. If others by chance offer themselves, they are instantly smothered and crowded out. If we be joyous, we cannot keep thinking of those uncertainties and risks of failure which abound upon our path; if lugubrious, we cannot think of new triumphs, travels, loves, and joys; nor if vengeful, of our oppressor's community of nature with ourselves. The cooling advice which we get from others when the fever-fit is on us is the most jarring and exasperating thing in life. Reply we cannot, so we get angry; for by a sort of self-preserving instinct which our passion has, it feels that these chill objects, if they once but gain a lodgment, will work and work until they have frozen the very vital spark from out of all our mood and brought our airy castles in ruin to the ground. Such is the inevitable effect of reasonable ideas over others—*if they can once get a quiet hearing;* and passion's cue accordingly is always and everywhere to prevent their still small voice from being heard at all.

"Let me not think of that! Don't speak to me of that!" This is the sudden cry of all those who in a passion perceive some sobering considerations about to check them in mid-career. "*Haec tibi erit janua leti*," we feel. There is something so icy in this cold-water bath, something which seems so hostile to the movement of our life, so purely negative, in Reason when she lays her corpse-like finger on our heart and says, "Halt! give up! leave off! go back! sit down!" that it is no wonder that to most men the steadying influence seems, for the time being, a very minister of death.

The strong-willed man, however, is the man who hears the still small voice unflinchingly, and who, when the death-bringing consideration comes, looks at its face, consents to its presence, clings to it, affirms it, and holds it fast, in spite of the host of exciting mental images which rise in revolt against it and would expel it from the mind. Sustained in this way by a resolute effort of attention, the difficult object ere long begins to call up its own congeners and associates and ends by changing the disposition of the man's consciousness altogether. And with his consciousness, his action changes, for the new object, once stably in possession of the field of his thoughts, infallibly produces its own motor effects. The difficulty lies in the gaining possession of that field. Though the spontaneous drift of thought is all the other way, the attention must be kept strained on that one object until at last it *grows*, so as to maintain itself before the mind with ease. This strain of the attention is the fundamental act of will. And the will's work is in most cases practically ended when the bare presence to our thought of the naturally unwelcome object has been secured. For the mysterious tie between the thought and the motor centres next comes into play, and, in a way which we cannot even guess at, the obedience of the bodily organs follows as a matter of course.

In all this one sees how the immediate point of application of the volitional effort lies exclusively in the mental world. The whole drama is a mental drama. The whole difficulty

is a mental difficulty, a difficulty with an object of our thought. If I may use the word *idea* without suggesting associationist or Herbartian fables, I will say that it is an idea to which our will applies itself, an idea which if we let it go would slip away, but which we will not let go. Consent to the idea's undivided presence, this is effort's sole achievement. Its only function is to get this feeling of consent into the mind. And for this there is but one way. The idea to be consented to must be kept from flickering and going out. It must be held steadily before the mind until it *fills* the mind. Such filling of the mind by an idea, with its congruous associates, *is* consent to the idea and to the fact which the idea represents. If the idea be that, or include that, of a bodily movement of our own, then we call the consent thus laboriously gained a motor volition. For Nature here "backs" us instantaneously and follows up our inward willingness by outward changes on her own part. She does this in no other instance. Pity she should not have been more generous, nor made a world whose other parts were as immediately subject to our will!

In describing the "reasonable type" of decision, it was said that it usually came when the right conception of the case was found. Where, however, the right conception is an anti-impulsive one, the whole intellectual ingenuity of the man usually goes to work to crowd it out of sight and to find names for the emergency, by the help of which the dispositions of the moment may sound sanctified, and sloth or passion may reign unchecked. How many excuses does the drunkard find when each new temptation comes! It is a new brand of liquor which the interests of intellectual culture in such matters oblige him to test; moreover it is poured out and it is sin to waste it; or others are drinking and it would be churlishness to refuse; or it is but to enable him to sleep; or just to get through this job of work; or it isn't drinking, it is because he feels so cold; or it is Christmas-day; or it is a means of stimulating him to make a more

powerful resolution in favour of abstinence than any he has hitherto made; or it is just this once, and once doesn't count, etc., etc., *ad libitum*—it is, in fact, anything you like except *being a drunkard*. *That* is the conception that will not stay before the poor soul's attention. But if he once gets able to pick out that way of conceiving from all the other possible ways of conceiving the various opportunities which occur, if through thick and thin he holds to it that this is being a drunkard and is nothing else, he is not likely to remain one long. The effort by which he succeeds in keeping the right *name* unwaveringly present to his mind proves to be his saving moral act.

Everywhere, then, the function of the effort is the same: to keep affirming and adopting a thought which, if left to itself, would slip away. It may be cold and flat when the spontaneous mental drift is towards excitement, or great and arduous when the spontaneous drift is towards repose. In the one case the effort has to inhibit an explosive, in the other to arouse an obstructed will. The exhausted sailor on a wreck has a will which is obstructed. One of his ideas is that of his sore hands, of the nameless exhaustion of his whole frame which the act of further pumping involves, and of the deliciousness of sinking into sleep. The other is that of the hungry sea engulfing him. "Rather the aching toil!" he says; and it becomes reality then, in spite of the inhibiting influence of the relatively luxurious sensations which he gets from lying still. But exactly similar in form would be his consent to lie and sleep. Often it is the thought of sleep and what leads to it which is the hard one to keep before the mind. If a patient afflicted with insomnia can only control the whirling chase of his thoughts so far as to think of *nothing at all* (which can be done), or so far as to imagine one letter after another of a verse of scripture or poetry spelt slowly and monotonously out, it is almost certain that here, too, specific bodily effects will follow, and that sleep will come. The trouble is to keep the mind upon a train of objects naturally so

insipid. *To sustain a representation, to think*, is, in short, the only moral act, for the impulsive and the obstructed, for sane and lunatics alike. Most maniacs know their thoughts to be crazy, but find them too pressing to be withstood. Compared with them the sane truths are so deadly sober, so cadaverous, that the lunatic cannot bear to look them in the face and say, "Let these alone be my reality!" But with sufficient effort, as Dr. Wigan says:—

"Such a man can for a time *wind himself up*, as it were, and determine that the notions of the disordered brain shall not be manifested. Many instances are on record similar to that told by Pinel, where an inmate of the Bicêtre, having stood a long cross-examination, and given every mark of restored reason, signed his name to the paper authorizing his discharge 'Jesus Christ,' and then went off into all the vagaries connected with that delusion. In the phrascology of the gentleman whose case is related in an early part of this [Wigan's] work he had 'held himself tight' during the examination in order to attain his object; this once accomplished he 'let himself down' again, and, if even *conscious* of his delusion, could not control it. I have observed with such persons that it requires a considerable time to wind themselves up to the pitch of complete self-control, that the effort is a painful tension of the mind. . . . When thrown off their guard by any accidental remark or worn out by the length of the examination, they *let themselves go*, and cannot gather themselves up again without preparation. Lord Erskine relates the story of a man who brought an action against Dr. Munro for confining him without cause. He underwent the most rigid examination by the counsel for the defendant without discovering any appearance of insanity, till a gentleman asked him about a princess with whom he corresponded in cherry-juice, and he became instantly insane." [1]

To sum it all up in a word, *the terminus of the psychological process in volition, the point to which the will is directly*

[1] *The Duality of Mind*, pp. 141–42

applied, is always an idea. There are at all times *some* ideas from which we shy away like frightened horses the moment we get a glimpse of their forbidding profile upon the threshold of our thought. *The only resistance which our will can possibly experience is the resistance which such an idea offers to being attended to at all.* To attend to it is the volitional act, and the only inward volitional act which we ever perform.

I have put the thing in this ultra-simple way because I want more than anything else to emphasize the fact that volition is primarily a relation, not between our Self and extra-mental matter (as many philosophers still maintain), but between our Self and our own states of mind. But when, a short while ago, I spoke of the filling of the mind with an idea as being equivalent to consent to the idea's object, I said something which the reader doubtless questioned at the time, and which certainly now demands some qualification ere we pass beyond.

It is unqualifiedly true that if any thought *do* fill the mind exclusively, such filling is consent. The thought, for that time at any rate, carries the man and his will with it. But it is not true that the thought *need* fill the mind exclusively for consent to be there; for we often consent to things whilst thinking of other things, even of hostile things. . . . The effort to *attend* is therefore only a part of what the word "will" covers; it covers also the effort to *consent* to something to which our attention is not quite complete. Often, when an object has gained our attention exclusively, and its motor results are just on the point of setting in, it seems as if the sense of their imminent irrevocability were enough of itself to start up the inhibitory ideas and to make us pause. Then we need a new stroke of effort to break down the sudden hesitation which seizes upon us, and to persevere. So that although attention is the first and fundamental thing in volition, *express consent to the reality of what is attended to* is often an additional and quite distinct phenomenon involved.

The reader's own consciousness tells him, of course, just what these words of mine denote. And I freely confess that I am impotent to carry the analysis of the matter any further or to explain in other terms of what this consent consists. It seems a subjective experience *sui generis*, which we can designate but not define. We stand here exactly where we did in the case of belief. When an idea *stings* us in a certain way, makes as it were a certain electric connection with our Self, we believe that it *is* a reality. When it stings us in another way, makes another connection with our Self, we say, *let it be* a reality. To the word "is" and to the words "let it be" there correspond peculiar attitudes of consciousness which it is vain to seek to explain. The indicative and the imperative moods are as much ultimate categories of thinking as they are of grammar. The "quality of reality" which these moods attach to things is not like other qualities. It is a relation to our life. It means *our* adoption of the things, *our* caring for them, *our* standing by them. This at least is what it practically means for us; what it may mean beyond that we do not know. And the transition from merely considering an object as possible to deciding or willing it to be real; the change from the fluctuating to the stable personal attitude concerning it; from the "don't care" state of mind to that in which "we mean business," is one of the most familiar things in life. We can partly enumerate its conditions; and we can partly trace its consequences, especially the momentous one that when the mental object is a movement of our own body, it realizes itself outwardly when the mental change in question has occurred. But the change itself as a subjective phenomenon is something which we can translate into no simpler terms.

Especially must we, when talking about the question of free-will, rid our mind of the fabulous warfare of separate agents called "ideas." The brain-processes may be agents, and the thought as such may be an agent. But what the ordinary psychologies call "ideas" are nothing but parts

of the total *object* of representation. All that is before the mind at once, no matter how complex a system of things and relations it may be, is one object for the thought. Thus, "A - and - B - and - their - mutual - incompatibility - and - the - fact - that - one - alone - can - be - true - or - can - become - real - notwithstanding - the - probability - or - desirability - of - both" may be such a complex object; and where the thought is deliberative its object has always some such form as this. When, now, we pass from deliberation to decision, that total object undergoes a change. We either dismiss A altogether and its relations to B, and think of B exclusively; or after thinking of both as possibilities, we next think that A is impossible, and that B is or forthwith shall be real. In either case a *new* object is before our thought; and where effort exists, it is where the change from the first object to the second one is hard. Our thought seems to turn in this case like a heavy door upon its hinges; only, so far as the effort feels spontaneous, it turns, not as if by some one helping, but as if by an inward activity, born for the occasion, of its own. . . .

My own belief is that the question of free-will is insoluble on strictly psychologic grounds. After a certain amount of effort of attention has been given to an idea, it is manifestly impossible to tell whether either more or less of it *might* have been given or not. To tell that, we should have to ascend to the antecedents of the effort, and defining them with mathematical exactitude, prove, by laws of which we have not at present even an inkling, that the only amount of sequent effort which could *possibly* comport with them was the precise amount which actually came. Measurements, whether of psychic or of neural quantities, and deductive reasonings such as this method of proof implies, will surely be forever beyond human reach. No serious psychologist or physiologist will venture even to suggest a notion of how they might be practically made. We are thrown back, therefore, upon the crude evidences of introspection on the one hand, with all its

liabilities to deception, and, on the other hand, upon *a priori* postulates and probabilities. He who loves to balance nice doubts need be in no hurry to decide the point. Like Mephistopheles to Faust, he can say to himself, "*dazu hast du noch eine lange Frist,*" for from generation to generation the reasons adduced on both sides will grow more voluminous, and the discussion more refined. But if our speculative delight be less keen, if the love of a *parti pris* outweighs that of keeping questions open, or if, as a French philosopher of genius says, "*l'amour de la vie qui s'indigne de tant de discours,*" awakens in us, craving the sense of either peace or power—then, taking the risk of error on our head, we must project upon one of the alternative views the attribute of reality for us; we must so fill our mind with the idea of it that it becomes our settled creed. The present writer does this for the alternative of freedom, but since the grounds of his opinion are ethical rather than psychological, he prefers to exclude them from the present book.

A few words, however, may be permitted about the logic of the question. The most that any argument can do for determinism is to make it a clear and seductive conception, which a man is foolish not to espouse, so long as he stands by the great scientific postulate that the world must be one unbroken fact, and that prediction of all things without exception must be ideally, even if not actually, possible. It is a *moral* postulate about the universe, the postulate that *what ought to be can be, and that bad acts cannot be fated, but that good ones must be possible in their place,* which would lead one to espouse the contrary view. But when scientific and moral postulates war thus with each other and objective proof is not to be had, the only course is voluntary choice, for scepticism itself, if systematic, is also voluntary choice. If, meanwhile, the will *be* undetermined, it would seem only fitting that the belief in its indetermination should be voluntarily chosen from amongst other possible beleifs. Freedom's first deed should be to affirm itself.

We ought never to hope for any other method of getting at the truth if indeterminism be a fact. Doubt of this particular truth will therefore probably be open to us to the end of time, and the utmost that a believer in free-will can *ever* do will be to show that the deterministic arguments are not coercive. That they are seductive, I am the last to deny; nor do I deny that effort may be needed to keep the faith in freedom, when they press upon it, upright in the mind.

There is a *fatalistic argument* for determinism, however, which is radically vicious. When a man has let himself go time after time, he easily becomes impressed with the enormously preponderating influence of circumstances, hereditary habits, and temporary bodily dispositions over what might seem a spontaneity born for the occasion. "All is fate," he then says; "all is resultant of what pre-exists. Even if the moment seems original, it is but the instable molecules passively tumbling in their preappointed way. It is hopeless to resist the drift, vain to look for any new force coming in; and less, perhaps, than anywhere else under the sun is there anything really mine in the decisions which I make." This is really no argument for simple determinism. There runs throughout it the sense of a force which might make things otherwise from one moment to another, if it were only strong enough to breast the tide. A person who feels the *impotence* of free effort in this way has the acutest notion of what is meant by it, and of its possible independent power. How else could he be so conscious of its absence and of that of its effects? But genuine determinism occupies a totally different ground; not the *impotence* but the *unthinkability* of free-will is what it affirms. It admits something phenomenal *called* free effort, which *seems* to breast the tide, but it claims this as a *portion of the tide.* The variations of the effort cannot be independent, it says; they cannot originate *ex nihilo,* or come from a fourth dimension; they are mathematically fixed functions of the ideas themselves, which are the tide.

Fatalism, which conceives of effort clearly enough as an independent variable that *might* come from a fourth dimension, if it *would* come but that *does not* come, is a very dubious ally for determinism. It strongly imagines that very *possibility* which determinism denies.

But what, quite as much as the inconceivability of absolutely independent variables, persuades modern men of science that their efforts must be predetermined, is the continuity of the latter with other phenomena whose predetermination no one doubts. Decisions with effort merge so gradually into those without it that it is not easy to say where the limit lies. Decisions without effort merge again into ideo-motor, and these into reflex acts; so that the temptation is almost irresistible to throw the formula which covers so many cases over absolutely all. Where there is effort just as where there is none, the ideas themselves which furnish the matter of deliberation are brought before the mind by the machinery of association. And this machinery is essentially a system of arcs and paths, a reflex system, whether effort be amongst its incidents or not. The reflex way is, after all, the universal way of conceiving the business. The feeling of *ease* is a passive result of the way in which the thoughts unwind themselves. Why is not the feeling of effort the same? Professor Lipps, in his admirably clear deterministic statement, so far from admitting that the feeling of effort testifies to an increment of force exerted, explains it as a sign that force is lost. We speak of effort, according to him, whenever a force expends itself (wholly or partly) in neutralizing another force, and so fails of its own possible outward effect. The outward effect of the antagonistic force, however, also fails in corresponding measure, " so that there is no effort without counter-effort . . . and effort and counter-effort signify only that causes are mutually robbing each other of effectiveness." Where the forces are ideas, both sets of them, strictly speaking, are the seat of effort—both those which tend to explode and those which tend to check

them. We, however, call the more abundant mass of ideas *ourselves;* and, talking of its effort as *our* effort, and of that of the smaller mass of ideas as the *resistance*, we say that our effort sometimes overcomes the resistances offered by the inertias of an obstructed, and sometimes those presented by the impulsions of an explosive, will. Really both effort and resistance are ours, and the identification of our *self* with one of these factors is an illusion and a trick of speech. I do not see how any one can fail (especially when the mythologic dynamism of separate "ideas," which Professor Lipps cleaves to, is translated into that of brain-processes) to recognize the fascinating simplicity of some such view as his. Nor do I see why *for scientific purposes* one need give it up even if indeterminate amounts of effort really do occur. Before their indeterminism, science simply *stops*. She can abstract from it altogether, then; for in the impulses and inhibitions with which the effort has to cope there is already a larger field of uniformity than she can ever practically cultivate. Her prevision will never foretell, even if the effort be completely predestinate, the actual way in which each individual emergency is resolved. Psychology will be Psychology,[1] and Science Science, as much as ever (as much and no more) in this world, whether free-will be true in it or not. Science, however, must be constantly reminded that her purposes are not the only purposes, and that the order of uniform causation which she has use for, and is therefore right in postulating, may be enveloped in a wider order, on which she has no claims at all.

[1] Such ejaculations as Mr. Spencer's—"Psychical changes either conform to law or they do not. If they do not, this work, in common with all works on the subject, is sheer nonsense: no science of Psychology is possible" (*Principles of Psychology*, i. 503)—are beneath criticism. Mr. Spencer's work, like all the other "works on the subject," treats of those general conditions of *possible* conduct within which all our real decisions must fall no matter whether their effort be small or great. However closely psychical changes may conform to law, it is safe to say that individual histories and biographies will never be written in advance no matter how "evolved" psychology may become.

We can therefore leave the free-will question altogether out of our account. The operation of free effort, if it existed, could only be to hold some one ideal object, or part of an object, a little longer or a little more intensely before the mind. Amongst the alternatives which present themselves as *genuine possibles*, it would thus make one effective. And although such quickening of one idea might be *morally and historically momentous*, yet, if considered *dynamically*, it would be an operation amongst those physiological infinitesimals which calculation must forever neglect.

But whilst eliminating the question about the amount of our effort as one which psychology will never have a practical call to decide, I must say one word about the extraordinarily intimate and important character which the phenomenon of effort assumes in our own eyes as individual men. Of course we measure ourselves by many standards. Our strength and our intelligence, our wealth and even our good luck, are things which warm our heart and make us feel ourselves a match for life. But deeper than all such things, and able to suffice unto itself without them, is the sense of the amount of effort which we can put forth. Those are, after all, but effects, products, and reflections of the outer world within. But the effort seems to belong to an altogether different realm, as if it were the substantive thing which we *are*, and those were but externals which we *carry*. If the "searching of our heart and reins" be the purpose of this human drama, then what is sought seems to be what effort we can make. He who can make none is but a shadow; he who can make much is a hero. The huge world that girdles us about puts all sorts of questions to us, and tests us in all sorts of ways. Some of the tests we meet by actions that are easy, and some of the questions we answer in articulately formulated words. But the deepest question that is ever asked admits of no reply but the dumb turning of the will and tightening of our heart-strings as we say, "*Yes, I will even have it so!*"

When a dreadful object is presented, or when life as a whole turns up its dark abysses to our view, then the worthless ones among us lose their hold on the situation altogether, and either escape from its difficulties by averting their attention, or if they cannot do that, collapse into yielding masses of plaintiveness and fear. The effort required for facing and consenting to such objects is beyond their power to make. But the heroic mind does differently. To it, too, the objects are sinister and dreadful, unwelcome, incompatible with wished-for things. But it can face them if necessary, without for that losing its hold upon the rest of life. The world thus finds in the heroic man its worthy match and mate; and the effort which he is able to put forth to hold himself erect and keep his heart unshaken is the direct measure of his worth and function in the game of human life. He can *stand* this Universe. He can meet it and keep up his faith in it in presence of those same features which lay his weaker brethren low. He can still find a zest in it, not by "ostrich-like forgetfulness," but by pure inward willingness to face the world with those deterrent objects there. And hereby he becomes one of the masters and the lords of life. He must be counted with henceforth; he forms a part of human destiny. Neither in the theoretic nor in the practical sphere do we care for, or go for help to, those who have no head for risks, or sense for living on the perilous edge. Our religious life lies more, our practical life lies less, than it used to, on the perilous edge. But just as our courage is so often a reflex of another's courage, so our faith is apt to be, as Max Müller somewhere says, a faith in some one else's faith. We draw new life from the heroic example. The prophet has drunk more deeply than any one of the cup of bitterness, but his countenance is so unshaken and he speaks such mighty words of cheer that his will becomes our will, and our life is kindled at his own.

Thus not only our morality but our religion, so far as the latter is deliberate, depend on the effort which we can

make. *"Will you or won't you have it so?"* is the most probing question we are ever asked; we are asked it every hour of the day, and about the largest as well as the smallest, the most theoretical as well as the most practical, things. We answer by *consents* or *non-consents* and not by words. What wonder that these dumb responses should seem our deepest organs of communication with the nature of things! What wonder if the effort demanded by them be the measure of our worth as men! What wonder if the amount which we accord of it be the one strictly underived and original contribution which we make to the world!

VI

PHILOSOPHY AND ITS CRITICS[1]

THE progress of society is due to the fact that individuals vary from the human average in all sorts of directions, and that the originality is often so attractive or useful that they are recognized by their tribe as leaders, and become objects of envy or admiration, and setters of new ideals.

Among the variations, every generation of men produces some individuals exceptionally preoccupied with theory. Such men find matter for puzzle and astonishment where no one else does. Their imagination invents explanations and combines them. They store up the learning of their time, utter prophecies and warnings, and are regarded as sages. Philosophy, etymologically meaning the love of wisdom, is the work of this class of minds, regarded with an indulgent relish, if not with admiration, even by those who do not understand them or believe much in the truth which they proclaim.

Philosophy, thus become a race-heritage, forms in its totality a monstrously unwieldy mass of learning. So taken, there is no reason why any special science like chemistry or astronomy should be excluded from it. By common consent, however, special sciences are to-day excluded, for reasons presently to be explained; and what remains is manageable enough to be taught under the name of philosophy by one man if his interests be broad enough.

If this were a German textbook I should first give my abstract definition of the topic, thus limited by usage, then proceed to display its "*Begriff, und Einteilung*," and its "*Aufgabe und Methode*." But as such displays are usually

[1] From *Some Problems of Philosophy*, 1911, pp. 3-28.

unintelligible to beginners, and unnecessary after reading the book, it will conduce to brevity to omit that chapter altogether, useful though it might possibly be to more advanced readers as a summary of what is to follow.

I will tarry a moment, however, over the matter of definition. Limited by the omission of the special sciences, the name of philosophy has come more and more to denote ideas of universal scope exclusively. The principles of explanation that underlie all things without exception, the elements common to gods and men and animals and stones, the first *whence* and the last *whither* of the whole cosmic procession, the conditions of all knowing, and the most general rules of human action—these furnish the problems commonly deemed philosophic *par excellence;* and the philosopher is the man who finds the most to say about them. Philosophy is defined in the usual scholastic text-books as "the knowledge of things in general by their ultimate causes, so far as natural reason can attain to such knowledge." This means that explanation of the universe at large, not description of its details, is what philosophy must aim at; and so it happens that a view of anything is termed philosophic just in proportion as it is broad and connected with other views, and as it uses principles not proximate, or intermediate, but ultimate and all-embracing, to justify itself. Any very sweeping view of the world is a philosophy in this sense, even though it may be a vague one. It is a *Weltanschauung*, an intellectualized attitude towards life. Professor Dewey well describes the constitution of all the philosophies that actually exist, when he says that philosophy expresses a certain attitude, purpose, and temper of conjoined intellect and will, rather than a discipline whose boundaries can be neatly marked off.[1]

To know the chief rival attitudes towards life, as the history of human thinking has developed them, and to

[1] Compare the article "Philosophy" in Baldwin's *Dictionary of Philosophy and Psychology.*

have heard some of the reasons they can give for themselves, ought to be considered an essential part of liberal education. Philosophy, indeed, in one sense of the term is only a compendious name for the spirit in education which the word "college" stands for in America. Things can be taught in dry dogmatic ways or in a philosophic way. At a technical school a man may grow into a first-rate instrument for doing a certain job, but he may miss all the graciousness of mind suggested by the term liberal culture. He may remain a cad and not a gentleman, intellectually pinned down to his one narrow subject, literal, unable to suppose anything different from what he has seen, without imagination, atmosphere, or mental perspective.

Philosophy, beginning in wonder, as Plato and Aristotle said, is able to fancy everything different from what it is. It sees the familiar as if it were strange, and the strange as if it were familiar. It can take things up and lay them down again. Its mind is full of air that plays round every subject. It rouses us from our native dogmatic slumber and breaks up our caked prejudices. Historically it has always been a sort of fecundation of four different human interests—science, poetry, religion, and logic—by one another. It has sought by hard reasoning for results emotionally valuable. To have some contact with it, to catch its influence, is thus good for both literary and scientific students. By its poetry it appeals to literary minds; but its logic stiffens them up and remedies their softness. By its logic it appeals to the scientific; but softens them by its other aspects, and saves them from too dry a technicality. Both types of student ought to get from philosophy a livelier spirit, more air, more mental background. "Hast any philosophy in thee, Shepherd?"—this question of Touchstone's is the one with which men should always meet one another. A man with no philosophy in him is the most inauspicious and unprofitable of all possible social mates.

I say nothing in all this of what may be called the gymnastic use of philosophic study, the purely intellectual

power gained by defining the high and abstract concepts of the philosopher and discriminating between them.

In spite of the advantages thus enumerated, the study of philosophy has systematic enemies, and they were never as numerous as at the present day. The definite conquests of science and the apparent indefiniteness of philosophy's results partly account for this; to say nothing of man's native rudeness of mind, which maliciously enjoys deriding long words and abstractions. "Scholastic jargon," "mediæval dialectics," are for many people synonyms of the word philosophy. With his obscure and uncertain speculations as to the intimate nature and causes of things, the philosopher is likened to a "blind man in a dark room looking for a black hat that is not there." His occupation is described as the art of "endlessly disputing without coming to any conclusion," or more contemptuously still as the "*systematische Missbrauch einer eben zu diesem Zwecke erfundenen Terminologie.*"

Only to a very limited degree is this sort of hostility reasonable. I will take up some of the current objections in successive order, since to reply to them will be a convenient way of entering into the interior of our subject.

Objection 1. Whereas the sciences make steady progress and yield applications of matchless utility, philosophy makes no progress and has no practical applications.

Reply. The opposition is unjustly founded, for the sciences are themselves branches of the tree of philosophy. As fast as questions got accurately answered, the answers were called "scientific," and what men call "philosophy" to-day is but the residuum of questions still unanswered. At this very moment we are seeing two sciences, psychology and general biology, drop off from the parent trunk and take independent root as specialties. The more general philosophy cannot as a rule follow the voluminous details of any special science.

A backward glance at the evolution of philosophy will reward us here. The earliest philosophers in every land

were encyclopædic sages, lovers of wisdom, sometimes with and sometimes without a dominantly ethical or religious interest. They were just men curious beyond immediate practical needs, and no particular problems, but rather the problematic generally, was their specialty. China, Persia, Egypt, India had such wise men, but those of Greece are the only sages who until very recently have influenced the course of western thinking. The earlier Greek philosophy lasted, roughly speaking, for about two hundred and fifty years, say from 600 B.C. onwards. Such men as Thales, Heraclitus, Pythagoras, Parmenides, Anaxagoras, Empedocles, Democritus were mathematicians, theologians, politicians, astronomers, and physicists. All the learning of their time, such as it was, was at their disposal. Plato and Aristotle continued their tradition, and the great mediæval philosophers only enlarged its field of application. If we turn to Saint Thomas Aquinas's great "Summa," written in the thirteenth century, we find opinions expressed about literally everything, from God down to matter, with angels, men, and demons taken in on the way. The relations of almost everything with everything else, of the creator with his creatures, of the knower with the known, of substances with forms, of mind with body, of sin with salvation, come successively up for treatment. A theology, a psychology, a system of duties and morals, are given in fullest detail, while physics and logic are established in their universal principles. The impression made on the reader is of almost superhuman intellectual resources. It is true that Saint Thomas's method of handling the mass of fact, or supposed fact, which he treated, was different from that to which we are accustomed. He deduced and proved everything, either from fixed principles of reason, or from holy Scripture. The properties and changes of bodies, for example, were explained by the two principles of matter and form, as Aristotle had taught. Matter was the quantitative, determinable, passive element; form the qualitative, unifying, determining, and active principle. All activity

was for an end. Things could act on each other only when in contact. The number of species of things was determinate, and their differences discrete, etc., etc.[1]

By the beginning of the seventeenth century, men were tired of the elaborate *a priori* methods of scholasticism. Suarez's treatises availed not to keep them in fashion. But the new philosophy of Descartes, which displaced the scholastic teaching, sweeping over Europe like wildfire, preserved the same encyclopædic character. We think of Descartes nowadays as the metaphysician who said "Cogito, ergo sum," separated mind from matter as two contrasted substances, and gave a renovated proof of God's existence. But his contemporaries thought of him much more as we think of Herbert Spencer in our day, as a great cosmic evolutionist who explained, by "the redistribution of matter and motion," and the laws of impact, the rotations of the heavens, the circulation of the blood, the refraction of light, apparatus of vision and of nervous action, the passings of the soul, and the connection of the mind and body.

Descartes died in 1650. With Locke's *Essay Concerning Human Understanding*, published in 1690, philosophy for the first time turned more exclusively to the problem of knowledge, and became "critical." This subjective tendency developed; and although the school of Leibnitz, who was the pattern of a universal sage, still kept up the more universal tradition—Leibnitz's follower Wolff published systematic treatises on everything, physical as well as moral—Hume, who succeeded Locke, woke Kant "from his dogmatic slumber," and since Kant's time the word "philosophy" has come to stand for mental and moral speculations far more than for physical theories. Until a comparatively recent time, philosophy was taught in our colleges under the name of "mental and moral philosophy,"

[1] J. Rickaby's *General Metaphysics* (Longmans, Green and Co.) gives a popular account of the essentials of St. Thomas's philosophy of nature. Thomas J. Harper's *Metaphysics of the School* (Macmillan) goes into minute detail.

or "philosophy of the human mind," exclusively, to distinguish it from "natural philosophy."

But the older tradition is the better as well as the completer one. To know the actual peculiarities of the world we are born into is surely as important as to know what makes worlds anyhow abstractly possible. Yet this latter knowledge has been treated by many since Kant's time as the only knowledge worthy of being called philosophical. Common men feel the question "What is Nature like?" to be as meritorious as the Kantian question "How is Nature possible?" So philosophy, in order not to lose human respect, must take some notice of the actual constitution of reality. There are signs to-day of a return to the more objective tradition.[1]

Philosophy in the full sense is only *man thinking*, thinking about generalities rather than about particulars. But whether about generalities or particulars, man thinks always by the same methods. He observes, discriminates, generalizes, classifies, looks for causes, traces analogies, and makes hypotheses. Philosophy, taken as something distinct from science or from practical affairs, follows no method peculiar to itself. All our thinking to-day has evolved gradually out of primitive human thought, and the only really important changes that have come over its manner (as distinguished from the matters in which it believes) are a greater hesitancy in asserting its convictions, and the habit of seeking verification [2] for them whenever it can.

It will be instructive to trace very briefly the origins of our present habits of thought.

Auguste Comte, the founder of a philosophy which he called "positive," [3] said that human theory on any subject always took three forms in succession. In the theological stage of theorizing, phenomena are explained by spirits

[1] For an excellent defence of it I refer my readers to Paulsen's *Introduction to Philosophy* (translated by Thilly), 1895, pp. 19–44.

[2] Compare G. H. Lewes, *Aristotle*, 1864, chap. iv.

[3] *Cours de philosophie positive*, 6 volumes, Paris, 1830–1842.

producing them; in the metaphysical stage, their essential feature is made into an abstract idea, and this is placed behind them as if it were an explanation; in the positive stage, phenomena are simply described as to their coexistences and successions. Their "laws" are formulated, but no explanation of their natures or existence is sought after. Thus a "*spiritus rector*" would be a theological—a "principle of attraction" a metaphysical—and "a law of the squares" would be a positive theory of the planetary movements.

Comte's account is too sharp and definite. Anthropology shows that the earliest attempts at human theorizing mixed the theological and metaphysical together. Common things needed no special explanation, remarkable things alone, odd things, especially deaths, calamities, diseases, called for it. What made things act was the mysterious energy in them, and the more awful they were the more of this *mana* they possessed. The great thing was to acquire *mana* oneself. "Sympathetic magic" is the collective name for what seems to have been the primitive philosophy here. You could act on anything by controlling anything else that either was associated with it or resembled it. If you wished to injure an enemy, you should either make an image of him, or get some of his hair or other belongings, or get his name written. Injuring the substitute, you thus made him suffer correspondingly. If you wished the rain to come, you sprinkled the ground, if the wind, you whistled, etc. If you would have yams grow well in your garden, put a stone there that looks like a yam. Would you cure jaundice, give tumeric, that makes things look yellow; or give poppies for troubles of the head, because their seed vessels form a "head." This "doctrine of signatures" played a great part in early medicine. The various "-mancies" and "-mantics" come in here, in which witchcraft and incipient science are indistinguishably mixed. "Sympathetic" theorizing persists to the present day. "Thoughts are things" for a contemporary school—and on the whole a

good school—of practical philosophy. Cultivate the thought of what you desire, affirm it, and it will bring all similar thoughts from elsewhere to reinforce it, so that finally your wish will be fulfilled.[1]

Little by little, more positive ways of considering things began to prevail. Common elements in phenomena began to be singled out and to form the basis of generalizations. But these elements at first had necessarily to be the more dramatic or humanly interesting ones. The hot, the cold, the wet, the dry in things explained their behaviour. Some bodies were naturally warm, others cold. Motions were natural or violent. The heavens moved in circles because circular motion was the most perfect. The lever was explained by the greater quantity of perfection embodied in the movement of its longer arm.[2] The sun went south in winter to escape the cold. Precious or beautiful things had exceptional properties. Peacock's flesh resisted putrefaction. The lodestone would drop the iron which it held if the superiorly powerful diamond was brought near, etc.

Such ideas sound to us grotesque, but imagine no tracks made for us by scientific ancestors, and what aspects would we single out from nature to understand things by? Not till the beginning of the seventeenth century did the more insipid kinds of regularity in things abstract men's attention away from the properties originally picked out. Few of us realize how short the career of what we know as "science" has been. Three hundred and fifty years ago hardly any one believed in the Copernican planetary theory. Optical combinations were not discovered. The circulation of the blood, the weight of air, the conduction of heat, the laws of

[1] Compare Prentice Mulford and others of the "new thought" type. For primitive sympathetic magic consult J. Jastrow in *Fact and Fable in Psychology*, the chapter on "Analogy"; F. B. Jevons, *Introduction to the History of Religion*, chap. iv.; J. G. Frazer, *The Golden Bough*, i. 2; R. R. Marett, *The Threshold of Religion, passim;* A. O. Lovejoy, *The Monist*, xvi. 357.

[2] On Greek science, see W. Whewell's *History of the Inductive Sciences*, vol. i. book i.; G. H. Lewes, *Aristotle, passim.*

motion were unknown; the common pump was inexplicable; there were no clocks; no thermometers; no general gravitation; the world was five thousand years old; spirits moved the planets; alchemy, magic, astrology, imposed on every one's belief. Modern science began only after 1600, with Kepler, Galileo, Descartes, Torricelli, Pascal, Harvey, Newton, Huygens, and Boyle. Five men telling one another in succession the discoveries which their lives had witnessed, could deliver the whole of it into our hands: Harvey might have told Newton, who might have told Voltaire; Voltaire might have told Dalton, who might have told Huxley, who might have told the readers of this book.

The men who began this work of emancipation were philosophers in the original sense of the word, universal sages. Galileo said that he had spent more years on philosophy than months on mathematics. Descartes was a universal philosopher in the fullest sense of the term. But the fertility of the newer conceptions made special departments of truth grow at such a rate that they became too unwieldy with details for the more universal minds to carry them, so the special sciences of mechanics, astronomy, and physics began to drop off from the parent stem.

No one could have foreseen in advance the extraordinary fertility of the more insipid mathematical aspects which these geniuses ferreted out. No one could have dreamed of the control over nature which the search for their concomitant variations would give. "Laws" describe these variations; and all our present laws of nature have as their model the proportionality of v to t, and of s to t^2 which Galileo first laid bare. Pascal's discovery of the proportionality of altitude to barometric height, Newton's of acceleration to distance, Boyle's of air-volume to pressure, Descartes' of sine to cosine in the refracted ray, were the first fruits of Galileo's discovery. There was no question of agencies, nothing animistic or sympathetic in this new way of taking nature. It was description only, of concomi-

tant variations, after the particular quantities that varied had been successfully abstracted out. The result soon showed itself in a differentiation of human knowledge into two spheres, one called "Science," within which the more definite laws apply, the other "General Philosophy," in which they do not. The state of mind called positivistic is the result. "Down with philosophy!" is the cry of innumerable scientific minds. "Give us measurable facts only, phenomena, without the mind's additions, without entities or principles that pretend to explain." It is largely from this kind of mind that the objection that philosophy has made no progress, proceeds.

It is obvious enough that if every step forward which philosophy makes, every question to which an accurate answer is found, gets accredited to science the residuum of unanswered problems will alone remain to constitute the domain of philosophy, and will alone bear her name. In point of fact this is just what is happening. Philosophy has become a collective name for questions that have not yet been answered to the satisfaction of all by whom they have been asked. It does not follow, because some of these questions have waited two thousand years for an answer, that no answer will ever be forthcoming. Two thousand years probably measure but one paragraph in that great romance of adventure called the history of the intellect of man. The extraordinary progress of the last three hundred years is due to a rather sudden finding of the way in which a certain order of questions ought to be attacked, questions admitting of mathematical treatment. But to assume, therefore, that the only possible philosophy must be mechanical and mathematical, and to disparage all inquiry into the other sorts of questions, is to forget the extreme diversity of aspects under which reality undoubtedly exists. To the spiritual questions the proper avenues of philosophic approach will also undoubtedly be found. They have, to some extent, been found already. In some respects, indeed, "science" has made less progress than

"philosophy"—its most general conceptions would astonish neither Aristotle nor Descartes, could they revisit our earth. The composition of things from elements, their evolution, the conservation of energy, the idea of a universal determinism, would seem to them commonplace enough—the little things, the microscopes, electric lights, telephones, and details of the sciences, would be to them the awe-inspiring things. But if they opened our books on metaphysics, or visited a philosophic lecture room, everything would sound strange. The whole idealistic or "critical" attitude of our time would be novel, and it would be long before they took it in.[1]

Objection 2. Philosophy is dogmatic, and pretends to settle things by pure reason, whereas the only fruitful mode of getting at truth is to appeal to concrete experience. Science collects, classes, and analyzes facts, and thereby far outstrips philosophy.

Reply. This objection is historically valid. Too many philosophers have aimed at closed systems, established *a priori*, claiming infallibility, and to be accepted or rejected only as totals. The sciences on the other hand, using hypotheses only, but always seeking to verify them by experiment and observation, open a way for indefinite self-correction and increase. At the present day, it is getting more and more difficult for dogmatists claiming finality for their systems, to get a hearing in educated circles. Hypothesis and verification, the watchwords of science, have set the fashion too strongly in academic minds.

Since philosophers are only men thinking about things in the most comprehensive possible way, they can use any method whatsoever freely. Philosophy must, in any case, complete the sciences, and must incorporate their methods. One cannot see why, if such a policy should appear advis-

[1] The reader will find all that I have said, and much more, set forth in an excellent article by James Ward in *Mind*, vol. xv. No. 58: "The Progress of Philosophy."

able, philosophy might not end by forswearing all dogmatism whatever, and become as hypothetical in her manners as the most empirical science of them all.

Objection 3. Philosophy is out of touch with real life, for which it substitutes abstractions. The real world is various, tangled, painful. Philosophers have, almost without exception, treated it as noble, simple, and perfect, ignoring the complexity of fact, and indulging in a sort of optimism that exposes their systems to the contempt of common men, and to the satire of such writers as Voltaire and Schopenhauer. The great popular success of Schopenhauer is due to the fact that, first among philosophers, he spoke the concrete truth about the ills of life.

Reply. This objection also is historically valid, but no reason appears why philosophy should keep aloof from reality permanently. Her manners may change as she successfully develops. The thin and noble abstractions may give way to more solid and real constructions, when the materials and methods for making such constructions shall be more and more securely ascertained. In the end philosophers may get into as close contact as realistic novelists with the facts of life.

In conclusion. In its original acceptation, meaning the completest knowledge of the universe, philosophy must include the results of all the sciences, and cannot be contrasted with the latter. It simply aims at making of science what Herbert Spencer calls a "system of completely unified knowledge." [1] In the more modern sense, of something contrasted with the sciences, philosophy means "metaphysics." The older sense is the more worthy sense, and as the results of the sciences get more available for co-ordination, and the conditions for finding truth in different kinds of question get more methodically defined, we may hope that the term will revert to its original meaning. Science, metaphysics, and religion may then again

[1] See the excellent chapter in Spencer's *First Principles* entitled "Philosophy Defined."

form a single body of wisdom, and lend each other mutual support.

At present this hope is far from its fulfilment. I propose in this book to take philosophy in the narrow sense of metaphysics, and to let both religion and the results of the sciences alone.

VII

THE WILL TO BELIEVE[1]

IN the recently published Life by Leslie Stephen of his brother, Fitz-James, there is an account of a school to which the latter went when he was a boy. The teacher, a certain Mr. Guest, used to converse with his pupils in this wise: "Gurney, what is the difference between justification and sanctification?—Stephen, prove the omnipotence of

[1] From *The Will to Believe*, pp. 1-31, 1915.
An address to the Philosophical Clubs of Yale and Brown Universities. Published in the *New World*, June 1896.

[In a letter to an English critic, written in 1904, Professor James suggests that this essay "should have been called by the less unlucky title *The Right to Believe*." And he adds, "My essay hedged the licence to indulge in private over-beliefs with so many restrictions and signboards of danger that the outlet was narrow enough. It made of tolerance the essence of the situation; it defined the permissible cases; it treated the faith-attitude as a necessity for individuals, because the total 'evidence,' which only the race can draw, has to include their experiments among its data. It tended to show only that faith could not be absolutely vetoed, as certain champions of 'science' (Clifford, Huxley, etc.) had claimed it ought to be. It was a function that might lead, and probably does lead, into a wider world." After protesting against the misrepresentations and travesties of the view here presented of which his critics have been guilty, he goes on to say: "I cry to Heaven to tell me of what insane root my 'leading contemporaries' have eaten, that they are so smitten with blindness as to the meaning of printed texts. Or are we others absolutely incapable of making our meaning clear? I imagine that there is neither insane root nor unclear writing, but that in these matters each man writes from out of a field of consciousness of which the Bogey in the background is the chief object. Your bogey is superstitious; my bogey is desiccation; and each, for his contrast-effect, clutches at any text that can be used to represent the enemy, regardless of exegetical proprieties. In my essay the evil shape was a vision of 'Science' in the form of abstraction, priggishness, and sawdust, lording it over all. Take the sterilest scientific prig and cad you know, compare him with the richest religious intellect you know, and you would not, any more than I would, give the former the exclusive right of way."—EDITOR.]

God!" etc. In the midst of our Harvard freethinking and indifference we are prone to imagine that here at your good old orthodox College conversation continues to be somewhat upon this order; and to show you that we at Harvard have not lost all interest in these vital subjects, I have brought with me to-night something like a sermon on justification by faith to read to you—I mean an essay in justification *of* faith, a defence of our right to adopt a believing attitude in religious matters, in spite of the fact that our merely logical intellect may not have been coerced. "The Will to Believe," accordingly, is the title of my paper.

I have long defended to my own students the lawfulness of voluntarily adopted faith; but as soon as they have got well imbued with the logical spirit, they have as a rule refused to admit my contention to be lawful philosophically, even though in point of fact they were personally all the time chock-full of some faith or other themselves. I am all the while, however, so profoundly convinced that my own position is correct, that your invitation has seemed to me a good occasion to make my statements more clear. Perhaps your minds will be more open than those with which I have hitherto had to deal. I will be as little technical as I can, though I must begin by setting up some technical distinctions that will help us in the end.

I

Let us give the name of *hypothesis* to anything that may be proposed to our belief; and just as the electricians speak of live and dead wires, let us speak of any hypothesis as either *live* or *dead*. A live hypothesis is one which appeals as a real possibility to him to whom it is proposed. If I ask you to believe in the Mahdi, the notion makes no electric connection with your nature—it refuses to scintillate with any credibility at all. As an hypothesis it is completely dead. To an Arab, however (even if he be not one

of the Mahdi's followers), the hypothesis is among the mind's possibilities: it is alive. This shows that deadness and liveness in an hypothesis are not intrinsic properties but relations to the individual thinker. They are measured by his willingness to act. The maximum of liveness in an hypothesis means willingness to act irrevocably. Practically that means belief; but there is some believing tendency wherever there is willingness to act at all.

Next, let us call the decision between two hypotheses an *option*. Options may be of several kinds. They may be— 1, *living* or *dead*; 2, *forced* or *avoidable*; 3, *momentous* or *trivial*; and for our purposes we may call an option a *genuine* option when it is of the forced, living, and momentous kind.

1. A living option is one in which both hypotheses are live ones. If I say to you: "Be a theosophist or be a Mohammedan," it is probably a dead option, because for you neither hypothesis is likely to be alive. But if I say: "Be an agnostic or be a Christian," it is otherwise: trained as you are, each hypothesis makes some appeal, however small, to your belief.

2. Next, if I say to you: "Choose between going out with your umbrella or without it," I do not offer you a genuine option, for it is not forced. You can easily avoid it by not going out at all. Similarly, if I say, "Either love me or hate me," "Either call my theory true or call it false," your option is avoidable. You may remain indifferent to me, neither loving not hating, and you may decline to offer any judgment as to my theory. But if I say, "Either accept this truth or go without it," I put on you a forced option, for there is no standing place outside of the alternative. Every dilemma based on a complete logical disjunction, with no possibility of not choosing, is an option of this forced kind.

3. Finally, if I were Dr. Nansen and proposed to you to join my North Pole expedition, your option would be momentous; for this would probably be your only similar

opportunity, and your choice now would either exclude you from the North Pole sort of immortality altogether or put at least the chance of it into your hands. He who refuses to embrace a unique opportunity loses the prize as surely as if he tried and failed. *Per contra*, the option is trivial when the opportunity is not unique, when the stake is insignificant, or when the decision is reversible if it later prove unwise. Such trivial options abound in the scientific life. A chemist finds an hypothesis live enough to spend a year in its verification: he believes in it to that extent. But if his experiments prove inconclusive either way, he is quit for his loss of time, no vital harm being done.

It will facilitate our discussion if we keep all these distinctions well in mind.

II

The next matter to consider is the actual psychology of human opinion. When we look at certain facts, it seems as if our passional and volitional nature lay at the root of all our convictions. When we look at others, it seems as if they could do nothing when the intellect had once said its say. Let us take the latter facts up first.

Does it not seem preposterous on the very face of it to talk of our opinions being modifiable at will? Can our will either help or hinder our intellect in its perceptions of truth? Can we, by just willing it, believe that Abraham Lincoln's existence is a myth, and that the portraits of him in *McClure's Magazine* are all of some one else? Can we, by any effort of our will, or by any strength of wish that it were true, believe ourselves well and about when we are roaring with rheumatism in bed, or feel certain that the sum of the two one-dollar bills in our pocket must be a hundred dollars? We can *say* any of these things, but we are absolutely impotent to believe them; and of just such things is the whole fabric of the truths that we do believe

in made up—matters of fact, immediate or remote, as Hume said, and relations between ideas, which are either there or not there for us if we see them so, and which if not there cannot be put there by any action of our own.

In Pascal's *Thoughts* there is a celebrated passage known in literature as Pascal's wager. In it he tries to force us into Christianity by reasoning as if our concern with truth resembled our concern with the stakes in a game of chance. Translated freely his words are these: You must either believe or not believe that God is—which will you do? Your human reason cannot say. A game is going on between you and the nature of things which at the day of judgment will bring out either heads or tails. Weigh what your gains and your losses would be if you should stake all you have on heads, or God's existence: if you win in such case, you gain eternal beatitude; if you lose, you lose nothing at all. If there were an infinity of chances, and only one for God in this wager, still you ought to stake your all on God; for though you surely risk a finite loss by this procedure, any finite loss is reasonable, even a certain one is reasonable, if there is but the possibility of infinite gain. Go, then, and take holy water, and have masses said; belief will come and stupefy your scruples—*Cela vous fera croire et vous abêtira.* Why should you not? At bottom, what have you to lose?

You probably feel that when religious faith expresses itself thus, in the language of the gaming-table, it is put to its last trumps. Surely Pascal's own personal belief in masses and holy water had far other springs; and this celebrated page of his is but an argument for others, a last desperate snatch at a weapon against the hardness of the unbelieving heart. We feel that a faith in masses and holy water adopted wilfully after such a mechanical calculation would lack the inner soul of faith's reality; and if we were ourselves in the place of the Deity, we should probably take particular pleasure in cutting off believers of this pattern from their infinite reward. It is evident that unless there

be some pre-existing tendency to believe in masses and holy water, the option offered to the will by Pascal is not a living option. Certainly no Turk ever took to masses and holy water on its account; and even to us Protestants these means of salvation seem such foregone impossibilities that Pascal's logic, invoked for them specifically, leaves us unmoved. As well might the Mahdi write to us, saying, "I am the Expected One whom God has created in his effulgence. You shall be infinitely happy if you confess me; otherwise you shall be cut off from the light of the sun. Weigh, then, your infinite gain if I am genuine against your finite sacrifice if I am not!" His logic would be that of Pascal; but he would vainly use it on us, for the hypothesis he offers us is dead. No tendency to act on it exists in us to any degree.

The talk of believing by our volition seems, then, from one point of view, simply silly. From another point of view it is worse than silly, it is vile. When one turns to the magnificent edifice of the physical sciences, and sees how it was reared; what thousands of disinterested moral lives of men lie buried in its mere foundations; what patience and postponement, what choking down of preference, what submission to the icy laws of outer fact are wrought into its very stones and mortar; how absolutely impersonal it stands in its vast augustness—then how besotted and contemptible seems every little sentimentalist who comes blowing his voluntary smoke-wreaths, and pretending to decide things from out of his private dream! Can we wonder if those bred in the rugged and manly school of science should feel like spewing such subjectivism out of their mouths? The whole system of loyalties which grow up in the schools of science go dead against its toleration; so that it is only natural that those who have caught the scientific fever should pass over to the opposite extreme, and write sometimes as if the incorruptibly truthful intellect ought positively to prefer bitterness and unacceptableness to the heart in its cup.

It fortifies my soul to know
That, though I perish, Truth is so—

sings Clough, while Huxley exclaims: "My only consolation lies in the reflection that, however bad our posterity may become, so far as they hold by the plain rule of not pretending to believe what they have no reason to believe, because it may be to their advantage so to pretend [the word "pretend" is surely here redundant], they will not have reached the lowest depth of immorality." And that delicious *enfant terrible* Clifford writes: "Belief is desecrated when given to unproved and unquestioned statements for the solace and private pleasure of the believer. . . . Whoso would deserve well of his fellows in this matter will guard the purity of his belief with a very fanaticism of jealous care, lest at any time it should rest on an unworthy object, and catch a stain which can never be wiped away. . . . If [a] belief has been accepted on insufficient evidence [even though the belief be true, as Clifford on the same page explains] the pleasure is a stolen one. . . . It is sinful because it is stolen in defiance of our duty to mankind. That duty is to guard ourselves from such beliefs as from a pestilence which may shortly master our own body and then spread to the rest of the town. . . . It is wrong always, everywhere, and for every one, to believe anything upon insufficient evidence."

III

All this strikes one as healthy, even when expressed, as by Clifford, with somewhat too much of robustious pathos in the voice. Free-will and simple wishing do seem, in the matter of our credences, to be only fifth wheels to the coach. Yet if any one should thereupon assume that intellectual insight is what remains after wish and will and sentimental preference have taken wing, or that pure reason is what then settles our opinions, he would fly quite as directly in the teeth of the facts.

It is only our already dead hypotheses that our willing nature is unable to bring to life again. But what has made them dead for us is for the most part a previous action of our willing nature of an antagonistic kind. When I say "willing nature," I do not mean only such deliberate volitions as may have set up habits of belief that we cannot now escape from—I mean all such factors of belief as fear and hope, prejudice and passion, imitation and partisanship, the circumpressure of our caste and set. As a matter of fact we find ourselves believing, we hardly know how or why. Mr. Balfour gives the name of "authority" to all those influences, born of the intellectual climate, that make hypotheses possible or impossible for us, alive or dead. Here in this room, we all of us believe in molecules and the conservation of energy, in democracy and necessary progress, in Protestant Christianity and the duty of fighting for "the doctrine of the immortal Monroe," all for no reasons worthy of the name. We see into these matters with no more inner clearness, and probably with much less, than any disbeliever in them might possess. His unconventionality would probably have some grounds to show for its conclusions; but for us, not insight, but the *prestige* of the opinions, is what makes the spark shoot from them and light up our sleeping magazines of faith. Our reason is quite satisfied, in nine hundred and ninety-nine cases out of every thousand of us, if it can find a few arguments that will do to recite in case our credulity is criticised by some one else. Our faith is faith in some one else's faith, and in the greatest matters this is most the case. Our belief in truth itself, for instance, that there is a truth, and that our minds and it are made for each other—what is it but a passionate affirmation of desire, in which our social system backs us up? We want to have a truth; we want to believe that our experiments and studies and discussions must put us in a continually better and better position towards it; and on this line we agree to fight out our thinking lives. But if a pyrrhonistic sceptic asks us *how we know* all this,

can our logic find a reply? No! certainly it cannot. It is just one volition against another—we willing to go in for life upon a trust or assumption which he, for his part, does not care to make.[1]

As a rule we disbelieve all facts and theories for which we have no use. Clifford's cosmic emotions find no use for Christian feelings. Huxley belabours the bishops because there is no use for sacerdotalism in his scheme of life. Newman, on the contrary, goes over to Romanism and finds all sorts of reasons good for staying there, because a priestly system is for him an organic need and delight. Why do so few " scientists " even look at the evidence for telepathy, so called? Because they think, as a leading biologist, now dead, once said to me, that even if such a thing were true, scientists ought to band together to keep it suppressed and concealed. It would undo the uniformity of Nature and all sorts of other things without which scientists cannot carry on their pursuits. But if this very man had been shown something which as a scientist he might *do* with telepathy, he might not only have examined the evidence, but even have found it good enough. This very law which the logicians would impose upon us—if I may give the name of logicians to those who would rule out our willing nature here—is based on nothing but their own natural wish to exclude all elements for which they, in their professional quality of logicians, can find no use.

Evidently, then, our non-intellectual nature does influence our convictions. There are passional tendencies and volitions which run before and others which come after belief, and it is only the latter that are too late for the fair; and they are not too late when the previous passional work has been already in their own direction. Pascal's argument, instead of being powerless, then seems a regular clincher, and is the last stroke needed to make our faith in masses and holy water complete. The state of things is evidently

[1] Compare the admirable page 310 in S. H. Hodgson's *Time and Space*. London, 1865.

far from simple; and pure insight and logic, whatever they might do ideally, are not the only things that really do produce our creeds.

IV

Our next duty, having recognized this mixed-up state of affairs, is to ask whether it be simply reprehensible and pathological, or whether, on the contrary, we must treat it as a normal element in making up our minds. The thesis I defend is, briefly stated, this: *Our passional nature not only lawfully may, but must, decide an option between propositions, whenever it is a genuine option that cannot by its nature be decided on intellectual grounds; for to say, under such circumstances, "Do not decide, but leave the question open," is itself a passional decision—just like deciding yes or no—and is attended with the same risk of losing the truth.* The thesis thus abstractly expressed will, I trust, soon become quite clear. But I must first indulge in a bit more of preliminary work.

V

It will be observed that for the purposes of this discussion we are on "dogmatic" ground—ground, I mean, which leaves systematic philosophical scepticism altogether out of account. The postulate that there is truth, and that it is the destiny of our minds to attain it, we are deliberately resolving to make, though the sceptic will not make it. We part company with him, therefore, absolutely, at this point. But the faith that truth exists, and that our minds can find it, may be held in two ways. We may talk of the *empiricist* way and of the *absolutist* way of believing in truth. The absolutists in this matter say that we not only can attain to knowing truth, but we can *know when* we have attained to knowing it; while the empiricists think that although we may attain it, we cannot infallibly know when. To *know* is one thing, and to know for certain *that*

we know is another. One may hold to the first being possible without the second; hence the empiricists and the absolutists, although neither of them is a sceptic in the usual philosophic sense of the term, show very different degrees of dogmatism in their lives.

If we look at the history of opinions, we see that the empiricist tendency has largely prevailed in science, while in philosophy the absolutist tendency has had everything its own way. The characteristic sort of happiness, indeed, which philosophies yield has mainly consisted in the conviction felt by each successive school or system that by it bottom-certitude had been attained. "Other philosophies are collections of opinions, mostly false; *my* philosophy gives standing-ground forever"—who does not recognize in this the key-note of every system worthy of the name? A system, to be a system at all, must come as a *closed* system, reversible in this or that detail, perchance, but in its essential features never!

Scholastic orthodoxy, to which one must always go when one wishes to find perfectly clear statement, has beautifully elaborated this absolutist conviction in a doctrine which it calls that of "objective evidence." If, for example, I am unable to doubt that I now exist before you, that two is less than three, or that if all men are mortal then I am mortal too, it is because these things illumine my intellect irresistibly. The final ground of this objective evidence possessed by certain propositions is the *adæquatio intellectûs nostri cum rê*. The certitude it brings involves an *aptitudinem ad extorquendum certum assensum* on the part of the truth envisaged, and on the side of the subject a *quietem in cognitione*, when once the object is mentally received, that leaves no possibility of doubt behind; and in the whole transaction nothing operates but the *entitas ipsa* of the object and the *entitas ipsa* of the mind. We slouchy modern thinkers dislike to talk in Latin—indeed, we dislike to talk in set terms at all; but at bottom our own state of mind is very much like this whenever we

uncritically abandon ourselves: You believe in objective evidence and I do. Of some things we feel that we are certain: we know, and we know that we do know. There is something that gives a click inside of us, a bell that strikes twelve, when the hands of our mental clock have swept the dial and meet over the meridan hour. The greatest empiricists among us are only empiricists on reflection: when left to their instincts, they dogmatize like infallible popes. When the Cliffords tell us how sinful it is to be Christians on such "insufficient evidence," insufficiency is really the last thing they have in mind. For them the evidence is absolutely sufficient, only it makes the other way. They believe so completely in an anti-christian order of the universe that there is no living option: Christianity is a dead hypothesis from the start.

VI

But now, since we are all such absolutists by instinct, what in our quality of students of philosophy ought we to do about the fact? Shall we espouse and indorse it? Or shall we treat it as a weakness of our nature from which we must free ourselves, if we can?

I sincerely believe that the latter course is the only one we can follow as reflective men. Objective evidence and certitude are doubtless very fine ideals to play with, but where on this moonlit and dream-visited planet are they found? I am, therefore, myself a complete empiricist so far as my theory of human knowledge goes. I live, to be sure, by the practical faith that we must go on experiencing and thinking over our experience, for only thus can our opinions grow more true; but to hold any one of them—I absolutely do not care which—as if it never could be reinterpretable or corrigible, I believe to be a tremendously mistaken attitude, and I think that the whole history of philosophy will bear me out. There is but one indefectibly certain truth, and that is the truth that pyrrhonistic

scepticism itself leaves standing—the truth that the present phenomenon of consciousness exists. That, however, is the bare starting-point of knowledge, the mere admission of a stuff to be philosophized about. The various philosophies are but so many attempts at expressing what this stuff really is. And if we repair to our libraries what disagreement do we discover! Where is a certainly true answer found? Apart from abstract propositions of comparison (such as two and two are the same as four), propositions which tell us nothing by themselves about concrete reality, we find no proposition ever regarded by any one as evidently certain that has not either been called a falsehood, or at least had its truth sincerely questioned by some one else. The transcending of the axioms of geometry, not in play but in earnest, by certain of our contemporaries (as Zöllner and Charles H. Hinton), and the rejection of the whole Aristotelian logic by the Hegelians are striking instances in point.

No concrete test of what is really true has ever been agreed upon. Some make the criterion external to the moment of perception, putting it either in revelation, the *consensus gentium*, the instincts of the heart, or the systematized experience of the race. Others make the perceptive moment its own test—Descartes, for instance, with his clear and distinct ideas guaranteed by the veracity of God; Reid with his " common-sense "; and Kant with his forms of synthetic judgment *a priori*. The inconceivability of the opposite; the capacity to be verified by sense; the possession of complete organic unity or self-relation, realized when a thing is its own other—are standards which, in turn, have been used. The much-lauded objective evidence is never triumphantly there; it is a mere aspiration or *Grenzbegriff*, marking the infinitely remote ideal of our thinking life. To claim that certain truths now possess it, is simply to say that when you think them true and they *are* true, then their evidence is objective, otherwise it is not.' But practically one's conviction that the evidence one

goes by is of the real objective brand, is only one more subjective opinion added to the lot. For what a contradictory array of opinions have objective evidence and absolute certitude been claimed! The world is rational through and through—its existence is an ultimate brute fact; there is a personal God—a personal God is inconceivable; there is an extra-mental physical world immediately known—the mind can only know its own ideas; a moral imperative exists—obligation is only the resultant of desires; a permanent spiritual principle is in every one—there are only shifting states of mind; there is an endless chain of causes—there is an absolute first cause; an eternal necessity—a freedom; a purpose—no purpose; a primal One—a primal Many; a universal continuity—an essential discontinuity in things; an infinity—no infinity. There is this—there is that; there is indeed nothing which some one has not thought absolutely true, while his neighbour deemed it absolutely false; and not an absolutist among them seems ever to have considered that the trouble may all the time be essential, and that the intellect, even with truth directly in its grasp, may have no infallible signal for knowing whether it be truth or no. When, indeed, one remembers that the most striking practical application to life of the doctrine of objective certitude has been the conscientious labours of the Holy Office of the Inquisition, one feels less tempted than ever to lend the doctrine a respectful ear.

But please observe, now, that when as empiricists we give up the doctrine of objective certitude, we do not thereby give up the quest or hope of truth itself. We still pin our faith on its existence, and still believe that we gain an ever better position towards it by systematically continuing to roll up experiences and think. Our great difference from the scholastic lies in the way we face. The strength of his system lies in the principles, the origin, the *terminus a quo* of his thought; for us the strength is in the outcome, the upshot, the *terminus ad quem*. Not where it comes from

but what it leads to is to decide. It matters not to an empiricist from what quarter an hypothesis may come to him: he may have acquired it by fair means or by foul; passion may have whispered or accident suggested it; but if the total drift of thinking continues to confirm it, that is what he means by its being true.

VII

One more point, small but important, and our preliminaries are done. There are two ways of looking at our duty in the matter of opinion—ways entirely different, and yet ways about whose difference the theory of knowledge seems hitherto to have shown very little concern. *We must know the truth;* and *we must avoid error*—these are our first and great commandments as would-be knowers; but they are not two ways of stating an identical commandment, they are two separable laws. Although it may indeed happen that when we believe the truth *A*, we escape as an incidental consequence from believing the falsehood *B*, it hardly ever happens that by merely disbelieving *B* we necessarily believe *A*. We may in escaping *B* fall into believing other falsehoods, *C* or *D*, just as bad as *B;* or we may escape *B* by not believing anything at all, not even *A*.

Believe truth! Shun error!—these, we see, are two materially different laws; and by choosing between them we may end by colouring differently our whole intellectual life. We may regard the chase for truth as paramount, and the avoidance of error as secondary; or we may, on the other hand, treat the avoidance of error as more imperative, and let truth take its chance. Clifford, in the instructive passage which I have quoted, exhorts us to the latter course. Believe nothing, he tells us, keep your mind in suspense forever, rather than by closing it on insufficient evidence incur the awful risk of believing lies. You, on the other hand, may think that the risk of being in error

is a very small matter when compared with the blessings of real knowledge, and be ready to be duped many times in your investigation rather than postpone indefinitely the chance of guessing true. I myself find it impossible to go with Clifford. We must remember that these feelings of our duty about either truth or error are in any case only expressions of our passional life. Biologically considered, our minds are as ready to grind out falsehood as veracity, and he who says, "Better go without belief forever than believe a lie!" merely shows his own preponderant private horror of becoming a dupe. He may be critical of many of his desires and fears, but this fear he slavishly obeys. He cannot imagine any one questioning its binding force. For my own part, I have also a horror of being duped; but I can believe that worse things than being duped may happen to a man in this world: so Clifford's exhortation has to my ears a thoroughly fantastic sound. It is like a general informing his soldiers that it is better to keep out of battle forever than to risk a single wound. Not so are victories either over enemies or over nature gained. Our errors are surely not such awfully solemn things. In a world where we are so certain to incur them in spite of all our caution, a certain lightness of heart seems healthier than this excessive nervousness on their behalf. At any rate, it seems the fittest thing for the empiricist philosopher.

VIII

And now, after all this introduction, let us go straight at our question. I have said, and now repeat it, that not only as a matter of fact do we find our passional nature influencing us in our opinions, but that there are some options between opinions in which this influence must be regarded both as an inevitable and as a lawful determinant of our choice.

I fear here that some of you my hearers will begin to scent danger, and lend an inhospitable ear. Two first steps

of passion you have indeed had to admit as necessary—we must think so as to avoid dupery, and we must think so as to gain truth; but the surest path to those ideal consummations, you will probably consider, is from now onwards to take no further passional step.

Well, of course, I agree as far as the facts will allow. Wherever the option between losing truth and gaining it is not momentous, we can throw the chance of *gaining truth* away, and at any rate save ourselves from any chance of *believing falsehood*, by not making up our minds at all till objective evidence has come. In scientific questions, this is almost always the case; and even in human affairs in general, the need of acting is seldom so urgent that a false belief to act on is better than no belief at all. Law courts, indeed, have to decide on the best evidence attainable for the moment, because a judge's duty is to make law as well as to ascertain it, and (as a learned judge once said to me) few cases are worth spending much time over: the great thing is to have them decided on *any* acceptable principle, and got out of the way. But in our dealings with objective nature we obviously are recorders, not makers, of the truth; and decisions for the mere sake of deciding promptly and getting on to the next business would be wholly out of place. Throughout the breadth of physical nature facts are what they are quite independently of us, and seldom is there any such hurry about them that the risks of being duped by believing a premature theory need be faced. The questions here are always trivial options, the hypotheses are hardly living (at any rate not living for us spectators), the choice between believing truth or falsehood is seldom forced. The attitude of sceptical balance is therefore the absolutely wise one if we would escape mistakes. What difference, indeed, does it make to most of us whether we have or have not a theory of the Röntgen rays, whether we believe or not in mind-stuff, or have a conviction about the causality of conscious states? It makes no difference. Such options are not forced on us. On every account it is

better not to make them, but still keep weighing reasons *pro et contra* with an indifferent hand.

I speak, of course, here of the purely judging mind. For purposes of discovery such indifference is to be less highly recommended, and science would be far less advanced than she is if the passionate desires of individuals to get their own faiths confirmed had been kept out of the game. See, for example, the sagacity which Spencer and Weismann now display. On the other hand, if you want an absolute duffer in an investigation, you must, after all, take the man who has no interest whatever in its results: he is the warranted incapable, the positive fool. The most useful investigator, because the most sensitive observer, is always he whose eager interest in one side of the question is balanced by an equally keen nervousness lest he become deceived.[1] Science has organized this nervousness into a regular *technique*, her so-called method of verification; and she has fallen so deeply in love with the method that one may even say she has ceased to care for truth by itself at all. It is only truth as technically verified that interests her. The truth of truths might come in merely affirmative form, and she would decline to touch it. Such truth as that, she might repeat with Clifford, would be stolen in defiance of her duty to mankind. Human passions, however, are stronger than technical rules. " Le cœur a ses raisons," as Pascal says, " que la raison ne connaît pas; " and however indifferent to all but the bare rules of the game the umpire, the abstract intellect, may be, the concrete players who furnish him the materials to judge of are usually, each one of them, in love with some pet " live hypothesis " of his own. Let us agree, however, that wherever there is no forced option, the dispassionately judicial intellect with no pet hypothesis, saving us, as it does, from dupery at any rate, ought to be our ideal.

The question next arises: Are there not somewhere

[1] Compare Wilfrid Ward's Essay, " The Wish to Believe," in his *Witnesses to the Unseen*, Macmillan and Co., 1893.

forced options in our speculative questions, and can we (as men who may be interested at least as much in positively gaining truth as in merely escaping dupery) always wait with impunity till the coercive evidence shall have arrived? It seems *a priori* improbable that the truth should be so nicely adjusted to our needs and powers as that. In the great boarding-house of nature, the cakes and the butter and the syrup seldom come out so even and leave the plates so clean. Indeed, we should view them with scientific suspicion if they did.

IX

Moral questions immediately present themselves as questions whose solution cannot wait for sensible proof. A moral question is a question not of what sensibly exists, but of what is good, or would be good if it did exist. Science can tell us what exists; but to compare the *worths*, both of what exists and of what does not exist, we must consult not science, but what Pascal calls our heart. Science herself consults her heart when she lays it down that the infinite ascertainment of fact and correction of false belief are the supreme goods for man. Challenge the statement, and science can only repeat it oracularly, or else prove it by showing that such ascertainment and correction bring man all sorts of other goods which man's heart in turn declares. The question of having moral beliefs at all or not having them is decided by our will. Are our moral preferences true or false, or are they only odd biological phenomena, making things good or bad for *us*, but in themselves indifferent? How can your pure intellect decide? If your heart does not *want* a world of moral reality, your head will assuredly never make you believe in one. Mephistophelian scepticism, indeed, will satisfy the head's play-instincts much better than any rigorous idealism can. Some men (even at the student age) are so naturally cool-hearted that the moralistic hypothesis never has for

them any pungent life, and in their supercilious presence the hot young moralist always feels strangely ill at ease. The appearance of knowingness is on their side, of *naïvete* and gullibility on his. Yet, in the inarticulate heart of him, he clings to it that he is not a dupe, and that there is a realm in which (as Emerson says) all their wit and intellectual superiority is no better than the cunning of a fox. Moral scepticism can no more be refuted or proved by logic than intellectual scepticism can. When we stick to it that there *is* truth (be it of either kind), we do so with our whole nature, and resolve to stand or fall by the results. The sceptic with his whole nature adopts the doubting attitude; but which of us is the wiser, Omniscience only knows.

Turn now from these wide questions of good to a certain class of questions of fact, questions concerning personal relations, states of mind between one man and another. *Do you like me or not?*—for example. Whether you do or not depends, in countless instances, on whether I meet you half-way, am willing to assume that you must like me, and show you trust and expectation. The previous faith on my part in your liking's existence is in such cases what makes your liking come. But if I stand aloof, and refuse to budge an inch until I have objective evidence, until you shall have done something apt, as the absolutists say, *ad extorquendum assensum meum*, ten to one your liking never comes. How many women's hearts are vanquished by the mere sanguine insistence of some man that they *must* love him! he will not consent to the hypothesis that they cannot. The desire for a certain kind of truth here brings about that special truth's existence; and so it is in innumerable cases of other sorts. Who gains promotions, boons, appointments but the man in whose life they are seen to play the part of live hypotheses, who discounts them, sacrifices other things for their sake before they have come, and takes risks for them in advance? His faith acts on the powers above him as a claim, and creates its own verification.

A social organism of any sort whatever, large or small, is

what it is because each member proceeds to his own duty with a trust that the other members will simultaneously do theirs. Wherever a desired result is achieved by the co-operation of many independent persons, its existence as a fact is a pure consequence of the precursive faith in one another of those immediately concerned. A government, an army, a commercial system, a ship, a college, an athletic team, all exist on this condition, without which not only is nothing achieved, but nothing is even attempted. A whole train of passengers (individually brave enough) will be looted by a few highwaymen, simply because the latter can count on one another, while each passenger fears that if he makes a movement of resistance he will be shot before any one else backs him up. If we believed that the whole car-full would rise at once with us, we should each severally rise, and train-robbing would never even be attempted. There are, then, cases where a fact cannot come at all unless a preliminary faith exists in its coming. *And where faith in a fact can help create the fact*, that would be an insane logic which should say that faith running ahead of scientific evidence is the "lowest kind of immorality" into which a thinking being can fall. Yet such is the logic by which our scientific absolutists pretend to regulate our lives!

X

In truths dependent on our personal action, then, faith based on desire is certainly a lawful and possibly an indispensable thing.

But now, it will be said, these are all childish human cases, and have nothing to do with great cosmical matters, like the question of religious faith. Let us then pass on to that. Religions differ so much in their accidents that in discussing the religious question we must make it very generic and broad. What then do we now mean by the religious hypothesis? Science says things are; morality says some things are better than other things; and religion says essentially two things

First, she says that the best things are the more eternal things, the overlapping things, the things in the universe that throw the last stone, so to speak, and say the final word. "Perfection is eternal,"—this phrase of Charles Secrétan seems a good way of putting this first affirmation of religion, an affirmation which obviously cannot yet be verified scientifically at all.

The second affirmation of religion is that we are better off even now if we believe her first affirmation to be true.

Now, let us consider what the logical elements of this situation are *in case the religious hypothesis in both its branches be really true.* (Of course, we must admit that possibility at the outset. If we are to discuss the question at all, it must involve a living option. If for any of you religion be a hypothesis that cannot by any living possibility be true, then you need go no farther. I speak to the "saving remnant" alone.) So proceeding, we see, first, that religion offers itself as a *momentous* option. We are supposed to gain, even now, by our belief, and to lose by our non-belief, a certain vital good. Secondly, religion is a *forced* option, so far as that good goes. We cannot escape the issue by remaining sceptical and waiting for more light, because, although we do avoid error in that way *if religion be untrue*, we lose the good, *if it be true*, just as certainly as if we positively chose to disbelieve. It is as if a man should hesitate indefinitely to ask a certain woman to marry him because he was not perfectly sure that she would prove an angel after he brought her home. Would he not cut himself off from that particular angel-possibility as decisively as if he went and married some one else? Scepticism, then, is not avoidance of option; it is option of a certain particular kind of risk. *Better risk loss of truth than chance of error* —that is your faith-vetoer's exact position. He is actively playing his stake as much as the believer is; he is backing the field against the religious hypothesis, just as the believer is backing the religious hypothesis against the field. To preach scepticism to us as a duty until "sufficient evidence"

for religion be found, is tantamount therefore to telling us, when in presence of the religious hypothesis, that to yield to our fear of its being error is wiser and better than to yield to our hope that it may be true. It is not intellect against all passions, then; it is only intellect with one passion laying down its law. And by what, forsooth, is the supreme wisdom of this passion warranted? Dupery for dupery, what proof is there that dupery through hope is so much worse than dupery through fear? I, for one, can see no proof; and I simply refuse obedience to the scientist's command to imitate his kind of option, in a case where my own stake is important enough to give me the right to choose my own form of risk. If religion be true and the evidence for it be still insufficient, I do not wish, by putting your extinguisher upon my nature (which feels to me as if it had after all some business in this matter), to forfeit my sole chance in life of getting upon the winning side—that chance depending, of course, on my willingness to run the risk of acting as if my passional need of taking the world religiously might be prophetic and right.

All this is on the supposition that it really may be prophetic and right, and that, even to us who are discussing the matter, religion is a live hypothesis which may be true. Now, to most of us religion comes in a still further way that makes a veto on our active faith even more illogical. The more perfect and more eternal aspect of the universe is represented in our religions as having personal form. The universe is no longer a mere *It* to us, but a *Thou*, if we are religious; and any relation that may be possible from person to person might be possible here. For instance, although in one sense we are passive portions of the universe, in another we show a curious autonomy, as if we were small active centres on our own account. We feel, too, as if the appeal of religion to us were made to our own active good-will, as if evidence might be forever withheld from us unless we met the hypothesis half-way. To take a trivial illustration: just as a man who in a company of gentlemen made no advances,

asked a warrant for every concession, and believed no one's word without proof, would cut himself off by such churlishness from all the social rewards that a more trusting spirit would earn—so here, one who should shut himself up in snarling logicality and try to make the gods extort his recognition willy-nilly, or not get it at all, might cut himself off forever from his only opportunity of making the gods' acquaintance. This feeling, forced on us we know not whence, that by obstinately believing that there are gods (although not to do so would be so easy both for our logic and our life) we are doing the universe the deepest service we can, seems part of the living essence of the religious hypothesis. If the hypothesis *were* true in all its parts, including this one, then pure intellectualism, with its veto on our making willing advances, would be an absurdity; and some participation of our sympathetic nature would be logically required. "I, therefore, for one, cannot see my way to accepting the agnostic rules for truth-seeking, or wilfully agree to keep my willing nature out of the game. I cannot do so for this plain reason, that *a rule of thinking which would absolutely prevent me from acknowledging certain kinds of truth if those kinds of truth were really there, would be an irrational rule.* That for me is the long and short of the formal logic of the situation, no matter what the kinds of truth might materially be.

I confess I do not see how this logic can be escaped. But sad experience makes me fear that some of you may still shrink from radically saying with me, *in abstracto*, that we have the right to believe at our own risk any hypothesis that is live enough to tempt our will. I suspect, however, that if this is so, it is because you have got away from the abstract logical point of view altogether, and are thinking (perhaps without realizing it) of some particular religious hypothesis which for you is dead. The freedom to "believe what we will" you apply to the case of some patent superstition; and the faith you think of is the faith defined by the

schoolboy when he said, " Faith is when you believe something that you know ain't true." I can only repeat that this is misapprehension. *In concreto*, the freedom to believe can only cover living options which the intellect of the individual cannot by itself resolve; and living options never seem absurdities to him who has them to consider. When I look at the religious question as it really puts itself to concrete men, and when I think of all the possibilities which both practically and theoretically it involves, then this command that we shall put a stopper on our heart, instincts, and courage, and *wait*—acting of course meanwhile more or less as if religion were *not* true [1]—till doomsday, or till such time as our intellect and senses working together may have raked in evidence enough—this command, I say, seems to me the queerest idol ever manufactured in the philosophic cave. Were we scholastic absolutists, there might be more excuse. If we had an infallible intellect with its objective certitudes, we might feel ourselves disloyal to such a perfect organ of knowledge in not trusting to it exclusively, in not waiting for its releasing word. But if we are empiricists, if we believe that no bell in us tolls to let us know for certain when truth is in our grasp, then it seems a piece of idle fantasticality to preach so solemnly our duty of waiting for the bell. Indeed we *may* wait if we will—I hope you do not think that I am denying that —but if we do so, we do so at our peril as much as if we believed. In either case we *act*, taking our life in our hands. No one of us ought to issue vetoes to the other, nor should

[1] Since belief is measured by action, he who forbids us to believe religion to be true, necessarily also forbids us to act as we should if we did believe it to be true. The whole defence of religious faith hinges upon action. If the action required or inspired by the religious hypothesis is in no way different from that dictated by the naturalistic hypothesis, then religious faith is a pure superfluity, better pruned away, and controversy about its legitimacy is a piece of idle trifling, unworthy of serious minds. I myself believe, of course, that the religious hypothesis gives to the world an expression which specifically determines our reactions, and makes them in a large part unlike what they might be on a purely naturalistic scheme of belief.

we bandy words of abuse. We ought, on the contrary, delicately and profoundly to respect one another's mental freedom: then only shall we bring about the intellectual republic; then only shall we have that spirit of inner tolerance without which all our outer tolerance is soulless, and which is empiricism's glory; then only shall we live and let live, in speculative as well as in practical things.

I began by a reference to Fitz-James Stephen; let me end by a quotation from him. "What do you think of yourself? What do you think of the world? . . . These are questions with which all must deal as it seems good to them. They are riddles of the Sphinx, and in some way or other we must deal with them. . . . In all important transactions of life we have to take a leap in the dark. . . . If we decide to leave the riddles unanswered, that is a choice; if we waver in our answer, that, too, is a choice: but whatever choice we make, we make it at our peril. If a man chooses to turn his back altogether on God and the future, no one can prevent him; no one can show beyond reasonable doubt that he is mistaken. If a man thinks otherwise and acts as he thinks, I do not see that any one can prove that *he* is mistaken. Each must act as he thinks best; and if he is wrong, so much the worse for him. We stand on a mountain pass in the midst of whirling snow and blinding mist, through which we get glimpses now and then of paths which may be deceptive. If we stand still we shall be frozen to death. If we take the wrong road we shall be dashed to pieces. We do not certainly know whether there is any right one. What must we do? 'Be strong and of a good courage.' Act for the best, hope for the best, and take what comes. . . . If death ends all, we cannot meet death better." [1]

[1] *Liberty, Equality, Fraternity*, p. 353, 2nd edition. London, 1874.

VIII

THE SENTIMENT OF RATIONALITY[1]

I

WHAT is the task which philosophers set themselves to perform; and why do they philosophize at all? Almost every one will immediately reply: They desire to attain a conception of the frame of things which shall on the whole be more rational than that somewhat chaotic view which every one by nature carries about with him under his hat. But suppose this rational conception attained, how is the philosopher to recognize it for what it is, and not let it slip through ignorance? The only answer can be that he will recognize its rationality as he recognizes everything else, by certain subjective marks with which it affects him. When he gets the marks, he may know that he has got the rationality.

What, then, are the marks? A strong feeling of ease, peace, rest, is one of them. The transition from a state of puzzle and perplexity to rational comprehension is full of lively relief and pleasure.

But this relief seems to be a negative rather than a positive character. Shall we then say that the feeling of rationality is constituted merely by the absence of any feeling of irrationality? I think there are very good grounds for upholding such a view. All feeling whatever, in the light of certain psychological speculations, seems to depend for its physical condition not on simple discharge of nerve-

[1] From *The Will to Believe*, 1915, pp. 63–110.
This essay as far as page 75 consists of extracts from an article printed in *Mind* for July 1879. Thereafter it is a reprint of an address to the Harvard Philosophical Club, delivered in 1880, and published in the *Princeton Review*, July 1882.

currents, but on their discharge under arrest, impediment, or resistance. Just as we feel no particular pleasure when we breathe freely, but a very intense feeling of distress when the respiratory motions are prevented — so any unobstructed tendency to action discharges itself without the production of much cogitative accompaniment, and any perfectly fluent course of thought awakens but little feeling; but when the movement is inhibited, or when the thought meets with difficulties, we experience distress. It is only when the distress is upon us that we can be said to strive, to crave, or to aspire. When enjoying plenary freedom either in the way of motion or of thought, we are in a sort of anæsthetic state in which we might say with Walt Whitman, if we care to say anything about ourselves at such times, " I am sufficient as I am." This feeling of the sufficiency of the present moment, of its absoluteness,— this absence of all need to explain it, account for it, or justify it,—is what I call the Sentiment of Rationality. As soon, in short, as we are enabled from any cause whatever to think with perfect fluency, the thing we think of seems to us *pro tanto* rational.

Whatever modes of conceiving the cosmos facilitate this fluency, produce the sentiment of rationality. Conceived in such modes, being vouches for itself and needs no further philosophic formulation. But this fluency may be obtained in various ways; and first I will take up the theoretic way.

The facts of the world in their sensible diversity are always before us, but our theoretic need is that they should be conceived in a way that reduces their manifoldness to simplicity. Our pleasure at finding that a chaos of facts is the expression of a single underlying fact is like the relief of the musician at resolving a confused mass of sound into melodic or harmonic order. The simplified result is handled with far less mental effort than the original data; and a philosophic conception of nature is thus in no metaphorical sense a labour-saving contrivance. The passion

for parsimony, for economy of means in thought, is the philosophic passion *par excellence;* and any character or aspect of the world's phenomena which gathers up their diversity into monotony will gratify that passion, and in the philosopher's mind stand for that essence of things compared with which all their other determinations may by him be overlooked.

More universality or extensiveness is, then, one mark which the philosopher's conceptions must possess. Unless they apply to an enormous number of cases they will not bring him relief. The knowledge of things by their causes, which is often given as a definition of rational knowledge, is useless to him unless the causes converge to a minimum number, while still producing the maximum number of effects. The more multiple then are the instances, the more flowingly does his mind rove from fact to fact. The phenomenal transitions are no real transitions; each item is the same old friend with a slightly altered dress.

Who does not feel the charm of thinking that the moon and the apple are, as far as their relation to the earth goes, identical; of knowing respiration and combustion to be one; of understanding that the balloon rises by the same law whereby the stone sinks; of feeling that the warmth in one's palm when one rubs one's sleeve is identical with the motion which the friction checks; of recognizing the difference between beast and fish to be only a higher degree of that between human father and son; of believing our strength when we climb the mountain or fell the tree to be no other than the strength of the sun's rays which made the corn grow out of which we got our morning meal?

But alongside of this passion for simplification there exists a sister passion, which in some minds—though they perhaps form the minority—is its rival. This is the passion for distinguishing; it is the impulse to be *acquainted* with the parts rather than to comprehend the whole. Loyalty to clearness and integrity of perception, dislike of blurred

outlines, of vague identifications, are its characteristics. It loves to recognize particulars in their full completeness, and the more of these it can carry the happier it is. It prefers any amount of incoherence, abruptness, and fragmentariness (so long as the literal details of the separate facts are saved) to an abstract way of conceiving things that, while it simplifies them, dissolves away at the same time their concrete fulness. Clearness and simplicity thus set up rival claims, and make a real dilemma for the thinker.

A man's philosophic attitude is determined by the balance in him of these two cravings. No system of philosophy can hope to be universally accepted among men which grossly violates either need, or entirely subordinates the one to the other. The fate of Spinoza, with his barren union of all things in one substance, on the one hand; that of Hume, with his equally barren " looseness and separateness " of everything, on the other—neither philosopher owning any strict and systematic disciples to-day, each being to posterity a warning as well as a stimulus—show us that the only possible philosophy must be a compromise between an abstract monotony and a concrete heterogeneity. But the only way to mediate between diversity and unity is to class the diverse items as cases of a common essence which you discover in them. Classification of things into extensive " kinds " is thus the first step; and classification of their relations and conduct into extensive " laws " is the last step, in their philosophic unification. A completed theoretic philosophy can thus never be anything more than a completed classification of the world's ingredients; and its results must always be abstract since the basis of every classification is the abstract essence embedded in the living fact—the rest of the living fact being for the time ignored by the classifier. This means that none of our explanations are complete. They subsume things under heads wider or more familiar; but the last heads, whether of things or of their connections, are mere

abstract genera, data which we just find in things and write down.

When, for example, we think that we have rationally explained the connection of the facts *A* and *B* by classing both under their common attribute *x*, it is obvious that we have really explained only so much of these items as *is x*. To explain the connection of choke-damp and suffocation by the lack of oxygen is to leave untouched all the other peculiarities both of choke-damp and of suffocation—such as convulsions and agony on the one hand, density and explosibility on the other. In a word, so far as *A* and *B* contain *l*, *m*, *n*, and *o*, *p*, *q*, respectively, in addition to *x*, they are not explained by *x*. Each additional particularity makes its distinct appeal. A single explanation of a fact only explains it from a single point of view. The entire fact is not accounted for until each and all of its characters have been classed with their likes elsewhere. To apply this now to the case of the universe, we see that the explanation of the world by molecular movements explains it only so far as it actually *is* such movements. To invoke the "Unknowable" explains only so much as is unknowable, "Thought" only so much as is thought, "God" only so much as is God. *Which* thought? *Which* God?—are questions that have to be answered by bringing in again the residual data from which the general term was abstracted. All those data that cannot be analytically identified with the attribute invoked as universal principle, remain as independent kinds or natures, associated empirically with the said attribute but devoid of rational kinship with it.

Hence the unsatisfactoriness of all our speculations. On the one hand, so far as they retain any multiplicity in their terms, they fail to get us out of the empirical sand-heap world; on the other, so far as they eliminate multiplicity the practical man despises their empty barrenness. The most they can say is that the elements of the world are such and such, and that each is identical with itself wherever found; but the question Where is it found? the prac-

tical man is left to answer by his own wit. Which, of all the essences, shall here and now be held the essence of this concrete thing, the fundamental philosophy never attempts to decide. We are thus led to the conclusion that the simple classification of things is, on the one hand, the best possible theoretic philosophy, but is, on the other, a most miserable and inadequate substitute for the fulness of the truth. It is a monstrous abridgment of life, which, like all abridgments, is got by the absolute loss and casting out of real matter. This is why so few human beings truly care for philosophy. The particular determinations which she ignores are the real matter exciting needs, quite as potent and authoritative as hers. What does the moral enthusiast care for philosophical ethics? Why does the *Æsthetik* of every German philosopher appear to the artist an abomination of desolation?

> Grau, theurer Freund, ist alle Theorie
> Und grün des Lebens goldner Baum.

The entire man, who feels all needs by turns, will take nothing as an equivalent for life but the fulness of living itself. Since the essences of things are as a matter of fact disseminated through the whole extent of time and space, it is in their spread-outness and alternation that he will enjoy them. When weary of the concrete clash and dust and pettiness, he will refresh himself by a bath in the eternal springs, or fortify himself by a look at the immutable natures. But he will only be a visitor, not a dweller in the region; he will never carry the philosophic yoke upon his shoulders, and when tired of the grey monotony of her problems and insipid spaciousness of her results, will always escape gleefully into the teeming and dramatic richness of the concrete world.

So our study turns back here to its beginning. Every way of classifying a thing is but a way of handling it for some particular purpose. Conceptions, "kinds," are teleological instruments. No abstract concept can be a

valid substitute for a concrete reality except with reference to a particular interest in the conceiver. The interest of theoretic rationality, the relief of identification, is but one of a thousand human purposes. When others rear their heads, it must pack up its little bundle and retire till its turn recurs. The exaggerated dignity and value that philosophers have claimed for their solutions is thus greatly reduced. The only virtue their theoretic conception need have is simplicity, and a simple conception is an equivalent for the world only so far as the world is simple—the world meanwhile, whatever simplicity it may harbour, being also a mightily complex affair. Enough simplicity remains, however, and enough urgency in our craving to reach it, to make the theoretic function one of the most invincible of human impulses. The quest of the fewest elements of things is an ideal that some will follow, as long as there are men to think at all.

But suppose the goal attained. Suppose that at last we have a system unified in the sense that has been explained. Our world can now be conceived simply, and our mind enjoys the relief. Our universal concept has made the concrete chaos rational. But now I ask, Can that which is the ground of rationality in all else be itself properly called rational? It would seem at first sight that it might. One is tempted at any rate to say that, since the craving for rationality is appeased by the identification of one thing with another, a datum which left nothing else outstanding might quench that craving definitively, or be rational *in se*. No otherness being left to annoy us, we should sit down at peace. In other words, as the theoretic tranquillity of the boor results from his spinning no further considerations about his chaotic universe, so any datum whatever (provided it were simple, clear, and ultimate) ought to banish puzzle from the universe of the philosopher and confer peace, inasmuch as there would then be for him absolutely no further considerations to spin.

This in fact is what some persons think. Professor Bain says—

"A difficulty is solved, a mystery unriddled, when it can be shown to resemble something else; to be an example of a fact already known. Mystery is isolation, exception, or it may be apparent contradiction: the resolution of the mystery is found in assimilation, identity, fraternity. When all things are assimilated, so far as assimilation can go, so far as likeness holds, there is an end to explanation; there is an end to what the mind can do, or can intelligently desire. . . . The path of science as exhibited in modern ages is toward generality, wider and wider, until we reach the highest, the widest laws of every department of things; there explanation is finished, mystery ends, perfect vision is gained."

But, unfortunately, this first answer will not hold. Our mind is so wedded to the process of seeing an *other* beside every item of its experience, that when the notion of an absolute datum is presented to it, it goes through its usual procedure and remains pointing at the void beyond, as if in that lay further matter for contemplation. In short, it spins for itself the further positive consideration of a nonentity enveloping the being of its datum; and as that leads nowhere, back recoils the thought toward its datum again. But there is no natural bridge between nonentity and this particular datum, and the thought stands oscillating to and fro, wondering "Why was there anything but nonentity; why just this universal datum and not another?" and finds no end, in wandering mazes lost. Indeed, Bain's words are so untrue that in reflecting men it is just when the attempt to fuse the manifold into a single totality has been most successful, when the conception of the universe as a unique fact is nearest its perfection, that the craving for further explanation, the ontological wonder-sickness, arises in its extremest form. As Schopenhauer says, "The uneasiness which keeps the never-

resting clock of metaphysics in motion, is the consciousness that the non-existence of this world is just as possible as its existence."

The notion of nonentity may thus be called the parent of the philosophic craving in its subtilest and profoundest sense. Absolute existence is absolute mystery, for its relations with the nothing remain unmediated to our understanding. One philosopher only has pretended to throw a logical bridge over this chasm. Hegel, by trying to show that nonentity and concrete being are linked together by a series of identities of a synthetic kind, binds everything conceivable into a unity, with no outlying notion to disturb the free rotary circulation of the mind within its bounds. Since such unchecked movement gives the feeling of rationality, he must be held, if he has succeeded, to have eternally and absolutely quenched all rational demands.

But for those who deem Hegel's heroic effort to have failed, nought remains but to confess that when all things have been unified to the supreme degree, the notion of a possible other than the actual may still haunt our imagination and prey upon our system. The bottom of being is left logically opaque to us, as something which we simply come upon and find, and about which (if we wish to act) we should pause and wonder as little as possible. The philosopher's logical tranquillity is thus in essence no other than the boor's. They differ only as to the point at which each refuses to let further considerations upset the absoluteness of the data he assumes. The boor does so immediately, and is liable at any moment to the ravages of many kinds of doubt. The philosopher does not do so till unity has been reached, and is warranted against the inroads of those considerations, but only practically, not essentially, secure from the blighting breath of the ultimate Why? If he cannot exorcise this question, he must ignore or blink it, and, assuming the data of his system as something given, and the gift as ultimate, simply proceed to a life of contemplation or of action based on it. There is no doubt that this

acting on an opaque necessity is accompanied by a certain pleasure. See the reverence of Carlyle for brute fact: "There is an infinite significance in fact." "Necessity," says Dühring, and he means not rational but given necessity, "is the last and highest point that we can reach. . . . It is not only the interest of ultimate and definitive knowledge, but also that of the feelings, to find a last repose and an ideal equilibrium in an uttermost datum which can simply not be other than it is."

Such is the attitude of ordinary men in their theism. God's fiat being in physics and morals such an uttermost datum. Such also is the attitude of all hard-minded analysts and *Verstandesmenschen*. Lotze, Renouvier, and Hodgson promptly say that of experience as a whole no account can be given, but neither seeks to soften the abruptness of the confession nor to reconcile us with our impotence.

But mediating attempts may be made by more mystical minds. The peace of rationality may be sought through ecstasy when logic fails. To religious persons of every shade of doctrine moments come when the world, as it is, seems so divinely orderly, and the acceptance of it by the heart so rapturously complete, that intellectual questions vanish; nay, the intellect itself is hushed to sleep—as Wordsworth says, "thought is not; in enjoyment it expires." Ontological emotion so fills the soul that ontological speculation can no longer overlap it and put her girdle of interrogation-marks round existence. Even the least religious of men must have felt with Walt Whitman, when loafing on the grass on some transparent summer morning, that "swiftly arose and spread round him the peace and knowledge that pass all the argument of the earth." At such moments of energetic living we feel as if there were something diseased and contemptible, yea, vile, in theoretic grubbing and brooding. In the eye of healthy sense the philosopher is at best a learned fool.

Since the heart can thus wall out the ultimate irration-

ality which the head ascertains, the erection of its procedure into a systematized method would be a philosophic achievement of first-rate importance. But as used by mystics hitherto it has lacked universality, being available for few persons and at few times, and even in these being apt to be followed by fits of reaction and dryness; and if men should agree that the mystical method is a subterfuge without logical pertinency, a plaster but no cure, and that the idea of nonentity can never be exorcised, empiricism will be the ultimate philosophy. Existence then will be a brute fact to which as a whole the emotion of ontologic wonder shall rightfully cleave, but remain eternally unsatisfied. Then wonderfulness or mysteriousness will be an essential attribute of the nature of things, and the exhibition and emphasing of it will continue to be an ingredient in the philosophic industry of the race. Every generation will produce its Job, its Hamlet, its Faust, or its Sartor Resartus.

With this we seem to have considered the possibilities of purely theoretic rationality. But we saw at the outset that rationality meant only unimpeded mental function. Impediments that arise in the theoretic sphere might perhaps be avoided if the stream of mental action should leave that sphere betimes and pass into the practical. Let us therefore inquire what constitutes the feeling of rationality in its *practical* aspect. If thought is not to stand forever pointing at the universe in wonder, if its movement is to be diverted from the issueless channel of purely theoretic contemplation, let us ask what conception of the universe will awaken active impulses capable of effecting this diversion. A definition of the world which will give back to the mind the free motion which has been blocked in the purely contemplative path may so far make the world seem rational again.

Well, of two conceptions equally fit to satisfy the logical demand, that one which awakens the active impulses, or

satisfies other æsthetic demands better than the other, will be accounted the more rational conception, and will deservedly prevail.

There is nothing improbable in the supposition that an analysis of the world may yield a number of formulæ, all consistent with the facts. In physical science different formulæ may explain the phenomena equally well—the one-fluid and the two-fluid theories of electricity, for example. Why may it not be so with the world? Why may there not be different points of view for surveying it, within each of which all data harmonize, and which the observer may therefore either choose between, or simply cumulate one upon another? A Beethoven string-quartet is truly, as some one has said, a scraping of horses' tails on cats' bowels, and may be exhaustively described in such terms; but the application of this description in no way precludes the simultaneous applicability of an entirely different description. Just so a thorough-going interpretation of the world in terms of mechanical sequence is compatible with its being interpreted teleologically, for the mechanism itself may be designed.

If, then, there were several systems excogitated, equally satisfying to our purely logical needs, they would still have to be passed in review, and approved or rejected by our æsthetic and practical nature. Can we define the tests of rationality which these parts of our nature would use?

Philosophers long ago observed the remarkable fact that mere familiarity with things is able to produce a feeling of their rationality. The empiricist school has been so much struck by this circumstance as to have laid it down that the feeling of rationality and the feeling of familiarity are one and the same thing, and that no other kind of rationality than this exists. The daily contemplation of phenomena juxtaposed in a certain order begets an acceptance of their connection, as absolute as the repose engendered by theoretic insight into their coherence. To explain a thing is to

pass easily back to its antecedents; to know it is easily to foresee its consequents. Custom, which lets us do both, is thus the source of whatever rationality the thing may gain in our thought.

In the broad sense in which rationality was defined at the outset of this essay, it is perfectly apparent that custom must be one of its factors. We said that any perfectly fluent and easy thought was devoid of the sentiment of irrationality. Inasmuch then as custom acquaints us with all the relations of a thing, it teaches us to pass fluently from that thing to others, and *pro tanto* tinges it with the rational character.

Now, there is one particular relation of greater practical importance than all the rest—I mean the relation of a thing to its future consequences. So long as an object is unusual, our expectations are baffled; they are fully determined as soon as it becomes familiar. I therefore propose this as the first practical requisite which a philosophic conception must satisfy: *It must, in a general way at least, banish uncertainty from the future.* The permanent presence of the sense of futurity in the mind has been strangely ignored by most writers, but the fact is that our consciousness at a given moment is never free from the ingredient of expectancy. Every one knows how when a painful thing has to be undergone in the near future, the vague feeling that it is impending penetrates all our thought with uneasiness and subtly vitiates our mood even when it does not control our attention; it keeps us from being at rest, at home in the given present. The same is true when a great happiness awaits us. But when the future is neutral and perfectly certain, " we do not mind it," as we say, but give an undisturbed attention to the actual. Let now this haunting sense of futurity be thrown off its bearings or left without an object, and immediately uneasiness takes possession of the mind. But in every novel or unclassified experience this is just what occurs; we do not know what will come next; and novelty *per se* becomes a mental irri-

tant, while custom *per se* is a mental sedative, merely because the one baffles while the other settles our expectations.

Every reader must feel the truth of this. What is meant by coming " to feel at home " in a new place, or with new people? It is simply that, at first, when we take up our quarters in a new room, we do not know what draughts may blow in upon our back, what doors may open, what forms may enter, what interesting objects may be found in cupboards and corners. When after a few days we have learned the range of all these possibilities, the feeling of strangeness disappears. And so it does with people, when we have got past the point of expecting any essentially new manifestations from their character.

The utility of this emotional effect of expectation is perfectly obvious; " natural selection," in fact, was bound to bring it about sooner or later. It is of the utmost practical importance to an animal that he should have prevision of the qualities of the objects that surround him, and especially that he should not come to rest in presence of circumstances that might be fraught either with peril or advantage—go to sleep, for example, on the brink of precipices, in the dens of enemies, or view with indifference some new-appearing object that might, if chased, prove an important addition to the larder. Novelty *ought* to irritate him. All curiosity has thus a practical genesis. We need only look at the physiognomy of a dog or a horse when a new object comes into his view, his mingled fascination and fear, to see that the element of conscious insecurity or perplexed expectation lies at the root of his emotion. A dog's curiosity about the movements of his master or a strange object only extends as far as the point of deciding what is going to happen next. That settled, curiosity is quenched. The dog quoted by Darwin, whose behaviour in presence of a newspaper moved by the wind seemed to testify to a sense " of the supernatural," was merely exhibiting the irritation of an uncertain future. A newspaper which could move spontaneously was in itself so unexpected that the

poor brute could not tell what new wonders the next moment might bring forth.

To turn back now to philosophy. An ultimate datum, even though it be logically unrationalized, will, if its quality is such as to define expectancy, be peacefully accepted by the mind; while if it leave the least opportunity for ambiguity in the future, it will to that extent cause mental uneasiness if not distress. Now, in the ultimate explanations of the universe which the craving for rationality has elicited from the human mind, the demands of expectancy to be satisfied have always played a fundamental part. The term set up by philosophers as primordial has been one which banishes the incalculable. "Substance," for example, means, as Kant says, *das Beharrliche*, which will be as it has been, because its being is essential and eternal. And although we may not be able to prophesy in detail the future phenomena to which the substance shall give rise, we may set our minds at rest in a general way, when we have called the substance God, Perfection, Love, or Reason, by the reflection that whatever is in store for us can never at bottom be inconsistent with the character of this term; so that our attitude even toward the unexpected is in a general sense defined. Take again the notion of immortality, which for common people seems to be the touchstone of every philosophic or religious creed: what is this but a way of saying that the determination of expectancy is the essential factor of rationality? The wrath of science against miracles, of certain philosophers against the doctrine of free-will, has precisely the same root—dislike to admit any ultimate factor in things which may rout our prevision or upset the stability of our outlook.

Anti-substantialist writers strangely overlook this function in the doctrine of substance: "If there be such a *substratum*," says Mill, "suppose it at this instant miraculously annihilated, and let the sensations continue to occur in the same order, and how would the *substratum*

be missed? By what signs should we be able to discover that its existence had terminated? Should we not have as much reason to believe that it still existed as we now have? And if we should not then be warranted in believing it, how can we be so now?" Truly enough, if we have already securely bagged our facts in a certain order, we can dispense with any further warrant for that order. But with regard to the facts yet to come the case is far different. It does not follow that if substance may be dropped from our conception of the irrecoverably past, it need be an equally empty complication to our notions of the future. Even if it were true that, for aught we know to the contrary, the substance might develop at any moment a wholly new set of attributes, the mere logical form of referring things to a substance would still (whether rightly or wrongly) remain accompanied by a feeling of rest and future confidence. In spite of the acutest nihilistic criticism, men will therefore always have a liking for any philosophy which explains things *per substantiam*.

A very natural reaction against the theosophizing conceit and hide-bound confidence in the upshot of things, which vulgarly optimistic minds display, has formed one factor of the scepticism of empiricists, who never cease to remind us of the reservoir of possibilities alien to our habitual experience which the cosmos may contain, and which, for any warrant we have to the contrary, may turn it inside out to-morrow. Agnostic substantialism like that of Mr. Spencer, whose Unknowable is not merely the unfathomable but the absolute-irrational, on which, if consistently represented in thought, it is of course impossible to count, performs the same function of rebuking a certain stagnancy and smugness in the manner in which the ordinary philistine feels his security. But considered as anything else than as reactions against an opposite excess, these philosophies of uncertainty cannot be acceptable; the general mind will fail to come to rest in their presence, and will seek for solutions of a more reassuring kind.

We may then, I think, with perfect confidence lay down as a first point gained in our inquiry, that a prime factor in the philosophic craving is the desire to have expectancy defined; and that no philosophy will definitively triumph which in an emphatic manner denies the possibility of gratifying this need.

We pass with this to the next great division of our topic. It is not sufficient for our satisfaction merely to know the future as determined, for it may be determined in either of many ways, agreeable or disagreeable. For a philosophy to succeed on a universal scale it must define the future *congruously with our spontaneous powers.* A philosophy may be unimpeachable in other respects, but either of two defects will be fatal to its universal acceptance. First, its ultimate principle must not be one that essentially baffles and disappoints our dearest desires and most cherished powers. A pessimistic principle like Schopenhauer's incurably vicious Will-substance, or Hartmann's wicked jack-of-all-trades the Unconscious, will perpetually call forth essays at other philosophies. Incompatibility of the future with their desires and active tendencies is, in fact, to most men a source of more fixed disquietude than uncertainty itself. Witness the attempts to overcome the "problem of evil," the "mystery of pain." There is no "problem of good."

But a second and worse defect in a philosophy than that of contradicting our active propensities is to give them no object whatever to press against. A philosophy whose principle is so incommensurate with our most intimate powers as to deny them all relevancy in universal affairs, as to annihilate their motives at one blow, will be even more unpopular than pessimism. Better face the enemy than the eternal Void! This is why materialism will always fail of universal adoption, however well it may fuse things into atomistic unity, however clearly it may prophesy the future eternity. For materialism denies reality to the objects of

almost all the impulses which we most cherish. The real *meaning* of the impulses, it says, is something which has no emotional interest for us whatever. Now, what is called "extradition" is quite as characteristic of our emotions as of our senses: both point to an object as the cause of the present feeling. What an intensely objective reference lies in fear! In like manner an enraptured man and a dreary-feeling man are not simply aware of their subjective states; if they were, the force of their feelings would all evaporate. Both believe there is outward cause why they should feel as they do: either, "It is a glad world! how good life is!" or, "What a loathsome tedium is existence!" Any philosophy which annihilates the validity of the reference by explaining away its objects or translating them into terms of no emotional pertinency, leaves the mind with little to care or act for. This is the opposite condition from that of nightmare, but when acutely brought home to consciousness it produces a kindred horror. In nightmare we have motives to act, but no power; here we have powers, but no motives. A nameless *unheimlichkeit* comes over us at the thought of there being nothing eternal in our final purposes, in the objects of those loves and aspirations which are our deepest energies. The monstrously lopsided equation of the universe and its knower, which we postulate as the ideal of cognition, is perfectly paralleled by the no less lopsided equation of the universe and the *doer*. We demand in it a character for which our emotions and active propensities shall be a match. Small as we are, minute as is the point by which the cosmos impinges upon each one of us, each one desires to feel that his reaction at that point is congruous with the demands of the vast whole—that he balances the latter, so to speak, and is able to do what it expects of him. But as his abilities to do lie wholly in the line of his natural propensities; as he enjoys reacting with such emotions as fortitude, hope, rapture, admiration, earnestness, and the like; and as he very unwillingly reacts with fear, disgust, despair, or doubt

—a philosophy which should only legitimate emotions of the latter sort would be sure to leave the mind a prey to discontent and craving.

It is far too little recognized how entirely the intellect is built up of practical interests. The theory of evolution is beginning to do very good service by its reduction of all mentality to the type of reflex action. Cognition, in this view, is but a fleeting moment, a cross-section at a certain point, of what in its totality is a motor phenomenon. In the lower forms of life no one will pretend that cognition is anything more than a guide to appropriate action. The germinal question concerning things brought for the first time before consciousness is not the theoretic "What is that?" but the practical "Who goes there?" or rather, as Horwicz has admirably put it, "What is to be done?" —"Was fang' ich an?" In all our discussions about the intelligence of lower animals, the only test we use is that of their *acting* as if for a purpose. Cognition, in short, is incomplete until discharged in act; and although it is true that the later mental development, which attains its maximum through the hypertrophied cerebrum of man, gives birth to a vast amount of theoretic activity over and above that which is immediately ministerial to practice, yet the earlier claim is only postponed, not effaced, and the active nature asserts its rights to the end.

When the cosmos in its totality is the object offered to consciousness, the relation is in no whit altered. React on it we must in some congenial way. It was a deep instinct in Schopenhauer which led him to reinforce his pessimistic argumentation by a running volley of invective against the practical man and his requirements. No hope for pessimism unless he is slain!

Helmholtz's immortal works on the eye and ear are to a great extent little more than a commentary on the law that practical utility wholly determines which parts of our sensations we shall be aware of, and which parts we shall ignore. We notice or discriminate an ingredient of sense

only so far as we depend upon it to modify our actions. We *comprehend* a thing when we synthetize it by identity with another thing. But the other great department of our understanding, *acquaintance* (the two departments being recognized in all languages by the antithesis of such words as *wissen* and *kennen*; *scire* and *noscere*, etc.), what is that also but a synthesis—a synthesis of a passive perception with a certain tendency to reaction? We are acquainted with a thing as soon as we have learned how to behave towards it, or how to meet the behaviour which we expect from it. Up to that point it is still "strange" to us.

If there be anything at all in this view, it follows that however vaguely a philosopher may define the ultimate universal datum, he cannot be said to leave it unknown to us so long as he in the slightest degree pretends that our emotional or active attitude toward it should be of one sort rather than another. He who says "life is real, life is earnest," however much he may speak of the fundamental mysteriousness of things, gives a distinct definition to that mysteriousness by ascribing to it the right to claim from us the particular mood called seriousness—which means the willingness to live with energy, though energy bring pain. The same is true of him who says that all is vanity. For indefinable as the predicate "vanity" may be *in se*, it is clearly something that permits anæsthesia, mere escape from suffering, to be our rule of life. There can be no greater incongruity than for a disciple of Spencer to proclaim with one breath that the substance of things is unknowable, and with the next that the thought of it should inspire us with awe, reverence, and a willingness to add our co-operative push in the direction toward which its manifestations seem to be drifting. The unknowable may be unfathomed, but if it make such distinct demands upon our activity we surely are not ignorant of its essential quality.

If we survey the field of history and ask what feature all

great periods of revival, of expansion of the human mind, display in common, we shall find, I think, simply this: that each and all of them have said to the human being, "The inmost nature of the reality is congenial to *powers* which you possess." In what did the emancipation message of primitive Christianity consist but in the announcement that God recognizes those weak and tender impulses which paganism had so rudely overlooked? Take repentance: the man who can do nothing rightly can at least repent of his failures. But for paganism this faculty of repentance was a pure supernumerary, a straggler too late for the fair. Christianity took it, and made it the one power within us which appealed straight to the heart of God. And after the night of the middle ages had so long branded with obloquy even the generous impulses of the flesh, and defined the reality to be such that only slavish natures could commune with it, in what did the *sursum corda* of the platonizing renaissance lie but in the proclamation that the archetype of verity in things laid claim on the widest activity of our whole æsthetic being? What were Luther's mission and Wesley's but appeals to powers which even the meanest of men might carry with them—faith and self-despair—but which were personal, requiring no priestly intermediation, and which brought their owner face to face with God? What caused the wildfire influence of Rousseau but the assurance he gave that man's nature was in harmony with the nature of things, if only the paralyzing corruptions of custom would stand from between? How did Kant and Fichte, Goethe and Schiller, inspire their time with cheer, except by saying, "Use all your powers; that is the only obedience the universe exacts"? And Carlyle with his gospel of work, of fact, of veracity, how does he move us except by saying that the universe imposes no tasks upon us but such as the most humble can perform? Emerson's creed that everything that ever was or will be is here in the enveloping now; that man has but to obey himself—"He who will rest in what he *is*, is a part of destiny"—is in like manner nothing

but an exorcism of all scepticism as to the pertinency of one's natural faculties.

In a word, "Son of Man, *stand upon thy feet* and I will speak unto thee!" is the only revelation of truth to which the solving epochs have helped the disciple. But that has been enough to satisfy the greater part of his rational need. *In se* and *per se* the universal essence had hardly been more defined by any of these formulas than by the agnostic x; but the mere assurance that my powers, such as they are, are not irrelevant to it, but pertinent; that it speaks to them and will in some way recognize their reply; that I can be a match for it if I will, and not a footless waif—suffices to make it rational to my feeling in the sense given above. Nothing could be more absurd than to hope for the definitive triumph of any philosophy which should refuse to legitimate, and to legitimate in an emphatic manner, the more powerful of our emotional and practical tendencies. Fatalism, whose solving word in all crises of behaviour is "all striving is vain," will never reign supreme, for the impulse to take life strivingly is indestructible in the race. Moral creeds which speak to that impulse will be widely successful in spite of inconsistency, vagueness, and shadowy determination of expectancy. Man needs a rule for his will, and will invent one if one be not given him.

But now observe a most important consequence. Men's active impulses are so differently mixed that a philosophy fit in this respect for Bismarck will almost certainly be unfit for a valetudinarian poet. In other words, although one can lay down in advance the rule that a philosophy which utterly denies all fundamental ground for seriousness, for effort, for hope, which says the nature of things is radically alien to human nature, can never succeed—one cannot in advance say what particular dose of hope, or of gnosticism of the nature of things, the definitely successful philosophy shall contain. In short, it is almost certain that personal temperament will here make itself felt, and that although

all men will insist on being spoken to by the universe in some way, few will insist on being spoken to in just the same way. We have here, in short, the sphere of what Matthew Arnold likes to call *Aberglaube*, legitimate, inexpugnable, yet doomed to eternal variations and disputes.

Take idealism and materialism as examples of what I mean, and suppose for a moment that both give a conception of equal theoretic clearness and consistency, and that both determine our expectations equally well. Idealism will be chosen by a man of one emotional constitution, materialism by another. At this very day all sentimental natures, fond of conciliation and intimacy, tend to an idealistic faith. Why? Because idealism gives to the nature of things such kinship with our personal selves. Our own thoughts are what we are most at home with, what we are least afraid of. To say then that the universe essentially is thought, is to say that I myself, potentially at least, am all. There is no radically alien corner, but an all-pervading *intimacy*. Now, in certain sensitively egotistic minds this conception of reality is sure to put on a narrow, close, sick-room air. Everything sentimental and priggish will be consecrated by it. That element in reality which every strong man of common-sense willingly feels there because it calls forth powers that he owns—the rough, harsh, sea-wave, north-wind element, the denier of persons, the democratizer—is banished because it jars too much on the desire for communion. Now, it is the very enjoyment of this element that throws many men upon the materialistic or agnostic hypothesis, as a polemic reaction against the contrary extreme. They sicken at a life wholly constituted of intimacy. There is an overpowering desire at moments to escape personality, to revel in the action of forces that have no respect for our ego, to let the tides flow, even though they flow over us. The strife of these two kinds of mental temper will, I think, always be seen in philosophy. Some men will keep insisting on the reason, the atonement, that lies in

the heart of things, and that we can act *with;* others, on the opacity of brute fact that we must react *against.*

Now, there is one element of our active nature which the Christian religion has emphatically recognized, but which philosophers as a rule have with great insincerity tried to huddle out of sight in their pretension to found systems of absolute certainty. I mean the element of faith. Faith means belief in something concerning which doubt is still theoretically possible; and as the test of belief is willingness to act, one may say that faith is the readiness to act in a cause the prosperous issue of which is not certified to us in advance. It is in fact the same moral quality which we call courage in practical affairs; and there will be a very widespread tendency in men of vigorous nature to enjoy a certain amount of uncertainty in their philosophic creed, just as risk lends a zest to worldly activity. Absolutely certified philosophies seeking the *inconcussum* are fruits of mental natures in which the passion for identity (which we saw to be but one factor of the rational appetite) plays an abnormally exclusive part. In the average man, on the contrary, the power to trust, to risk a little beyond the literal evidence, is an essential function. Any mode of conceiving the universe which makes an appeal to this generous power, and makes the man seem as if he were individually helping to create the actuality of the truth whose metaphysical reality he is willing to assume, will be sure to be responded to by large numbers.

The necessity of faith as an ingredient in our mental attitude is strongly insisted on by the scientific philosophers of the present day; but by a singularly arbitrary caprice they say that it is only legitimate when used in the interests of one particular proposition—the proposition, namely, that the course of nature is uniform. That nature will follow to-morrow the same laws that she follows to-day is, they all admit, a truth which no man can *know;* but in the interests of cognition as well as of action we must postulate

or assume it. As Helmholtz says: "Hier gilt nur der eine Rath: vertraue und handle!" And Professor Bain urges: "Our only error is in proposing to give any reason or justification of the postulate, or to treat it as otherwise than begged at the very outset."

With regard to all other possible truths, however, a number of our most influential contemporaries think that an attitude of faith is not only illogical but shameful. Faith in a religious dogma for which there is no outward proof, but which we are tempted to postulate for our emotional interests, just as we postulate the uniformity of nature for our intellectual interests, is branded by Professor Huxley as "the lowest depth of immorality." Citations of this kind from leaders of the modern *Aufklärung* might be multiplied almost indefinitely. Take Professor Clifford's article on the "Ethics of Belief." He calls it "guilt" and "sin" to believe even the truth without "scientific evidence." But what is the use of being a genius, unless *with the same scientific evidence* as other men, one can reach more truth than they? Why does Clifford fearlessly proclaim his belief in the conscious-automaton theory, although the "proofs" before him are the same which make Mr. Lewes reject it? Why does he believe in primordial units of "mind-stuff" on evidence which would seem quite worthless to Professor Bain? Simply because, like every human being of the slightest mental originality, he is peculiarly sensitive to evidence that bears in some one direction. It is utterly hopeless to try to exorcise such sensitiveness by calling it the disturbing subjective factor, and branding it as the root of all evil. "Subjective!" be it called! and "disturbing" to those whom it foils! But if it helps those who, as Cicero says, "vim naturæ magis sentiunt," it is good and not evil. Pretend what we may, the whole man within us is at work when we form our philosophical opinions. Intellect, will, taste, and passion co-operate just as they do in practical affairs; and lucky it is if the passion be not something as petty as a love of personal conquest over the philosopher

across the way. The absurd abstraction of an intellect verbally formulating all its evidence and carefully estimating the probability thereof by a vulgar fraction by the size of whose denominator and numerator alone it is swayed, is ideally as inept as it is actually impossible. It is almost incredible that men who are themselves working philosophers should pretend that any philosophy can be, or ever has been, constructed without the help of personal preference, belief, or divination. How have they succeeded in so stultifying their sense for the living facts of human nature as not to perceive that every philosopher, or man of science either, whose initiative counts for anything in the evolution of thought, has taken his stand on a sort of dumb conviction that the truth must lie in one direction rather than another, and a sort of preliminary assurance that his notion can be made to work; and has borne his best fruit in trying to make it work? These mental instincts in different men are the spontaneous variations upon which the intellectual struggle for existence is based. The fittest conceptions survive, and with them the names of their champions shining to all futurity.

The coil is about us, struggle as we may. The only escape from faith is mental nullity. What we enjoy most in a Huxley or a Clifford is not the professor with his learning, but the human personality ready to go in for what it feels to be right, in spite of all appearances. The concrete man has but one interest—to be right. That for him is the art of all arts, and all means are fair which help him to it. Naked he is flung into the world, and between him and nature there are no rules of civilized warfare. The rules of the scientific game, burdens of proof, presumptions, *experimenta crucis*, complete inductions, and the like, are only binding on those who enter that game. As a matter of fact we all more or less do enter it, because it helps us to our end. But if the means presume to frustrate the end and call us cheats for being right in advance of their slow aid, by guesswork or by hook or crook, what shall we say of them? Were all

of Clifford's works, except the *Ethics of Belief*, forgotten, he might well figure in future treatises on psychology in place of the somewhat threadbare instance of the miser who has been led by the association of ideas to prefer his gold to all the goods he might buy therewith.

In short, if I am born with such a superior general reaction to evidence that I can guess right and act accordingly, and gain all that comes of right action, while my less gifted neighbour (paralyzed by his scruples and waiting for more evidence which he dares not anticipate, much as he longs to) still stands shivering on the brink, by what law shall I be forbidden to reap the advantages of my superior native sensitiveness? Of course I yield to my belief in such a case as this or distrust it, alike at my peril, just as I do in any of the great practical decisions of life. If my inborn faculties are good, I am a prophet; if poor, I am a failure: nature spews me out of her mouth, and there is an end of me. In the total game of life we stake our persons all the while; and if in its theoretic part our persons will help us to a conclusion, surely we should also stake them there, however inarticulate they may be.[1]

But in being myself so very articulate in proving what to all readers with a sense for reality will seem a platitude, am I not wasting words? We cannot live or think at all without some degree of faith. Faith is synonymous with

[1] At most, the command laid upon us by science to believe nothing not yet verified by the senses is a prudential rule intended to maximize our right thinking and minimize our errors *in the long run*. In the particular instance we must frequently lose truth by obeying it; but on the whole we are safer if we follow it consistently, for we are sure to cover our losses with our gains. It is like those gambling and insurance rules based on probability, in which we secure ourselves against losses in detail by hedging on the total run. But this hedging philosophy requires that long run should be there; and this makes it inapplicable to the question of religious faith as the latter comes home to the individual man. He plays the game of life not to escape losses, for he brings nothing with him to lose; he plays it for gains; and it is now or never with him, for the long run which exists indeed for humanity, is not there for him. Let him doubt, believe, or deny, he runs his risk, and has the natural right to choose which one it shall be.

working hypothesis. The only difference is that while some hypotheses can be refuted in five minutes, others may defy ages. A chemist who conjectures that a certain wall-paper contains arsenic, and has faith enough to lead him to take the trouble to put some of it into a hydrogen bottle, finds out by the results of his action whether he was right or wrong. But theories like that of Darwin, or that of the kinetic constitution of matter, may exhaust the labours of generations in their corroboration, each tester of their truth proceeding in this simple way—that he acts as if it were true, and expects the result to disappoint him if his assumption is false. The longer disappointment is delayed, the stronger grows his faith in his theory.

Now, in such questions as God, immortality, absolute morality, and free-will, no non-papal believer at the present day pretends his faith to be of an essentially different complexion; he can always doubt his creed. But his intimate persuasion is that the odds in its favour are strong enough to warrant him in acting all along on the assumption of its truth. His corroboration or repudiation by the nature of things may be deferred until the day of judgment. The uttermost he now means is something like this: "I *expect* then to triumph with tenfold glory; but if it should turn out, as indeed it may, that I have spent my days in a fool's paradise, why, better have been the dupe of *such* a dreamland than the cunning reader of a world like that which then beyond all doubt unmasks itself to view." In short, we *go in* against materialism very much as we should *go in*, had we a chance, against the second French empire or the Church of Rome, or any other system of things toward which our repugnance is vast enough to determine energetic action, but too vague to issue in distinct argumentation. Our reasons are ludicrously incommensurate with the volume of our feeling, yet on the latter we unhesitatingly act.

Now, I wish to show what to my knowledge has never

been clearly pointed out, that belief (as measured by action) not only does and must continually outstrip scientific evidence, but that there is a certain class of truths of whose reality belief is a factor as well as a confessor; and that as regards this class of truths faith is not only licit and pertinent, but essential and indispensable. The truths cannot become true till our faith has made them so.

Suppose, for example, that I am climbing in the Alps and have had the ill-luck to work myself into a position from which the only escape is by a terrible leap. Being without similar experience, I have no evidence of my ability to perform it successfully; but hope and confidence in myself make me sure I shall not miss my aim, and nerve my feet to execute what without those subjective emotions would perhaps have been impossible. But suppose that, on the contrary, the emotions of fear and mistrust preponderate; or suppose that, having just read the *Ethics of Belief*, I feel it would be sinful to act upon an assumption unverified by previous experience—why, then I shall hesitate so long that at last, exhausted and trembling, and launching myself in a moment of despair, I miss my foothold and roll into the abyss. In this case (and it is one of an immense class) the part of wisdom clearly is to believe what one desires; for the belief is one of the indispensable preliminary conditions of the realization of its object. *There are then cases where faith creates its own verification.* Believe, and you shall be right, for you shall save yourself; doubt, and you shall again be right, for you shall perish. The only difference is that to believe is greatly to your advantage.

The future movements of the stars or the facts of past history are determined now once for all, whether I like them or not. They are given irrespective of my wishes, and in all that concerns truths like these subjective preference should have no part; it can only obscure the judgment. But in every fact into which there enters an element of personal contribution on my part, as soon as this personal contri-

bution demands a certain degree of subjective energy which, in its turn, calls for a certain amount of faith in the result—so that, after all, the future fact is conditioned by my present faith in it—how trebly asinine would it be for me to deny myself the use of the subjective method, the method of belief based on desire!

In every proposition whose bearing is universal (and such are all the propositions of philosophy), the acts of the subject and their consequences throughout eternity should be included in the formula. If M represent the entire world *minus* the reaction of the thinker upon it, and if $M+x$ represent the absolutely total matter of philosophic propositions (x standing for the thinker's reaction and its results)—what would be a universal truth if the term x were of one complexion, might become egregious error if x altered its character. Let it not be said that x is too infinitesimal a component to change the character of the immense whole in which it lies imbedded. Everything depends on the point of view of the philosophic proposition in question. If we have to define the universe from the point of view of sensibility, the critical material for our judgment lies in the animal kingdom, insignificant as that is, quantitatively considered. The moral definition of the world may depend on phenomena more restricted still in range. In short, many a long phrase may have its sense reversed by the addition of three letters, *n-o-t;* many a monstrous mass have its unstable equilibrium discharged one way or the other by a feather weight that falls.

Let us make this clear by a few examples. The philosophy of evolution offers us to-day a new criterion to serve as an ethical test between right and wrong. Previous criteria, it says, being subjective, have left us still floundering in variations of opinion and the *status belli*. Here is a criterion which is objective and fixed: *That is to be called good which is destined to prevail or survive.* But we immediately see that this standard can only remain objective by leaving myself and my conduct out. If what prevails and survives

does so by my help, and cannot do so without that help; if something else will prevail in case I alter my conduct—how can I possibly now, conscious of alternative courses of action open before me, either of which I may suppose capable of altering the path of events, decide which course to take by asking what path events will follow? If they follow my direction, evidently my direction cannot wait on them. The only possible manner in which an evolutionist can use his standard is the obsequious method of forecasting the course society would take *but for him*, and then putting an extinguisher on all personal idiosyncrasies of desire and interest, and with bated breath and tiptoe tread following as straight as may be at the tail, and bringing up the rear of everything. Some pious creatures may find a pleasure in this; but not only does it violate our general wish to lead and not to follow (a wish which is surely not immoral if we but lead aright), but if it be treated as every ethical principle must be treated—namely, as a rule good for all men alike—its general observance would lead to its practical refutation by bringing about a general deadlock. Each good man hanging back and waiting for orders from the rest, absolute stagnation would ensue. Happy, then, if a few unrighteous ones contribute an initiative which sets things moving again!

All this is no caricature. That the course of destiny may be altered by individuals no wise evolutionist ought to doubt. Everything for him has small beginnings, has a bud which may be "nipped," and nipped by a feeble force. Human races and tendencies follow the law, and have also small beginnings. The best, according to evolution, is that which has the biggest endings. Now, if a present race of men, enlightened in the evolutionary philosophy, and able to forecast the future, were able to discern in a tribe arising near them the potentiality of future supremacy; were able to see that their own race would eventually be wiped out of existence by the new-comers if the expansion of these were left unmolested—these present sages would have two

courses open to them, either perfectly in harmony with the evolutionary test: Strangle the new race *now*, and ours survives; help the new race, and *it* survives. In both cases the action is right as measured by the evolutionary standard—it is action for the winning side.

Thus the evolutionist foundation of ethics is purely objective only to the herd of nullities whose votes count for zero in the march of events. But for others, leaders of opinion or potentates, and in general those to whose actions position or genius gives a far-reaching import, and to the rest of us, each in his measure—whenever we espouse a cause we contribute to the determination of the evolutionary standard of right. The truly wise disciple of this school will then admit faith as an ultimate ethical factor. Any philosophy which makes such questions as, What is the ideal type of humanity? What shall be reckoned virtues? What conduct is good? depend on the question, What is going to succeed?—must needs fall back on personal belief as one of the ultimate conditions of the truth. For again and again success depends on energy of act; energy again depends on faith that we shall not fail; and that faith in turn on the faith that we are right—which faith thus verifies itself.

Take as an example the question of optimism or pessimism, which makes so much noise just now in Germany. Every human being must sometime decide for himself whether life is worth living. Suppose that in looking at the world and seeing how full it is of misery, of old age, of wickedness and pain, and how unsafe is his own future, he yields to the pessimistic conclusion, cultivates disgust and dread, ceases striving, and finally commits suicide. He thus adds to the mass M of mundane phenomena, independent of his subjectivity, the subjective complement x, which makes of the whole an utterly black picture illumined by no gleam of good. Pessimism completed, verified by his moral reaction and the deed in which this ends, is true beyond a doubt. $M+x$ expresses a state of things totally bad. The man's belief supplied all that was lacking to

make it so, and now that it is made so the belief was right.

But now suppose that with the same evil facts *M*, the man's reaction *x* is exactly reversed; suppose that instead of giving way to the evil he braves it, and finds a sterner, more wonderful joy than any passive pleasure can yield in triumphing over pain and defying fear; suppose he does this successfully, and however thickly evils crowd upon him proves his dauntless subjectivity to be more than their match—will not every one confess that the bad character of the *M* is here the *conditio sine qua non* of the good character of the *x*? Will not every one instantly declare a world fitted only for fair-weather human beings susceptible of every passive enjoyment, but without independence, courage, or fortitude, to be from a moral point of view incommensurably inferior to a world framed to elicit from the man every form of triumphant endurance and conquering moral energy? As James Hinton says:—

"Little inconveniences, exertions, pains—these are the only things in which we rightly feel our life at all. If these be not there, existence becomes worthless, or worse; success in putting them all away is fatal. So it is men engage in athletic sports, spend their holidays in climbing up mountains, find nothing so enjoyable as that which taxes their endurance and their energy. This is the way we are made, I say. It may or may not be a mystery or a paradox; it is a fact. Now, this enjoyment in endurance is just according to the intensity of life: the more physical vigour and balance, the more endurance can be made an element of satisfaction. A sick man cannot stand it. The line of enjoyable suffering is not a fixed one; it fluctuates with the perfectness of the life. That our pains are, as they are, unendurable, awful, overwhelming, crushing, not to be borne save in misery and dumb impatience, which utter exhaustion alone makes patient—that our pains are thus unendurable, means not that they are too great but that *we are sick*. We have not got our proper life. So you perceive pain is no

more necessarily an evil, but an essential element of the highest good." [1]

'But the highest good can be achieved only by our getting our proper life; and that can come about only by help of a moral energy born of the faith that in some way or other we shall succeed in getting it if we try pertinaciously enough. This world *is* good, we must say, since it is what we make it—and we shall make it good. How can we exclude from the cognition of a truth a faith which is involved in the creation of the truth? M has its character indeterminate, susceptible of forming part of a thorough-going pessimism on the one hand, or of a meliorism, a moral (as distinguished from a sensual) optimism on the other. All depends on the character of the personal contribution x. Wherever the facts to be formulated contain such a contribution, we may logically, legitimately, and inexpugnably believe what we desire. The belief creates its verification. The thought becomes literally father to the fact, as the wish was father to the thought.[2]

Let us now turn to the radical question of life—the question whether this be at bottom a moral or an unmoral universe—and see whether the method of faith may legitimately have a place there. It is really the question of materialism. Is the world a simple brute actuality, an existence *de facto* about which the deepest thing that can be said is that it happens so to be; or is the judgment of *better* or

[1] *Life of James Hinton*, pp. 172, 173. See also the excellent chapter on "Faith and Sight" in *The Mystery of Matter*, by J. Allanson Picton. Hinton's *Mystery of Pain* will undoubtedly always remain the classical utterance on this subject.

[2] Observe that in all this not a word has been said of free-will. It all applies as well to a predetermined as to an indeterminate universe. If $M+x$ is fixed in advance, the belief which leads to x and the desire which prompts the belief are also fixed. But fixed or not, these subjective states form a phenomenal condition necessarily preceding the facts; necessarily constitutive, therefore, of the truth $M+x$ which we seek. If, however, free acts be possible, a faith in their possibility, by augmenting the moral energy which gives them birth, will increase their frequency in a given individual.

worse, of *ought*, as intimately pertinent to phenomena as the simple judgment *is* or *is not*? The materialistic theorists say that judgments of worth are themselves mere matters of fact; that the words "good" and "bad" have no sense apart from subjective passions and interests which we may, if we please, play fast and loose with at will, so far as any duty of ours to the non-human universe is concerned. Thus, when a materialist says it is better for him to suffer great inconvenience than to break a promise, he only means that his social interests have become so knit up with keeping faith that, those interests once being granted, it *is* better for him to keep the promise in spite of everything. But the interests themselves are neither right nor wrong, except possibly with reference to some ulterior order of interests which themselves again are mere subjective data without character, either good or bad.

For the absolute moralists, on the contrary, the interests are not there merely to be felt—they are to be believed in and obeyed. Not only is it best for my social interests to keep my promise, but best for me to have those interests, and best for the cosmos to have this me. Like the old woman in the story who described the world as resting on a rock, and then explained that rock to be supported by another rock, and finally when pushed with questions said it was rocks all the way down—he who believes this to be a radically moral universe must hold the moral order to rest either on an absolute and ultimate *should*, or on a series of *shoulds* all the way down.[1]

The practical difference between this objective sort of moralist and the other one is enormous. The subjectivist in morals, when his moral feelings are at war with the facts about him, is always free to seek harmony by toning down the sensitiveness of the feelings. Being mere data, neither good nor evil in themselves, he may pervert them or lull

[1] In either case, as a later essay explains, the *should* which the moralist regards as binding upon *him* must be rooted in the feeling of some other thinker, or collection of thinkers, to whose demands he individually bows.

them to sleep by any means at his command. Truckling, compromise, time-serving, capitulations of conscience, are conventionally opprobrious names for what, if successfully carried out, would be on his principles by far the easiest and most praiseworthy mode of bringing about that harmony between inner and outer relations which is all that he means by good. The absolute moralist, on the other hand, when his interests clash with the world, is not free to gain harmony by sacrificing the ideal interests. According to him, these latter should be as they are and not otherwise. Resistance then, poverty, martyrdom if need be, tragedy in a word—such are the solemn feasts of his inward faith. Not that the contradiction between the two men occurs every day; in commonplace matters all moral schools agree. It is only in the lonely emergencies of life that our creed is tested: then routine maxims fail, and we fall back on our gods. It cannot then be said that the question, Is this a moral world? is a meaningless and unverifiable question because it deals with something non-phenomenal. Any question is full of meaning to which, as here, contrary answers lead to contrary behaviour. And it seems as if in answering such a question as this we might proceed exactly as does the physical philosopher in testing an hypothesis. He deduces from the hypothesis an experimental action, x; this he adds to the facts M already existing. It fits them if the hypothesis be true; if not, there is discord. The results of the action corroborate or refute the idea from which it flowed. So here: the verification of the theory which you may hold as to the objectively moral character of the world can consist only in this—that if you proceed to act upon your theory it will be reversed by nothing that later turns up as your action's fruit; it will harmonize so well with the entire drift of experience that the latter will, as it were, adopt it, or at most give it an ampler interpretation, without obliging you in any way to change the essence of its formulation. If this be an objectively moral universe, all acts that I make on that assumption, all expectations that I ground on

it, will tend more and more completely to interdigitate with the phenomena already existing. $M+x$ will be in accord; and the more I live, and the more the fruits of my activity come to light, the more satisfactory the consensus will grow. While if it be not such a moral universe, and I mistakenly assume that it is, the course of experience will throw ever new impediments in the way of my belief, and become more and more difficult to express in its language. Epicycle upon epicycle of subsidiary hypothesis will have to be invoked to give to the discrepant terms a temporary appearance of squaring with each other; but at last even this resource will fail.

If, on the other hand, I rightly assume the universe to be not moral, in what does my verification consist? It is that by letting moral interests sit lightly, by disbelieving that there is any duty about *them* (since duty obtains only as *between* them and other phenomena), and so throwing them over if I find it hard to get them satisfied—it is that by refusing to take up a tragic attitude, I deal in the long-run most satisfactorily with the facts of life. "All is vanity" is here the last word of wisdom. Even though in certain limited series there may be a great appearance of seriousness, he who in the main treats things with a degree of good-natured scepticism and radical levity will find that the practical fruits of his epicurean hypothesis verify it more and more, and not only save him from pain but do honour to his sagacity. While, on the other hand, he who contrary to reality stiffens himself in the notion that certain things absolutely should be, and rejects the truth that at bottom it makes no difference what is, will find himself evermore thwarted and perplexed and bemuddled by the facts of the world, and his tragic disappointment will, as experience accumulates, seem to drift farther and farther away from that final atonement or reconciliation which certain partial tragedies often get.

Anæsthesia is the watchword of the moral sceptic brought to bay and put to his trumps. *Energy* is that of the moralist.

Act on my creed, cries the latter, and the results of your action will prove the creed true, and that the nature of things is earnest infinitely. Act on mine, says the epicurean and the results will prove that seriousness is but a superficial glaze upon a world of fundamentally trivial import. You and your acts and the nature of things will be alike enveloped in a single formula, a universal *vanitas vanitatum*.

For the sake of simplicity I have written as if the verification might occur in the life of a single philosopher—which is manifestly untrue, since the theories still face each other, and the facts of the world give countenance to both. Rather should we expect, that, in a question of this scope, the experience of the entire human race must make the verification, and that all the evidence will not be " in " till the final integration of things, when the last man has had his say and contributed his share to the still unfinished x. Then the proof will be complete; then it will appear without doubt whether the moralistic x has filled up the gap which alone kept the M of the world from forming an even and harmonious unity, or whether the non-moralistic x has given the finishing touches which were alone needed to make the M appear outwardly as vain as it inwardly was.

But if this be so, is it not clear that the facts M, taken *per se*, are inadequate to justify a conclusion either way in advance of my action? My action is the complement which, by proving congruous or not, reveals the latent nature of the mass to which it is applied. The world may in fact be likened unto a lock, whose inward nature, moral or unmoral, will never reveal itself to our simply expectant gaze. The positivists, forbidding us to make any assumptions regarding it, condemn us to eternal ignorance, for the " evidence " which they wait for can never come so long as we are passive. But nature has put into our hands two keys, by which we may test the lock. If we try the moral key

and it fits, it is a moral lock. If we try the unmoral key and *it* fits, it is an unmoral lock. I cannot possibly conceive of any other sort of "evidence" or "proof" than this. It is quite true that the co-operation of generations is needed to educe it. But in these matters the solidarity (so called) of the human race is a patent fact. The essential thing to notice is that our active preference is a legitimate part of the game—that it is our plain business as men to try one of the keys, and the one in which we most confide. If then the proof exist not till I have acted, and I must needs in acting run the risk of being wrong, how can the popular science professors be right in objurgating in me as infamous a "credulity" which the strict logic of the situation requires? If this really be a moral universe; if by my acts I be a factor of its destinies; if to believe where I may doubt be itself a moral act analogous to voting for a side not yet sure to win—by what right shall they close in upon me and steadily negate the deepest conceivable function of my being by their preposterous command that I shall stir neither hand nor foot, but remain balancing myself in eternal and insoluble doubt? Why, doubt itself is a decision of the widest practical reach, if only because we may miss by doubting what goods we might be gaining by espousing the winning side. But more than that! it is often practically impossible to distinguish doubt from dogmatic negation. If I refuse to stop a murder because I am in doubt whether it be not justifiable homicide, I am virtually abetting the crime. If I refuse to bale out a boat because I am in doubt whether my efforts will keep her afloat, I am really helping to sink her. If in the mountain precipice I doubt my right to risk a leap, I actively connive at my destruction. He who commands himself not to be credulous of God, of duty, of freedom, of immortality, may again and again be indistinguishable from him who dogmatically denies them. Scepticism in moral matters is an active ally of immorality. Who is not for is against. The universe will have no neutrals in these questions. In theory as in practice, dodge or hedge,

or talk as we like about a wise scepticism, we are really doing volunteer military service for one side or the other.

Yet obvious as this necessity practically is, thousands of innocent magazine readers lie paralyzed and terrified in the network of shallow negations which the leaders of opinion have thrown over their souls. All they need to be free and hearty again in the exercise of their birthright is that these fastidious vetoes should be swept away. All that the human heart wants is its chance. It will willingly forego certainty in universal matters if only it can be allowed to feel that in them it has that same inalienable right to run risks which no one dreams of refusing to it in the pettiest practical affairs. And if I, in these last pages, like the mouse in the fable, have gnawed a few of the strings of the sophistical net that has been binding down its lion-strength, I shall be more than rewarded for my pains.

To sum up: No philosophy will permanently be deemed rational by all men which (in addition to meeting logical demands) does not to some degree pretend to determine expectancy, and in a still greater degree make a direct appeal to all those powers of our nature which we hold in highest esteem. Faith, being one of these powers, will always remain a factor not to be banished from philosophic constructions, the more so since in many ways it brings forth its own verification. In these points, then, it is hopeless to look for literal agreement among mankind.

The ultimate philosophy, we may therefore conclude, must not be too strait-laced in form, must not in all its parts divide heresy from orthodoxy by too sharp a line. There must be left over and above the propositions to be subscribed, *ubique, semper, et ab omnibus*, another realm into which the stifled soul may escape from pedantic scruples and indulge its own faith at its own risks; and all that can here be done will be to mark out distinctly the questions which fall within faith's sphere.

IX

GREAT MEN AND THEIR ENVIRONMENT[1]

A REMARKABLE parallel, which I think has never been noticed, obtains between the facts of social evolution on the one hand, and of zoological evolution as expounded by Mr. Darwin on the other.

It will be best to prepare the ground for my thesis by a few very general remarks on the method of getting at scientific truth. It is a common platitude that a complete acquaintance with any one thing, however small, would require a knowledge of the entire universe. Not a sparrow falls to the ground but some of the remote conditions of his fall are to be found in the milky way, in our federal constitution, or in the early history of Europe. That is to say, alter the milky way, alter the federal constitution, alter the facts of our barbarian ancestry, and the universe would so far be a different universe from what it now is. One fact involved in the difference might be that the particular little street-boy who threw the stone which brought down the sparrow might not find himself opposite the sparrow at that particular moment; or, finding himself there, he might not be in that particular serene and disengaged mood of mind which expressed itself in throwing the stone. But, true as all this is, it would be very foolish for any one who was inquiring the cause of the sparrow's fall to overlook the boy as too personal, proximate, and, so to speak, anthropomorphic an agent, and to say that the true cause is the federal constitution, the westward migration of the Celtic race, or the structure of the milky way. If we pro-

[1] A lecture before the Harvard Natural History Society; published in *The Atlantic Monthly*, October 1880.
From *The Will to Believe*, 1915, pp. 216–254.

ceeded on that method, we might say with perfect legitimacy that a friend of ours, who had slipped on the ice upon his doorstep and cracked his skull, some months after dining with thirteen at the table, died because of that ominous feast. I know, in fact, one such instance; and I might, if I chose, contend with perfect logical propriety that the slip on the ice was no real accident. "There are no accidents," I might say, "for science. The whole history of the world converged to produce that slip. If anything had been left out, the slip would not have occurred just there and then. To say it would is to deny the relations of cause and effect throughout the universe. The real cause of the death was not the slip, *but the conditions which engendered the slip*—and among them his having sat at a table, six months previous, one among thirteen. *That* is truly the reason why he died within the year."

It will soon be seen whose arguments I am, in form, reproducing here. I would fain lay down the truth without polemics or recrimination. But unfortunately we never fully grasp the import of any true statement until we have a clear notion of what the opposite untrue statement would be. The error is needed to set off the truth, much as a dark background is required for exhibiting the brightness of a picture. And the error which I am going to use as a foil to set off what seems to me the truth of my own statements is contained in the philosophy of Mr. Herbert Spencer and his disciples. Our problem is, What are the causes that make communities change from generation to generation—that make the England of Queen Anne so different from the England of Elizabeth, the Harvard College of to-day so different from that of thirty years ago?

I shall reply to this problem, The difference is due to the accumulated influences of individuals, of their examples, their initiatives, and their decisions. The Spencerian school replies, The changes are irrespective of persons, and independent of individual control. They are due to the environment, to the circumstances, the physical geography, the

ancestral conditions, the increasing experience of outer relations; to everything, in fact, except the Grants and the Bismarcks, the Joneses, and the Smiths.

Now, I say that these theorizers are guilty of precisely the same fallacy as he who should ascribe the death of his friend to the dinner with thirteen, or the fall of the sparrow to the milky way. Like the dog in the fable, who drops his real bone to snatch at its image, they drop the real causes to snatch at others, which from no possible human point of view are available or attainable. Their fallacy is a practical one. Let us see where it lies. Although I believe in free-will myself, I will waive that belief in this discussion, and assume with the Spencerians the predestination of all human actions. On that assumption I gladly allow that were the intelligence investigating the man's or the sparrow's death omniscient and omnipresent, able to take in the whole of time and space at a single glance, there would not be the slightest objection to the milky way or the fatal feast being invoked among the sought-for causes. Such a divine intelligence would see instantaneously all the infinite lines of convergence towards a given result, and it would, moreover, see impartially: it would see the fatal feast to be as much a condition of the sparrow's death as of the man's; it would see the boy with the stone to be as much a condition of the man's fall as of the sparrow's.

The human mind, however, is constituted on an entirely different plan. It has no such power of universal intuition. Its finiteness obliges it to see but two or three things at a time. If it wishes to take wider sweeps it has to use "general ideas," as they are called, and in so doing to drop all concrete truths. Thus, in the present case, if we as men wish to feel the connection between the milky way and the boy and the dinner and the sparrow and the man's death, we can do so only by falling back on the enormous emptiness of what is called an abstract proposition. We must say, All things in the world are fatally predetermined, and hang

together in the adamantine fixity of a system of natural law. But in the vagueness of this vast proposition we have lost all the concrete facts and links; and in all practical matters the concrete links are the only things of importance. The human mind is essentially partial. It can be efficient at all only by *picking out* what to attend to and ignoring everything else—by narrowing its point of view. Otherwise, what little strength it has is dispersed, and it loses its way altogether. Man always wants his curiosity gratified for a particular purpose. If, in the case of the sparrow, the purpose is punishment, it would be idiotic to wander off from the cats, boys, and other possible agencies close by in the street, to survey the early Celts and the milky way: the boy would meanwhile escape. And if, in the case of the unfortunate man, we lose ourselves in contemplation of the thirteen-at-table mystery, and fail to notice the ice on the step and cover it with ashes, some other poor fellow, who never dined out in his life, may slip on it in coming to the door, and fall and break his head too.

It is, then, a necessity laid upon us as human beings to limit our view. In mathematics we know how this method of ignoring and neglecting quantities lying outside of a certain range has been adopted in the differential calculus. The calculator throws out all the " infinitesimals " of the quantities he is considering. He treats them (under certain rules) as if they did not exist. In themselves they exist perfectly all the while; but they are as if they did not exist for the purposes of his calculation. Just so an astronomer, in dealing with the tidal movements of the ocean, takes no account of the waves made by the wind, or by the pressure of all the steamers which day and night are moving their thousands of tons upon its surface. Just so the marksman, in sighting his rifle, allows for the motion of the wind but not for the equally real motion of the earth and solar system. Just so a business man's punctuality may overlook an error of five minutes, while a physicist, measuring the velocity of light, must count each thousandth of a second.

There are, in short, *different cycles of operation* in nature; different departments, so to speak, relatively independent of one another, so that what goes on at any moment in one may be compatible with almost any condition of things at the same time in the next. The mould on the biscuit in the store-room of a man-of-war vegetates in absolute indifference to the nationality of the flag, the direction of the voyage, the weather, and the human dramas that may go on on board; and a mycologist may study it in complete abstraction from all these larger details. Only by so studying it, in fact, is there any chance of the mental concentration by which alone he may hope to learn something of its nature. On the other hand, the captain who in manœuvring the vessel through a naval fight should think it necessary to bring the mouldy biscuit into his calculations would very likely lose the battle by reason of the excessive "thoroughness" of his mind.

The causes which operate in these incommensurable cycles are connected with one another only *if we take the whole universe into account.* For all lesser points of view it is lawful—nay, more, it is for human wisdom necessary—to regard them as disconnected and irrelevant to one another.

And this brings us nearer to our special topic. If we look at an animal or a human being, distinguished from the rest of his kind by the possession of some extraordinary peculiarity, good or bad, we shall be able to discriminate between the causes which originally *produced* the peculiarity in him and the causes that *maintain* it after it is produced; and we shall see, if the peculiarity be one that he was born with, that these two sets of causes belong to two such irrelevant cycles. It was the triumphant originality of Darwin to see this, and to act accordingly. Separating the causes of production under the title of "tendencies to spontaneous variation," and relegating them to a physiological cycle

which he forthwith agreed to ignore altogether,[1] he confined his attention to the causes of preservation, and under the names of natural selection and sexual selection studied them exclusively as functions of the cycle of the environment.

Pre-Darwinian philosophers had also tried to establish the doctrine of descent with modification; but they all committed the blunder of clumping the two cycles of causation into one. What preserves an animal with his peculiarity, if it be a useful one, they saw to be the nature of the environment to which the peculiarity was adjusted. The giraffe with his peculiar neck is preserved by the fact that there are in his environment tall trees whose leaves he can digest. But these philosophers went further, and said that the presence of the trees not only maintained an animal with a long neck to browse upon their branches, but also produced him. They *made* his neck long by the constant striving they aroused in him to reach up to them. The environment, in short, was supposed by these writers to mould the animal by a kind of direct pressure, very much as a seal presses the wax into harmony with itself. Numerous instances were given of the way in which this goes on under our eyes. The exercise of the forge makes the right arm strong, the palm grows callous to the oar, the mountain air distends the chest, the chased fox grows cunning and the chased bird shy, the arctic cold stimulates the animal combustion, and so forth. Now these changes, of which many more examples might be adduced, are at present distinguished by the special name of *adaptive* changes. Their peculiarity is that that very feature in the environment to which the animal's nature grows adjusted, itself produces the adjustment. The "inner relation," to use Mr. Spencer's phrase, "corresponds" with its own efficient cause.

[1] Darwin's theory of pangenesis is, it is true, an attempt to account (among other things) for variation. But it occupies its own separate place, and its author no more invokes the environment when he talks of the adhesions of gemmules than he invokes these adhesions when he talks of the relations of the whole animal to the environment. *Divide et impera!*

Darwin's first achievement was to show the utter insignificance in amount of these changes produced by direct adaptation, the immensely greater mass of changes being produced by internal molecular accidents, of which we know nothing. His next achievement was to define the true problem with which we have to deal when we study the effects of the visible environment on the animal. That problem is simply this: Is the environment more likely to *preserve or to destroy him*, on account of this or that peculiarity with which he may be born? In giving the name "of accidental variations" to those peculiarities with which an animal is born, Darwin does not for a moment mean to suggest that they are not the fixed outcome of natural law. If the total system of the universe be taken into account, the causes of these variations and the visible environment which preserves or destroys them, undoubtedly do, in some remote and roundabout way, hang together. What Darwin means is, that, since that environment is a perfectly known thing, and its relations to the organism in the way of destruction or preservation are tangible and distinct, it would utterly confuse our finite understandings and frustrate our hopes of science to mix in with it facts from such a disparate and incommensurable cycle as that in which the variations are produced. This last cycle is that of occurrences before the animal is born. It is the cycle of influences upon ova and embryos; in which lie the causes that tip them and tilt them towards masculinity or femininity, towards strength or weakness, towards health or disease, and towards divergence from the parent type. What are the causes there?

In the first place, they are molecular and invisible—inaccessible, therefore, to direct observation of any kind. Secondly, their operations are compatible with any social, political, and physical conditions of environment. The same parents, living in the same environing conditions, may at one birth produce a genius, at the next an idiot or a monster. The visible external conditions are therefore not

direct determinants of this cycle; and the more we consider the matter, the more we are forced to believe that two children of the same parents are made to differ from each other by causes as disproportionate to their ultimate effects as is the famous pebble on the Rocky Mountain crest, which separates two rain-drops, to the Gulf of St. Lawrence and the Pacific Ocean toward which it makes them severally flow.

The great mechanical distinction between transitive forces and discharging forces is nowhere illustrated on such a scale as in physiology. Almost all causes there are forces of *detent*, which operate by simply unlocking energy already stored up. They are upsetters of unstable equilibria, and the resultant effect depends infinitely more on the nature of the materials upset than on that of the particular stimulus which joggles them down. Galvanic work, equal to unity, done on a frog's nerve will discharge from the muscle to which the nerve belongs mechanical work equal to seventy thousand; and exactly the same muscular effect will emerge if other irritants than galvanism are employed. The irritant has merely started or provoked something which then went on of itself—as a match may start a fire which consumes a whole town. And qualitatively as well as quantitatively the effect may be absolutely incommensurable with the cause. We find this condition of things in all organic matter. Chemists are distracted by the difficulties which the instability of albuminoid compounds opposes to their study. Two specimens, treated in what outwardly seem scrupulously identical conditions, behave in quite different ways. You know about the invisible factors of fermentation, and how the fate of a jar of milk—whether it turn into a sour clot or a mass of koumiss—depends on whether the lactic acid ferment or the alcoholic is introduced first, and gets ahead of the other in starting the process. Now, when the result is the tendency of an ovum, itself invisible to the naked eye, to tip towards this direction or that in its further evolution —to bring forth a genius or a dunce, even as the rain-drop

passes east or west of the pebble—is it not obvious that the deflecting cause must lie in a region so recondite and minute, must be such a ferment of a ferment, an infinitesimal of so high an order, that surmise itself may never succeed even in attempting to frame an image of it?

Such being the case, was not Darwin right to turn his back upon that region altogether, and to keep his own problem carefully free from all entanglement with matters such as these? The success of his work is a sufficiently affirmative reply.

And this brings us at last to the heart of our subject. The causes of production of great men lie in a sphere wholly inaccessible to the social philosopher. He must simply accept geniuses as data, just as Darwin accepts his spontaneous variations. For him, as for Darwin, the only problem is, these data being given, How does the environment affect them, and how do they affect the environment? Now, I affirm that the relation of the visible environment to the great man is in the main exactly what it is to the "variation" in the Darwinian philosophy. It chiefly adopts or rejects, preserves or destroys, in short *selects* him.[1] And whenever it adopts and preserves the great man, it becomes modified by his influence in an entirely original and peculiar way. He acts as a ferment, and changes its constitution, just as the advent of a new zoological species changes the faunal and floral equilibrium of the region in which it appears. We all recollect Mr. Darwin's famous statement of the influence of cats on the growth of clover in their neighbourhood. We all have read of the effects of the European rabbit in New Zealand, and we have many of us taken part in the controversy about the English sparrow here—whether he kills most canker-worms or drives away most native birds. Just so the

[1] It is true that it remodels him, also, to some degree, by its educative influence, and that this constitutes a considerable difference between the social case and the zoological case. I neglect this aspect of the relation here, for the other is the more important. At the end of the article I will return to it incidentally.

great man, whether he be an importation from without like Clive in India or Agassiz here, or whether he spring from the soil like Mahomet or Franklin, brings about a rearrangement, on a large or a small scale, of the pre-existing social relations.

The mutations of societies, then, from generation to generation, are in the main due directly or indirectly to the acts or the example of individuals whose genius was so adapted to the receptivities of the moment, or whose accidental position of authority was so critical that they became ferments, initiators of movement, setters of precedent or fashion, centres of corruption, or destroyers of other persons, whose gifts, had they had free play, would have led society in another direction.

We see this power of individual initiative exemplified on a small scale all about us, and on a large scale in the case of the leaders of history. It is only following the common-sense method of a Lyell, a Darwin, and a Whitney to interpret the unknown by the known, and reckon up cumulatively the only causes of social change we can directly observe. Societies of men are just like individuals, in that both at any given moment offer ambiguous potentialities of development. Whether a young man enters business or the ministry may depend on a decision which has to be made before a certain day. He takes the place offered in the counting-house and is *committed*. Little by little, the habits, the knowledges, of the other career, which once lay so near, cease to be reckoned even among his possibilities. At first, he may sometimes doubt whether the self he murdered in that decisive hour might not have been the better of the two; but with the years such questions themselves expire, and the old alternative *ego*, once so vivid, fades into something less substantial than a dream. It is no otherwise with nations. They may be committed by kings and ministers to peace or war, by generals to victory or defeat, by prophets to this religion or to that, by various geniuses to fame in art, science, or industry. A war is a true point of bifurcation of future

possibilities. Whether it fail or succeed, its declaration must be the starting-point of new policies. Just so does a revolution, or any great civic precedent, become a deflecting influence, whose operations widen with the course of time. Communities obey their ideals; and an accidental success fixes an ideal, as an accidental failure blights it.

Would England have to-day the "imperial" ideal which she now has if a certain boy named Bob Clive had shot himself, as he tried to do, at Madras? Would she be the drifting raft she is now in European affairs [1] if a Frederic the Great had inherited her throne instead of a Victoria, and if Messrs. Bentham, Mill, Cobden, and Bright had all been born in Prussia? England has, no doubt, to-day precisely the same intrinsic value relatively to the other nations that she ever had. There is no such fine accumulation of human material upon the globe. But in England the material has lost effective form, while in Germany it has found it. Leaders give the form. Would England be crying forward and backward at once, as she does now, "letting I will not wait upon I would," wishing to conquer but not to fight, if her ideal had in all these years been fixed by a succession of statesmen of supremely commanding personality, working in one direction? Certainly not. She would have espoused, for better or worse, either one course or another. Had Bismarck died in his cradle, the Germans would still be satisfied with appearing to themselves as a race of spectacled *Gelehrten* and political herbivora, and to the French as *ces bons*, or *ces naifs, Allemands*. Bismarck's will showed them, to their own great astonishment, that they could play a far livelier game. The lesson will not be forgotten. Germany may have many vicissitudes, but they—

> "will never do away, I ween,
> The marks of that which once hath been"—

of Bismarck's initiative, namely, from 1860 to 1873.

The fermentative influence of geniuses must be admitted

[1] The reader will remember when this was written.

as, at any rate, one factor in the changes that constitute social evolution. The community *may* evolve in many ways. The accidental presence of this or that ferment decides in which way it *shall* evolve. Why, the very birds of the forest, the parrot, the mino, have the power of human speech, but never develop it of themselves; some one must be there to teach them. So with us individuals. Rembrandt must teach us to enjoy the struggle of light with darkness, Wagner to enjoy peculiar musical effects; Dickens give a twist to our sentimentality, Artemus Ward to our humour; Emerson kindles a new moral light within us. But it is like Columbus's egg. "All can raise the flowers now, for all have got the seed." But if this be true of the individuals in the community, how can it be false of the community as a whole? If shown a certain way, a community may take it; if not, it will never find it. And the ways are to a large extent indeterminate in advance. A nation may obey either of many alternative impulses given by different men of genius, and still live and be prosperous, just as a man may enter either of many businesses. Only, the prosperities may differ in their type.

But the indeterminism is not absolute. Not every "man" fits every "hour." Some incompatibilities there are. A given genius may come either too early or too late. Peter the Hermit would now be sent to a lunatic asylum. John Mill in the tenth century would have lived and died unknown. Cromwell and Napoleon need their revolutions, Grant his civil war. An Ajax gets no fame in the day of telescopic-sighted rifles; and, to express differently an instance which Spencer uses, what could a Watt have effected in a tribe which no precursive genius had taught to smelt iron or to turn a lathe?

Now, the important thing to notice is that what makes a certain genius now incompatible with his surroundings is usually the fact that some previous genius of a different strain has warped the community away from the sphere of his possible effectiveness. After Voltaire, no Peter the

Hermit; after Charles IX. and Louis XIV., no general protestantization of France; after a Manchester school, a Beaconsfield's success is transient; after a Philip II., a Castelar makes little headway; and so on. Each bifurcation cuts off certain sides of the field altogether, and limits the future possible angles of deflection. A community is a living thing, and in words which I can do no better than quote from Professor Clifford,[1] "it is the peculiarity of living things not merely that they change under the influence of surrounding circumstances, but that any change which takes place in them is not lost but retained, and as it were built into the organism to serve as the foundation for future actions. If you cause any distortion in the growth of a tree and make it crooked, whatever you may do afterwards to make the tree straight the mark of your distortion is there; it is absolutely indelible; it has become part of the tree's nature. . . . Suppose, however, that you take a lump of gold, melt it, and let it cool. . . . No one can tell by examining a piece of gold how often it has been melted and cooled in geologic ages, or even in the last year by the hand of man. Any one who cuts down an oak can tell by the rings in its trunk how many times winter has frozen it into widowhood, and how many times summer has warmed it into life. A living being must always contain within itself the history, not merely of its own existence, but of all its ancestors."

Every painter can tell us how each added line deflects his picture in a certain sense. Whatever lines follow must be built on those first laid down. Every author who starts to rewrite a piece of work knows how impossible it becomes to use any of the first-written pages again. The new beginning has already excluded the possibility of those earlier phrases and transitions, while it has at the same time created the possibility of an indefinite set of new ones, no one of which, however, is completely determined in advance. Just so the social surroundings of the past and present

[1] *Lectures and Essays*, i. 82.

hour exclude the possibility of accepting certain contributions from individuals; but they do not positively define what contributions shall be accepted, for in themselves they are powerless to fix what the nature of the individual offerings shall be.[1]

Thus social evolution is a resultant of the interaction of two wholly distinct factors—the individual, deriving his peculiar gifts from the play of physiological and infra-social forces, but bearing all the power of initiative and origination in his hands; and, second, the social environment, with its power of adopting or rejecting both him and his gifts. Both factors are essential to change. The community stagnates without the impulse of the individual. The impulse dies away without the sympathy of the community.

All this seems nothing more than common-sense. All who wish to see it developed by a man of genius should read that golden little work, Bagehot's *Physics and Politics*, in which (it seems to me) the complete sense of the way in which concrete things grow and change is as livingly present as the straining after a pseudo-philosophy of evolution is livingly absent. But there are never wanting minds to whom such views seem personal and contracted, and allied to an anthropomorphism long exploded in other fields of knowledge. " The individual withers, and the world is more and more," to these writers; and in a Buckle, a Draper, and a Taine we all know how much the " world " has come to be almost synonymous with the *climate*. We all know, too, how the controversy has been kept up between the partisans of a " science of history " and those who deny the existence of anything like necessary " laws " where human societies are concerned. Mr. Spencer, at the opening of his *Study*

[1] Mr. Grant Allen himself, in an article from which I shall presently quote, admits that a set of people who, if they had been exposed ages ago to the geographical agencies of Timbuctoo, would have developed into negroes might now, after a protracted exposure to the conditions of Hamburg, never become negroes if transplanted to Timbuctoo.

of Sociology, makes an onslaught on the "great-man theory" of history, from which a few passages may be quoted:—

"The genesis of societies by the action of great men may be comfortably believed so long as, resting in general notions, you do not ask for particulars. But now, if, dissatisfied with vagueness, we demand that our ideas shall be brought into focus and exactly defined, we discover the hypothesis to be utterly incoherent. If, not stopping at the explanation of social progress as due to the great man, we go back a step, and ask, Whence comes the great man? we find that the theory breaks down completely. The question has two conceivable answers: his origin is supernatural or it is natural. Is his origin supernatural? Then he is a deputy god, and we have theocracy once removed —or, rather, not removed at all. . . . Is this an unacceptable solution? Then the origin of the great man is natural; and immediately this is recognized, he must be classed with all other phenomena in the society that gave him birth as a product of its antecedents. Along with the whole generation of which he forms a minute part, along with its institutions, language, knowledge, manners, and its multitudinous arts and appliances, he is a *resultant*. . . . You must admit that the genesis of the great man depends on the long series of complex influences which has produced the race in which he appears, and the social state into which that race has slowly grown. . . . Before he can remake his society, his society must make him. All those changes of which he is the proximate initiator have their chief causes in the generations he descended from. If there is to be anything like a real explanation of those changes, it must be sought in that aggregate of conditions out of which both he and they have arisen." [1]

Now, it seems to me that there is something which one might almost call impudent in the attempt which Mr. Spencer makes, in the first sentence of this extract, to pin

[1] *Study of Sociology*, pp. 33-35.

the reproach of vagueness upon those who believe in the power of initiative of the great man.

Suppose I say that the singular moderation which now distinguishes social, political, and religious discussion in England, and contrasts so strongly with the bigotry and dogmatism of sixty years ago, is largely due to J. S. Mill's example. I may possibly be wrong about the facts; but I am, at any rate, "asking for particulars," and not "resting in general notions." And if Mr. Spencer should tell me it started from no personal influence whatever, but from the "aggregate of conditions," the "generations," Mill and all his contemporaries "descended from," the whole past order of nature in short, surely he, not I, would be the person "satisfied with vagueness."

The fact is that Mr. Spencer's sociological method is identical with that of one who would invoke the zodiac to account for the fall of the sparrow, and the thirteen at table to explain the gentleman's death. It is of little more scientific value than the Oriental method of replying to whatever question arises by the unimpeachable truism, "God is great." *Not* to fall back on the gods, where a proximate principle may be found, has with us Westerners long since become the sign of an efficient as distinguished from an inefficient intellect.

To believe that the cause of everything is to be found in its antecendents is the starting-point, the initial postulate, not the goal and consummation, of science. If she is simply to lead us out of the labyrinth by the same hole we went in by three or four thousand years ago, it seems hardly worth while to have followed her through the darkness at all. If anything is humanly certain it is that the great man's society, properly so-called, does *not* make him before he can remake it. Physiological forces, with which the social, political, geographical, and to a great extent anthropological conditions have just as much and just as little to do as the condition of the crater of Vesuvius has to do with the flickering of this gas by which I write, are what make him.

Can it be that Mr. Spencer holds the convergence of sociological pressures to have so impinged on Stratford-upon-Avon about the 26th of April, 1564, that a W. Shakespeare, with all his mental peculiarities, had to be born there—as the pressure of water outside a certain boat will cause a stream of a certain form to ooze into a particular leak? And does he mean to say that if the aforesaid W. Shakespeare had died of cholera infantum, another mother at Stratford-upon-Avon would needs have engendered a duplicate copy of him, to restore the sociologic equilibrium—just as the same stream of water will reappear, no matter how often you pass a sponge over the leak, so long as the outside level remains unchanged? Or might the substitute arise at "Stratford-atte-Bowe"? Here, as elsewhere, it is very hard, in the midst of Mr. Spencer's vagueness, to tell what he does mean at all.

We have, however, in his disciple, Mr. Grant Allen, one who leaves us in no doubt whatever of his precise meaning. This widely informed, suggestive, and brilliant writer published last year a couple of articles in the *Gentleman's Magazine*, in which he maintained that individuals have no initiative in determining social change.

"The differences between one nation and another, whether in intellect, commerce, art, morals, or general temperament, ultimately depend, not upon any mysterious properties of race, nationality, or any other unknown and unintelligible abstractions, but simply and solely upon the physical circumstances to which they are exposed. If it be a fact, as we know it to be, that the French nation differs recognizably from the Chinese, and the people of Hamburg differ recognizably from the people of Timbuctoo, then the notorious and conspicuous differences between them are wholly due to the geographical position of the various races. If the people who went to Hamburg had gone to Timbuctoo, they would now be indistinguishable from the semi-barbarian negroes who inhabit that central African metropolis;[1]

[1] No! not even though they were bodily brothers! The geographical

and if the people who went to Timbuctoo had gone to Hamburg, they would now have been white-skinned merchants driving a roaring trade in imitation sherry and indigestible port. . . . The differentiating agency must be sought in the great permanent geographical features of land and sea . . . these have necessarily and inevitably moulded the characters and histories of every nation upon the earth. . . . We cannot regard any nation as an active agent in differentiating itself. Only the surrounding circumstances can have any effect in such a direction. [These two sentences dogmatically deny the existence of the relatively independent physiological cycle of causation.] To suppose otherwise is to suppose that the mind of man is exempt from the universal law of causation. There is no caprice, no spontaneous impulse, in human endeavours. Even tastes and inclinations *must* themselves be the result of surrounding causes." [1]

Elsewhere Mr. Allen, writing of the Greek culture, says:—

"It was absolutely and unreservedly the product of the geographical Hellas, acting upon the given factor of the undifferentiated Aryan brain. . . . To me it seems a self-evident proposition that nothing whatsoever can differentiate one body of men from another, except the physical conditions in which they are set—including, of course, under the term *physical conditions* the relations of place and time in which they stand with regard to other bodies of men. To suppose otherwise is to deny the primordial law of

factor utterly vanishes before the ancestral factor. The difference between Hamburg and Timbuctoo as a cause of ultimate divergence of two races is as nothing to the difference of constitution of the ancestors of the two races, even though as in twin brothers, this difference might be invisible to the naked eye. No two couples of the most homogeneous race could possibly be found so identical as, if set in identical environments, to give rise to two identical lineages. The minute divergence at the start grows broader with each generation, and ends with entirely dissimilar breeds.

[1] Article "Nation Making," in *Gentleman's Magazine*, 1878. I quote from the reprint in the *Popular Science Monthly Supplement*, December 1878, pp. 121, 123, 126.

causation. To imagine that the mind can differentiate itself is to imagine that it can be differentiated without a cause." [1]

This outcry about the law of universal causation being undone, the moment we refuse to invest in the kind of causation which is peddled round by a particular school, makes one impatient. These writers have no imagination of alternatives. With them there is no *tertium quid* between outword environment and miracle. *Aut Cæsar, aut nullus : Aut* Spencerism, *aut* catechism!

If by " physical conditions " Mr. Allen means what he does mean, the outward cycle of visible nature and man, his assertion is simply physiologically false. For a national mind differentiates " itself " whenever a genius is born in its midst by causes acting in the invisible and molecular cycle. But if Mr. Allen means by " physical conditions " the whole of nature, his assertion, though true, forms but the vague Asiatic profession of belief in an all-enveloping fate, which certainly need not plume itself on any specially advanced or scientific character.

And how can a thinker so clever as Mr. Allen fail to have distinguished in these matters between *necessary* conditions and *sufficient* conditions of a given result? The French say that to have an omelet we must break our eggs; that is, the breaking of eggs is a necessary condition of the omelet. But is it a sufficient condition? Does an omelet appear whenever three eggs are broken? So of the Greek mind. To get such versatile intelligence it may be that such commercial dealings with the world as the geographical Hellas afforded are a necessary condition. But if they are a sufficient condition, why did not the Phœnicians outstrip the Greeks in intelligence? No geographical environment can produce a given type of mind. It can only foster and further certain types fortuitously produced, and thwart and frustrate others. Once again, its function is simply selective,

[1] Article " Hellas " in *Gentleman's Magazine*, 1878. Reprint in *Popular Science Monthly Supplement*, September 1878.

and determines what shall actually be only by destroying what is positively incompatible. An Arctic environment is incompatible with improvident habits in its denizens; but whether the inhabitants of such a region shall unite with their thrift the peacefulness of the Eskimo or the pugnacity of the Norsemen is, so far as the climate is concerned, an accident. Evolutionists should not forget that we all have five fingers not because four or six would not do just as well, but merely because the first vertebrate above the fishes *happened* to have that number. He owed his prodigious success in founding a line of descent to some entirely other quality—we know not which—but the inessential five fingers were taken in tow and preserved to the present day. So of most social peculiarities. Which of them shall be taken in tow by the few qualities which the environment necessarily exacts is a matter of what physiological accidents shall happen among individuals. Mr. Allen promises to prove his thesis in detail by the examples of China, India, England, Rome, etc. I have not the smallest hesitation in predicting that he will do no more with these examples than he has done with Hellas. He will appear upon the scene after the fact, and show that the quality developed by each race was, naturally enough, not incompatible with its habitat. But he will utterly fail to show that the particular form of compatibility fallen into in each case was the one necessary and only possible form.

Naturalists know well enough how indeterminate the harmonies between a fauna and its environment are. An animal may better his chances of existence in either of many ways—growing aquatic, arboreal, or subterranean; small and swift, or massive and bulky; spiny, horny, slimy, or venomous; more timid or more pugnacious; more cunning or more fertile of offspring; more gregarious or more solitary; or in other ways besides—and any one of these ways may suit him to many widely different environments.

Readers of Mr. A. R. Wallace will well remember the striking illustrations of this in his *Malay Archipelago*:—

"Borneo closely resembles New Guinea not only in its vast size and its freedom from volcanoes, but in its variety of geological structure, its uniformity of climate, and the general aspect of the forest vegetation that clothes its surface; the Moluccas are the counterpart of the Philippines in their volcanic structure, their extreme fertility, their luxuriant forests, and their frequent earthquakes; and Bali, with the east end of Java, has a climate almost as dry and a soil almost as arid as that of Timor. Yet between these corresponding groups of islands, constructed, as it were, after the same pattern, subjected to the same climate, and bathed by the same oceans, there exists the greatest possible contrast when we compare their animal productions. Nowhere does the ancient doctrine that differences or similarities in the various forms of life that inhabit different countries are due to corresponding physical differences or similarities in the countries themselves, meet with so direct and palpable a contradiction. Borneo and New Guinea, as alike physically as two distinct countries can be, are zoologically wide as the poles asunder; while Australia, with its dry winds, its open plains, its stony deserts, and its temperate climate, yet produces birds and quadrupeds which are closely related to those inhabiting the hot, damp, luxuriant forests which everywhere clothe the plains and mountains of New Guinea."

Here we have similar physical-geography environments harmonising with widely differing animal lives, and similar animal lives harmonizing with widely differing geographical environments. A singularly accomplished writer, E. Gryzanowski, in the *North American Review*,[1] uses the instances of Sardinia and Corsica in support of this thesis with great effect. He says:—

"These sister islands, lying in the very centre of the Mediterranean, at almost equal distances from the centres

[1] Vol. cxiii. p. 318 (October 1871).

of Latin and Neo-Latin civilization, within easy reach of the Phœnician, the Greek, and the Saracen, with a coast-line of more than a thousand miles, endowed with obvious and tempting advantages, and hiding untold sources of agricultural and mineral wealth, have nevertheless remained unknown, unheeded, and certainly uncared for during the thirty centuries of European history. . . . These islands have dialects, but no language; records of battles, but no history. They have customs, but no laws; the *vendetta*, but no justice. They have wants and wealth, but no commerce; timber and ports, but no shipping. They have legends, but no poetry; beauty, but no art; and twenty years ago it could still be said that they had universities, but no students. . . . That Sardinia, with all her emotional and picturesque barbarism, has never produced a single artist is almost as strange as her barbarism itself. . . . Near the focus of European civilization, in the very spot which an *a priori* geographer would point out as the most favourable place for material and intellectual, commercial, and political development, these strange sister islands have slept their secular sleep, like *nodes* on the sounding board of history."

This writer then goes on to compare Sardinia and Sicily with some detail. All the material advantages are in favour of Sardinia, "and the Sardinian population, being of an ancestry more mixed than that of the English race, would justify far higher expectations than that of Sicily." Yet Sicily's past history has been brilliant in the extreme, and her commerce to-day is great. Dr. Gryzanowski has his own theory of the historic torpor of these favoured isles. He thinks they stagnated because they never gained political autonomy, being always owned by some Continental power. I will not dispute the theory; but I will ask, Why did they not gain it? and answer immediately: Simply because no individuals were born there with patriotism and ability enough to inflame their countrymen with national pride, ambition, and thirst for independent life.

Corsicans and Sardinians are probably as good stuff as any of their neighbours. But the best wood-pile will not blaze till a torch is applied, and the appropriate torches seem to have been wanting.[1]

Sporadic great men come everywhere. But for a community to get vibrating through and through with intensely active life, many geniuses coming together and in rapid

[1] I am well aware that in much that follows (though in nothing that precedes) I seem to be crossing the heavily shotted bows of Mr. Galton, for whose laborious investigations into the heredity of genius I have the greatest respect. Mr. Galton inclines to think that genius of intellect and passion is bound to express itself, whatever the outward opportunity, and that within any given race an equal number of geniuses of each grade must needs be born in every equal period of time; a subordinate race cannot possibly engender a large number of high-class geniuses, etc. He would, I suspect, infer the suppositions I go on to make—of great men fortuitously assembling around a given epoch and making it great, and of their being fortuitously absent from certain places and times (from Sardinia, from Boston now, etc.)—to be radically vicious. I hardly think, however, that he does justice to the great complexity of the conditions of *effective* greatness, and to the way in which the physiological averages of production may be masked entirely during long periods, either by the accidental mortality of geniuses in infancy, or by the fact that the particular geniuses born happened not to find tasks. I doubt the truth of his assertion that *intellectual* genius, like murder, "will out." It is true that certain types are irrepressible. Voltaire, Shelley, Carlyle, can hardly be conceived leading a dumb and vegetative life in any epoch. But take Mr. Galton himself, take his cousin Mr. Darwin, and take Mr. Spencer: nothing is to me more conceivable than that at another epoch all three of these men might have died "with all their music in them," known only to their friends as persons of strong and original character and judgment. What has started them on their career of effective greatness is simply the accident of each stumbling upon a task vast, brilliant, and congenial enough to call out the convergence of all his passions and powers. I see no more reason why, in case they had not fallen in with their several hobbies at propitious periods in their life, they need necessarily have hit upon other hobbies, and made themselves equally great. Their case seems similar to that of the Washingtons, Cromwells, and Grants, who simply rose to their occasions. But apart from these causes of fallacy, I am strongly disposed to think that where transcendent geniuses are concerned the numbers anyhow are so small that their appearance will not fit into any scheme of averages. That is, two or three might appear together, just as the two or three balls nearest the target centre might be fired consecutively. Take longer epochs and more firing, and the great geniuses and near balls would on the whole be more spread out.

succession are required. This is why great epochs are so rare—why the sudden bloom of a Greece, an early Rome, a Renaissance, is such a mystery. Blow must follow blow so fast that no cooling can occur in the intervals. Then the mass of the nation grows incandescent, and may continue to glow by pure inertia long after the originators of its internal movement have passed away. We often hear surprise expressed that in these high tides of human affairs not only the people should be filled with stronger life, but that individual geniuses should seem so exceptionally abundant. This mystery is just about as deep as the time-honoured conundrum as to why great rivers flow by great towns. It is true that great public fermentations awaken and adopt many geniuses, who in more torpid times would have had no chance to work. But over and above this there must be an exceptional concourse of genius about a time, to make the fermentation begin at all. The unlikeliness of the concourse is far greater than the unlikeliness of any particular genius; hence the rarity of these periods and the exceptional aspect which they always wear.

It is folly, then, to speak of the "laws of history" as of something inevitable, which science has only to discover and whose consequences any one can then foretell but do nothing to alter or avert. Why, the very laws of physics are conditional, and deal with *ifs*. The physicist does not say, "The water will boil anyhow;" he only says it will boil if a fire be kindled beneath it. And so the utmost the student of sociology can ever predict is that *if* a genius of a certain sort show the way, society will be sure to follow. It might long ago have been predicted with great confidence that both Italy and Germany would reach a stable unity if some one could but succeed in starting the process. It could not have been predicted, however, that the *modus operandi* in each case would be subordination to a paramount state rather than federation, because no historian could have calculated the freaks of birth and fortune which gave at the same moment such positions of authority to three such

peculiar individuals as Napoleon III., Bismarck, and Cavour. So of our own politics. It is certain now that the movement of the independents, reformers, or whatever one please to call them, will triumph. But whether it do so by converting the Republican party to its ends, or by rearing a new party on the ruins of both our present factions, the historian cannot say. There can be no doubt that the reform movement would make more progress in one year with an adequate personal leader than as now in ten without one. Were there a great citizen, splendid with every civic gift, to be its candidate, who can doubt that he would lead us to victory? But, at present, we, his environment, who sigh for him and would so gladly preserve and adopt him if he came, can neither move without him, nor yet do anything to bring him forth.[1]

To conclude: The evolutionary view of history, when it denies the vital importance of individual initiative, is, then, an utterly vague and unscientific conception, a lapse from modern scientific determinism into the most ancient oriental fatalism. The lesson of the analysis that we have made (even on the completely deterministic hypothesis with which we started) forms an appeal of the most stimulating sort to the energy of the individual. Even the dogged resistance of the reactionary conservative to changes which he cannot hope entirely to defeat is justified and shown to be effective. He retards the movement; deflects it a little by the concessions he extracts; gives it a resultant momentum, compounded of his inertia and his adversaries' speed; and keeps up, in short, a constant lateral pressure, which, to be sure, never heads it round about, but brings it up at last at a goal far to the right or left of that to which it would have drifted had he allowed it to drift alone.

I now pass to the last division of my subject, the function

[1] Since this paper was written, President Cleveland has to a certain extent met the need. But who can doubt that if he had certain other qualities which he has not yet shown, his influence would have been still more decisive? (1896).

of the environment in *mental* evolution. After what I have already said, I may be quite concise. Here, if anywhere, it would seem at first sight as if that school must be right which makes the mind passively plastic, and the environment actively productive of the form and order of its conceptions; which, in a word, thinks that all mental progress must result from a series of adaptive changes, in the sense already defined of that word. We know what a vast part of our mental furniture consists of purely remembered, not reasoned, experience. The entire field of our habits and associations by contiguity belongs here. The entire field of those abstract conceptions which were taught us with the language into which we were born belongs here also. And, more than this, there is reason to think that the order of "outer relations" experienced by the individual may itself determine the order in which the general characters imbedded therein shall be noticed and extracted by his mind.[1] The pleasures and benefits, moreover, which certain parts of the environment yield, and the pains and hurts which other parts inflict, determine the direction of our interest and our attention, and so decide at which points the accumulation of mental experiences shall begin. It might, accordingly, seem as if there were no room for any other agency than this; as if the distinction we have found so useful between "spontaneous variation," as the producer of changed forms, and the environment, as their preserver and destroyer, did not hold in the case of mental progress; as if, in a word, the parallel with darwinism might no longer obtain, and Spencer might be quite right with his fundamental law of intelligence, which says, "The cohesion between psychical states is proportionate to the frequency with which the relation between the answering external phenomena has been repeated in experience."[2]

[1] That is, if a certain general character be rapidly repeated in our outer experience with a number of strongly contrasted concomitants, it will be sooner abstracted than if its associates are invariable or monotonous.

[2] *Principles of Psychology*, i. 460. See also pp. 463, 464, 500. On

But, in spite of all these facts, I have no hesitation whatever in holding firm to the darwinian distinction even here. I maintain that the facts in question are all drawn from the lower strata of the mind, so to speak—from the sphere of its least evolved functions, from the region of intelligence which man possesses in common with the brutes. And I can easily show that throughout the whole extent of those mental departments which are highest, which are most characteristically human, Spencer's law is violated at every step; and that as a matter of fact the new conceptions, emotions, and active tendencies which evolve are originally produced in the shape of random images, fancies, accidental out-births of spontaneous variation in the functional activity of the excessively instable human brain, which the outer environment simply confirms or refutes, adopts or rejects, preserves or destroys—selects, in short, just as it selects morphological and social variations due to molecular accidents of an analogous sort.

It is one of the tritest of truisms that human intelligences of a simple order are very literal. They are slaves of habit, doing what they have been taught without variation; dry, prosaic, and matter-of-fact in their remarks; devoid of humour, except of the coarse physical kind which rejoices in a practical joke; taking the world for granted; and possessing in their faithfulness and honesty the single gift by which they are sometimes able to warm us into admiration. But even this faithfulness seems to have a sort of inorganic ring, and to remind us more of the immutable properties of a piece of inanimate matter than of the steadfastness of a human will capable of alternative choice. When we descend to the brutes, all these peculiarities are intensified. No reader of Schopenhauer can forget his frequent allusions to the *trockener ernst* of dogs and horses, nor to their *ehrlichkeit.*

page 408 the law is formulated thus: The *persistence* of the connection in consciousness is proportionate to the *persistence* of the outer connection. Mr. Spencer works most with the law of frequency. Either law, from my point of view, is false; but Mr. Spencer ought not to think them synonymous.

And every noticer of their ways must receive a deep impression of the fatally literal character of the few, simple, and treadmill-like operations of their minds.

But turn to the highest order of minds, and what a change! Instead of thoughts of concrete things patiently following one another in a beaten track of habitual suggestion, we have the most abrupt cross-cuts and transitions from one idea to another, the most rarefied abstractions and discriminations, the most unheard-of combinations of elements, the subtlest associations of analogy; in a word, we seem suddenly introduced into a seething caldron of ideas, where everything is fizzling and bobbing about in a state of bewildering activity, where partnerships can be joined or loosened in an instant, treadmill routine is unknown, and the unexpected seems the only law. According to the idiosyncrasy of the individual, the scintillations will have one character or another. They will be sallies of wit and humour; they will be flashes of poetry and eloquence; they will be constructions of dramatic fiction or of mechanical device, logical or philosophic abstractions, business projects, or scientific hypotheses, with trains of experimental consequences based thereon; they will be musical sounds, or images of plastic beauty or picturesqueness, or visions of moral harmony. But, whatever their differences may be, they will all agree in this—that their genesis is sudden and, as it were, spontaneous. That is to say, the same premises would not, in the mind of another individual, have engendered just that conclusion; although, when the conclusion is offered to the other individual, he may thoroughly accept and enjoy it, and envy the brilliancy of him to whom it first occurred.

To Professor Jevons is due the great credit of having emphatically pointed out[1] how the genius of discovery depends altogether on the number of these random notions and guesses which visit the investigator's mind. To be fertile in hypotheses is the first requisite, and to be willing

[1] In his *Principles of Science*, chaps. xi. xii. xxvi.

to throw them away the moment experience contradicts them is the next. The Baconian method of collating tables of instances may be a useful aid at certain times. But one might as well expect a chemist's note-book to write down the name of the body analyzed, or a weather table to sum itself up into a prediction of probabilities of its own accord, as to hope that the mere fact of mental confrontation with a certain series of facts will be sufficient to make *any* brain conceive their law. The conceiving of the law is a spontaneous variation in the strictest sense of the term. It flashes out of one brain, and no other, because the instability of that brain is such as to tip and upset itself in just that particular direction. But the important thing to notice is that the good flashes and the bad flashes, the triumphant hypotheses and the absurd conceits, are on an exact equality in respect of their origin. Aristotle's absurd Physics and his immortal Logic flow from one source: the forces that produce the one produce the other. When walking along the street, thinking of the blue sky or the fine spring weather, I may either smile at some grotesque whim which occurs to me, or I may suddenly catch an intuition of the solution of a long-unsolved problem, which at that moment was far from my thoughts. Both notions are shaken out of the same reservoir—the reservoir of a brain in which the reproduction of images in the relations of their outward persistence or frequency has long ceased to be the dominant law. But to the thought, when it is once engendered, the consecration of agreement with outward relations may come. The conceit perishes in a moment, and is forgotten. The scientific hypothesis arouses in me a fever of desire for verification. I read, write, experiment, consult experts. Everything corroborates my notion, which being then published in a book spreads from review to review and from mouth to mouth, till at last there is no doubt I am enshrined in the Pantheon of the great diviners of nature's ways. The environment *preserves* the

conception which it was unable to *produce* in any brain less idiosyncratic than my own.

"Now, the spontaneous upsettings of brains this way and that at particular moments into particular ideas and combinations are matched by their equally spontaneous permanent tiltings or saggings towards determinate directions. The humorous bent is quite characteristic; the sentimental one equally so. And the personal tone of each mind, which makes it more alive to certain classes of experience than others, more attentive to certain impressions, more open to certain reasons, is equally the result of that invisible and unimaginable play of the forces of growth within the nervous system which, irresponsibly to the environment, makes the brain peculiarly apt to function in a certain way. Here again the selection goes on. The products of the mind with the determined æsthetic bent please or displease the community. We adopt Wordsworth, and grow unsentimental and serene. We are fascinated by Schopenhauer, and learn from him the true luxury of woe. The adopted bent becomes a ferment in the community, and alters its tone. The alteration may be a benefit or a misfortune, for it is (*pace* Mr. Allen) a differentiation from within, which has to run the gauntlet of the larger environment's selective power. Civilized Languedoc, taking the tone of its scholars, poets, princes, and theologians, fell a prey to its rude Catholic environment in the Albigensian crusade. France in 1792, taking the tone of its St. Justs and Marats, plunged into its long career of unstable outward relations. Prussia in 1806, taking the tone of its Humboldts and its Steins, proved itself in the most signal way "adjusted" to its environment in 1872.

Mr. Spencer, in one of the strangest chapters of his *Psychology*,[1] tries to show the necessary order in which the development of conceptions in the human race occurs. No abstract conception can be developed, according to him,

[1] Part viii. chap. iii.

until the outward experiences have reached a certain degree of heterogeneity, definiteness, coherence, and so forth.

"Thus the belief in an unchanging order, the belief in *law*, is a belief of which the primitive man is absolutely incapable. . . . Experiences such as he receives furnish but few data for the conception of uniformity, whether as displayed in things or in relations. . . . The daily impressions which the savage gets yield the notion very imperfectly, and in but few cases. Of all the objects around—trees, stones, hills, pieces of water, clouds, and so forth—most differ widely . . . and few approach complete likeness so nearly as to make discrimination difficult. Even between animals of the same species it rarely happens that, whether alive or dead, they are presented in just the same attitudes. . . . It is only along with a gradual development of the arts . . . that there come frequent experiences of perfectly straight lines admitting of complete apposition, bringing the perceptions of equality and inequality. Still more devoid is savage life of the experiences which generate the conception of the uniformity of succession. The sequences observed from hour to hour and day to day seem anything but uniform; difference is a far more conspicuous trait among them. . . . So that if we contemplate primitive human life as a whole, we see that multiformity of sequence, rather than uniformity, is the notion which it tends to generate. . . . Only as fast as the practice of the arts develops the idea of measure can the consciousness of uniformity become clear. . . . Those conditions furnished by advancing civilization which make possible the notion of uniformity simultaneously make possible the notion of *exactness*. . . . Hence the primitive man has little experience which cultivates the consciousness of what we call *truth*. How closely allied this is to the consciousness which the practice of the arts cultivates is implied even in language. We speak of a true surface as well as a true statement. Exactness describes perfection in

a mechanical fit, as well as perfect agreement between the results of calculations."

The whole burden of Mr. Spencer's book is to show the fatal way in which the mind, supposed passive, is moulded by its experiences of "outer relations." In this chapter the yard-stick, the balance, the chronometer, and other machines and instruments come to figure among the "relations" external to the mind. Surely they are so, after they have been manufactured; but only because of the preservative power of the social environment. Originally all these things and all other institutions were flashes of genius in an individual head, of which the outer environment showed no sign. Adopted by the race and become its heritage, they then supply instigations to new geniuses whom they environ to make new inventions and discoveries; and so the ball of progress rolls. But take out the geniuses, or alter their idipsyncrasies, and what increasing uniformities will the environment show? We defy Mr. Spencer or any one else to reply.

The plain truth is that the "philosophy" of evolution (as distinguished from our special information about particular cases of change) is a metaphysical creed, and nothing else. It is a mood of contemplation, an emotional attitude, rather than a system of thought—a mood which is old as the world, and which no refutation of any one incarnation of it (such as the spencerian philosophy) will dispel; the mood of fatalistic pantheism, with its intuition of the One and All, which was, and is, and ever shall be, and from whose womb each single thing proceeds. Far be it from us to speak slightingly here of so hoary and mighty a style of looking on the world as this. What we at present call scientific discoveries had nothing to do with bringing it to birth, nor can one easily conceive that they should ever give it its *quietus*, no matter how logically incompatible with its spirit the ultimate phenomenal distinctions which science accumulates should turn out to be. It can laugh at the phenomenal distinctions on which science is based, for it

draws its vital breath from a region which—whether above or below—is at least altogether different from that in which science dwells. A critic, however, who cannot disprove the truth of the metaphysic creed, can at least raise his voice in protest against its disguising itself in " scientific " plumes. I think that all who have had the patience to follow me thus far will agree that the spencerian " philosophy " of social and intellectual progress is an obsolete anachronism, reverting to a pre-darwinian type of thought, just as the spencerian philosophy of " Force," effacing all the previous distinctions between actual and potential energy, momentum, work, force, mass, etc., which physicists have with so much agony achieved, carries us back to a pre-galilean age.

X

WHAT PRAGMATISM MEANS[1]

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 squrrrel 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. Every one 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

[1] From *Pragmatism*, 1907, pp. 43–81.

is quite obvious that the man fails to go round him, for by 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 further dispute. You are both right and both wrong, according as you conceive the verb 'to go round' in one practical fashion or the other."

Although one or two of the hotter disputants called my speech a shuffling evasion, saying they wanted no quibbling or scholastic hair-splitting, but meant just plain honest English "round," the majority seemed to think that the distinction had assuaged the dispute.

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.

A glance at the history of the idea will show you still better what pragmatism means. The term is derived from the same Greek word πρᾶγμα, meaning action, from which our words "practice" and "practical" come. It was first introduced into philosophy by Mr. Charles Peirce in 1878. In an article entitled "How to Make Our Ideas Clear," in the *Popular Science Monthly* for January of that year,[1]

[1] Translated in the *Revue Philosophique* for January 1879 (vol. vii.).

Mr. Peirce, after pointing out that our beliefs are really rules for action, said that, to develop a thought's meaning, we need only determine what conduct it is fitted to produce: that conduct is for us its sole significance. And the tangible fact at the root of all our thought-distinctions, however subtle, is that there is no one of them so fine as to consist in anything but a possible difference of practice. To attain perfect clearness in our thoughts of an object, then, we need only consider what conceivable effects of a practical kind the object may involve—what sensations we are to expect from it, and what reactions we must prepare. Our conception of these effects, whether immediate or remote, is then for us the whole of our conception of the object, so far as that conception has positive significance at all.

This is the principle of Peirce, the principle of pragmatism. It lay entirely unnoticed by any one for twenty years, until I, in an address before Professor Howison's philosophical union at the university of California, brought it forward again and made a special application of it to religion. By that date (1898) the times seemed ripe for its reception. The word " pragmatism " spread, and at present it fairly spots the pages of the philosophic journals. On all hands we find the " pragmatic movement " spoken of, sometimes with respect, sometimes with contumely, seldom with clear understanding. It is evident that the term applies itself conveniently to a number of tendencies that hitherto have lacked a collective name, and that it has " come to stay."

To take in the importance of Peirce's principle, one must get accustomed to applying it to concrete cases. I found a few years ago that Ostwald, the illustrious Leipzig chemist, had been making perfectly distinct use of the principle of pragmatism in his lectures on the philosophy of science, though he had not called it by that name.

" All realities influence our practice," he wrote me, " and that influence is their meaning for us. I am accustomed to put questions to my classes in this way: In what respects

would the world be different if this alternative or that were true? If I can find nothing that would become different, then the alternative has no sense."

That is, the rival views mean practically the same thing, and meaning, other than practical, there is for us none. Ostwald in a published lecture gives this example of what he means. Chemists have long wrangled over the inner constitution of certain bodies called "tautomerous." Their properties seemed equally consistent with the notion that an instable hydrogen atom oscillates inside of them, or that they are instable mixtures of two bodies. Controversy raged, but never was decided. "It would never have begun," says Ostwald, "if the combatants had asked themselves what particular experimental fact could have been made different by one or the other view being correct. For it would then have appeared that no difference of fact could possibly ensue; and the quarrel was as unreal as if, theorising in primitive times about the raising of dough by yeast, one party should have invoked a 'brownie,' while another insisted on an 'elf' as the true cause of the phenomenon." [1]

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

[1] "Theorie und Praxis," *Zeitsch. des Oesterreichischen Ingenieur u. Architecten-Vereines*, 1905, Nr. 4, u. 6. I find a still more radical pragmatism than Ostwald's in an address by Professor W. S. Franklin: "I think that the sickliest notion of physics, even if a student gets it, is that it is "the science of masses, molecules, and the ether." And I think that the healthiest notion, even if a student does not wholly get it, is that physics is the science of the ways of taking hold of bodies and pushing them!" (*Science*, January 2, 1903.)

will make to you and me, at definite instants of our life, if this world-formula or that world-formula be the true one.

There is absolutely nothing new in the pragmatic method. Socrates was an adept at it. Aristotle used it methodically. Locke, Berkeley, and Hume made momentous contributions to truth by its means. Shadworth Hodgson keeps insisting that realities are only what they are "known as." But these forerunners of pragmatism used it in fragments: they were a prelude only. Not until in our time has it generalized itself, become conscious of a universal mission, pretended to a conquering destiny. I believe in that destiny, and I hope I may end by inspiring you with my belief.

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 ultra-montane 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 programme for more work, and more particularly as an indication of the ways in which existing realities may be *changed*.

Theories thus become instruments, not answers to enigmas, in which we can rest. We don't lie back upon them, we move forward, and, on occasion, make nature over again by their aid. Pragmatism unstiffens all our theories, limbers them up and sets each one at work. Being nothing essentially new, it harmonizes with many ancient philosophic tendencies. It agrees with nominalism, for instance, in always appealing to particulars; with utilitarianism in emphasizing practical aspects; with positivism in its disdain for verbal solutions, useless questions, and metaphysical abstractions.

All these, you see, are *anti-intellectualist* tendencies. Against rationalism as a pretension and a method pragmatism is fully armed and militant. But, at the outset, at least, it stands for no particular results. It has no dogmas, and no doctrines save its method. As the young Italian

pragmatist Papini has well said, it lies in the midst of our theories like a corridor in a hotel. Innumerable chambers open out of it. In one you may find a man writing an atheistic volume; in the next some one on his knees praying for faith and strength; in a third a chemist investigating a body's properties; in a fourth a system of idealistic metaphysics is being excogitated; in a fifth the impossibility of metaphysics is being shown. But they all own the corridor, and all must pass through it if they want a practicable way of getting into or out of their respective rooms.

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.*

So much for the pragmatic method! You may say that I have been praising it rather than explaining it to you, but I shall presently explain it abundantly enough by showing how it works on some familiar problems. Meanwhile the word pragmatism has come to be used in a still wider sense, as meaning also a certain *theory of truth*. I mean to give a whole lecture to the statement of that theory, after first paving the way, so I can be very brief now. But brevity is hard to follow, so I ask for your redoubled attention for a quarter of an hour. If much remains obscure, I hope to make it clearer in the later lectures.

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 them-

selves to have deciphered authentically the eternal thoughts of the Almighty. His mind also thundered and reverberated in syllogisms. He also thought in conic sections, squares, and roots and ratios, and geometrized like Euclid. He made Kepler's laws for the planets to follow; he made velocity increase proportionally to the time in falling bodies; he made the law of the sines for light to obey when refracted; he established the classes, orders, families, and genera of plants and animals, and fixed the distances between them. 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

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.

Thus human arbitrariness has driven divine necessity from scientific logic. If I mention the names of Sigwart, Mach, Ostwald, Pearson, Milhaud, Poincaré, Duhem, Heymans, those of you who are students will easily identify the tendency I speak of, and will think of additional names.

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 summarise them and get about among them by conceptual shortcuts 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 labour—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 summating 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 *outrée* 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.

The point I now urge you to observe particularly is the part played by the older truths. Failure to take account of it is the source of much of the unjust criticism levelled against pragmatism. Their influence is absolutely controlling. Loyalty to them is the first principle—in most cases it is the only principle; for by far the most usual way of handling phenomena so novel that they would make for a serious rearrangement of our preconception is to ignore

them altogether, or to abuse those who bear witness for them.

You doubtless wish examples of this process of truth's growth, and the only trouble is their superabundance. The simplest case of new truth is of course the mere numerical addition of new kinds of facts, or of new single facts of old kinds, to our experience—an addition that involves no alteration in the old beliefs. Day follows day, and its contents are simply added. The new contents themselves are not true, they simply *come* and *are*. Truth is *what we say about* them, and when we say that they have come, truth is satisfied by the plain additive formula.

But often the day's contents oblige a rearrangement. If I should now utter piercing shrieks and act like a maniac on this platform, it would make many of you revise your ideas as to the probable worth of my philosophy. "Radium" came the other day as part of the day's content, and seemed for a moment to contradict our ideas of the whole order of nature, that order having come to be identified with what is called the conservation of energy. The mere sight of radium paying heat away indefinitely out of its own pocket seemed to violate that conservation. What to think? If the radiations from it were nothing but an escape of unsuspected "potential" energy, pre-existent inside of the atoms, the principle of conservation would be saved. The discovery of "helium" as the radiation's outcome, opened a way to this belief. So Ramsay's view is generally held to be true, because, although it extends our old ideas of energy, it causes a minimum of alteration in their nature.

I need not multiply instances. A new opinion counts as "true" just in proportion as it gratifies the individual's desire to assimilate the novel in his experience to his beliefs in stock. It must both lean on old truth and grasp new fact; and its success (as I said a moment ago) in doing this, is a matter for the individual's appreciation. When old truth grows, then, by new truth's addition, it is for subjective reasons. We are in the process and obey the reasons. That

new idea is truest which performs most felicitously its function of satisfying our double urgency. It makes itself true, gets itself classed as true, by the way it works; grafting itself then upon the ancient body of truth, which thus grows much as a tree grows by the activity of a new layer of cambium.

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 rôle 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.

The trail of the human serpent is thus over everything. Truth independent; truth that we *find* merely; truth no longer malleable to human need; truth incorrigible, in a word; such truth exists indeed superabundantly—or is supposed to exist by rationalistically minded thinkers; but then it means only the dead heart of the living tree, and its being there means only that truth also has its paleontology, and its "prescription," and may grow stiff with years of veteran service and petrified in men's regard by sheer antiquity. But how plastic even the oldest truths nevertheless really are has been vividly shown in our day by the transformation of logical and mathematical ideas, a transformation which seems even to be invading physics. The ancient formulas are reinterpreted as special expressions of much wider principles, principles that our ancestors never got a glimpse of in their present shape and formulation.

Mr. Schiller still gives to all this view of truth the name of " Humanism," but, for this doctrine too, the name of pragmatism seems fairly to be in the ascendant, so

I will treat it under the name of pragmatism in these lectures.

Such then would be the scope of pragmatism—first, a method, and second, a genetic theory of what is meant by truth. And these two things must be our future topics.

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.

You will probably be surprised to learn, then, that Messrs. Schiller's and Dewey's theories have suffered a hailstorm of contempt and ridicule. All rationalism has risen against them. In influential quarters Mr. Schiller, in particular, has been treated like an impudent schoolboy who deserves a spanking. I should not mention this, but for the fact that it throws so much sidelight upon that rationalistic temper to which I have opposed the temper of pragmatism. Pragmatism is uncomfortable away from facts. Rationalism is comfortable only in the presence of abstractions. This pragmatist talk about truths in the plural, about their utility and satisfactoriness, about the success with which they " work," etc., suggests to the typical intellectualist mind a sort of coarse, lame, second-rate, makeshift article of truth. Such truths are not real truth. Such tests are merely subjective. As against this, objective truth must be something non-utilitarian, haughty, refined, remote, august, exalted. It must be an absolute correspondence of our thoughts with an equally absolute reality. It must

be what we *ought* to think unconditionally. The conditioned ways in which we *do* think are so much irrelevance and matter for psychology. Down with psychology, up with logic, in all this question!

See the exquisite contrast of the types of mind! The pragmatist clings to facts and concreteness, observes truth at its work in particular cases, and generalizes. Truth, for him, becomes a class-name for all sorts of definite working-values in experience. For the rationalist it remains a pure abstraction, to the bare name of which we must defer. When the pragmatist undertakes to show in detail just *why* we must defer, the rationalist is unable to recognize the concretes from which his own abstraction is taken. He accuses us of *denying* truth; whereas we have only sought to trace exactly why people follow it and always ought to follow it. Your typical ultra-abstractionist fairly shudders at concreteness; other things equal, he positively prefers the pale and spectral. If the two universes were offered, he would always choose the skinny outline rather than the rich thicket of reality. It is so much purer, clearer, nobler.

I hope that as these lectures go on, the concreteness and closeness to facts of the pragmatism which they advocate may be what approves itself to you as its most satisfactory peculiarity. It only follows here the example of the sister-sciences, interpreting the unobserved by the observed. It brings old and new harmoniously together. It converts the absolutely empty notion of a static relation of "correspondence" (what that may mean we must ask later) between our minds and reality, into that of a rich and active commerce (that any one may follow in detail and understand) between particular thoughts of ours, and the great universe of other experiences in which they play their parts and have their uses.

But enough of this at present? The justification of what I say must be postponed. I wish now to add a word in further explanation of the claim I made at our last meeting that pragmatism may be a happy harmonizer of empiricist

ways of thinking with the more religious demands of human beings.

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Men who are strongly of the fact-loving temperament, you may remember me to have said, are liable to be kept at a distance by the small sympathy with facts which that philosophy from the present-day fashion of idealism offers them. It is far too intellectualistic. Old-fashioned theism was bad enough, with its notion of God as an exalted monarch, made up of a lot of unintelligible or preposterous "attributes"; but, so long as it held strongly by the argument from design, it kept some touch with concrete realities. Since, however, darwinism has once for all displaced design from the minds of the "scientific," theism has lost that foothold; and some kind of an immanent or pantheistic deity working *in* things rather than above them is, if any, the kind recommended to our contemporary imagination. Aspirants to a philosophic religion turn, as a rule, more hopefully nowadays towards idealistic pantheism than towards the old dualistic theism, in spite of the fact that the latter still counts able defenders.

But, as I said in my first lecture, the brand of pantheism offered is hard for them to assimilate if they are lovers of facts, or empirically minded. It is the absolutistic brand, spurning the dust and reared upon pure logic. It keeps no connexion whatever with concreteness. Affirming the Absolute Mind, which is its substitute for God, to be the rational presupposition of all particulars of fact, whatever they may be, it remains supremely indifferent to what the particular facts in our world actually are. Be they what they may, the Absolute will father them. Like the sick lion in Æsop's fable, all footprints lead into his den, but *nulla vestigia retrorsum*. You cannot redescend into the world of particulars by the Absolute's aid, or deduce any necessary consequences of detail important for your life from your idea of his nature. He gives you indeed the assurance that all is well with *Him*, and for his eternal way of thinking;

but thereupon he leaves you to be finitely saved by your own temporal devices.

Far be it from me to deny the majesty of this conception, or its capacity to yield religious comfort to a most respectable class of minds. But from the human point of view, no one can pretend that it doesn't suffer from the faults of remoteness and abstractness. It is eminently a product of what I have ventured to call the rationalistic temper. It disdains empiricism's needs. It substitutes a pallid outline for the real world's richness. It is dapper, it is noble in the bad sense, in the sense in which to be noble is to be inapt for humble service. In this real world of sweat and dirt, it seems to me that when a view of things is "noble," that ought to count as a presumption against its truth, and as a philosophic disqualification. The prince of darkness may be a gentleman, as we are told he is, but whatever the God of earth and heaven is, he can surely be no gentleman. His menial services are needed in the dust of our human trials, even more than his dignity is needed in the empyrean.

Now pragmatism, devoted though she be to facts, has no such materialistic bias as ordinary empiricism labours under. Moreover, she has no objection whatever to the realizing of abstractions, so long as you get about among particulars with their aid and they actually carry you somewhere. Interested in no conclusions but those which our minds and our experiences work out together, she has no *a priori* prejudices against theology. *If theological ideas prove to have a value for concrete life, they will be true for pragmatism, in the sense of being good for so much. For how much more they are true will depend entirely on their relations to the other truths that also have to be acknowledged.*

What I said just now about the Absolute, of transcendental idealism, is a case in point. First, I called it majestic and said it yielded religious comfort to a class of minds, and then I accused it of remoteness and sterility. But so far as it affords such comfort, it surely is not sterile; it has that amount of value; it performs a concrete function. As

a good pragmatist, I myself ought to call the Absolute true "in so far forth," then; and I unhesitatingly now do so

But what does *true in so far forth* mean in this case? To answer, we need only apply the pragmatic method. What do believers in the Absolute mean by saying that their belief affords them comfort? They mean that since in the Absolute finite evil is "overruled already, we may, therefore, whenever we wish, treat the temporal as if it were potentially the eternal, be sure that we can trust its outcome, and, without sin, dismiss our fear and drop the worry of our finite responsibility. In short, they mean that we have a right ever and anon to take a moral holiday, to let the world wag in its own way, feeling that its issues are in better hands than ours and are none of our business.

The universe is a system of which the individual members may relax their anxieties occasionally, in which the don't-care mood is also right for men, and moral holidays in order—that, if I mistake not, is part, at least, of what the Absolute is "known-as," that is the great difference in our particular experiences which his being true makes for us, that is his cash-value when he is pragmatically interpreted. Farther than that the ordinary lay-reader in philosophy who thinks favourably of absolute idealism does not venture to sharpen his conceptions. He can use the Absolute for so much, and so much is very precious. He is pained at hearing you speak incredulously of the Absolute, therefore, and disregards your criticisms because they deal with aspects of the conception that he fails to follow.

If the Absolute means this, and means no more than this, who can possibly deny the truth of it? To deny it would be to insist that men should never relax, and that holidays are never in order.

I am well aware how odd it must seem to some of you to hear me say that an idea is "true" so long as to believe it is profitable to our lives. That it is *good*, for as much as it profits, you will gladly admit. If what we do by its aid is

good, you will allow the idea itself to be good in so far forth, for we are the better for possessing it. But is it not a strange misuse of the word "truth," you will say, to call ideas also "true" for this reason?

To answer this difficulty fully is impossible at this stage of my account. You touch here upon the very central point of Messrs. Schiller's, Dewey's, and my own doctrine of truth, which I cannot discuss with detail until my sixth lecture. Let me now say only this, that truth is *one species of good*, and not, as is usually supposed, a category distinct from good and co-ordinate with it. *The true is the name of whatever proves itself to be good in the way of belief, and good, too, for definite, assignable reasons.* Surely you must admit this, that if there were *no* good for life in true ideas, or if the knowledge of them were positively disadvantageous and false ideas the only useful ones, then the current notion that truth is divine and precious and its pursuit a duty could never have grown up or become a dogma. In a world like that, our duty would be to *shun* truth, rather. But in this world, just as certain foods are not only agreeable to our taste but good for our teeth, our stomach, and our tissues, so certain ideas are not only agreeable to think about, or agreeable as supporting other ideas that we are fond of, but they are also helpful in life's practical struggles. If there be any life that it is really better we should lead, and if there be any idea which, if believed in, would help us to lead that life, then it would be really *better for us* to believe in that idea, *unless, indeed, belief in it incidentally clashed with other greater vital benefits.*

"What would be better for us to believe!" That sounds very like a definition of truth. It comes very near to saying "what we *ought* to believe": and in *that* definition none of you would find any oddity. Ought we ever not to believe what it is *better for us* to believe? And can we then keep the notion of what is better for us, and what is true for us, permanently apart?

Pragmatism says no, and I fully agree with her. Probably

you also agree, so far as the abstract statement goes, but with a suspicion that if we practically did believe everything that made for good in our own personal lives, we should be found indulging all kinds of fancies about this world's affairs, and all kinds of sentimental superstitions about a world hereafter. Your suspicion here is undoubtedly well founded, and it is evident that something happens when you pass from the abstract to the concrete that complicates the situation.

I said just now that what is better for us to believe is true *unless the belief incidentally clashes with some other vital benefit.* Now in real life what vital benefits is any particular belief of ours most liable to clash with? What indeed except the vital benefits yielded by *other beliefs* when these prove incompatible with the first ones? In other words, the greatest enemy of any one of our truths may be the rest of our truths. Truths have once for all this desperate instinct of self-preservation and of desire to extinguish whatever contradicts them. My belief in the Absolute, based on the good it does me, must run the gauntlet of all my other beliefs. Grant that it may be true in giving me a moral holiday. Nevertheless, as I conceive it—and let me speak now confidentially, as it were, and merely in my own private person—it clashes with other truths of mine whose benefits I hate to give up on its account. It happens to be associated with a kind of logic of which I am the enemy, I find that it entangles me in metaphysical paradoxes that are inacceptable, etc., etc. But as I have enough trouble in life already without adding the trouble of carrying these intellectual inconsistencies, I personally just give up the Absolute. I just *take* my moral holidays; or else as a professional philosopher I try to justify them by some other principle.

If I could restrict my notion of the Absolute to its bare holiday-giving value it wouldn't clash with my other truths. But we cannot easily thus restrict our hypotheses. They carry supernumerary features, and these it is that

clash so. My disbelief in the Absolute means then disbelief in those other supernumerary features, for I fully believe in the legitimacy of taking moral holidays.

You see by this what I meant when I called pragmatism a mediator and reconciler and said, borrowing the word from Papini, that she "unstiffens" our theories. She has in fact no prejudices whatever, no obstructive dogmas, no rigid canons of what shall count as proof. She is completely genial. She will entertain any hypothesis, she will consider any evidence. It follows that in the religious field she is at a great advantage both over positivistic empiricism, with its antitheological bias, and over religious rationalism, with its exclusive interest in the remote, the noble, the simple, and the abstract in the way of conception.

In short, she widens the field of search for God. Rationalism sticks to logic and the empyrean. Empiricism sticks to the external senses. Pragmatism is willing to take anything, to follow either logic or the senses and to count the humblest and most personal experiences. She will count mystical experiences if they have practical consequences. She will take a God who lives in the very dirt of private fact—if that should seem a likely place to find him.

Her only test of probable truth is what works best in the way of leading us, what fits every part of life best and combines with the collectivity of experience's demands, nothing being omitted. If theological ideas should do this, if the notion of God, in particular, should prove to do it, how could pragmatism possibly deny God's existence? She could see no meaning in treating as "not true" a notion that was pragmatically so successful. What other kind of truth could there be for her than all this agreement with concrete reality?

In my last lecture I shall return again to the relations of pragmatism with religion But you see already how democratic she is. Her manners are as various and flexible, her resources as rich and endless, and her conclusions as friendly as those of mother nature.

XI

HUMANISM AND TRUTH[1]

RECEIVING from the editor of *Mind* an advance proof of Mr. Bradley's article on "Truth and Practice," I understand this as a hint to me to join in the controversy over "Pragmatism" which seems to have seriously begun. As my name has been coupled with the movement, I deem it wise to take the hint, the more so as in some quarters greater credit has been given me than I deserve, and probably undeserved discredit in other quarters falls also to my lot.

First, as to the word "pragmatism." I myself have only used the term to indicate a method of carrying on abstract discussion. The serious meaning of a concept, says Mr. Peirce, lies in the concrete difference to some one which its being true will make. Strive to bring all debated conceptions to that "pragmatic" test, and you will escape vain wrangling; if it can make no practical difference which of two statements be true, then they are really one statement in two verbal forms; if it can make no practical difference whether a given statement be true or false, then the statement has no real meaning. In neither case is there anything fit to quarrel about: we may save our breath and pass to more important things.

All that the pragmatic method implies, then, is that truths should *have* practical[2] consequences. In England

[1] From *The Meaning of Truth*, 1914, pp. 51–101.
Reprinted with slight verbal revision from *Mind*, vol. xiii. N.S. p. 457 (October 1904). A couple of interpolations from another article in *Mind*, "Humanism and Truth Once More," in vol. xiv., have been made.

[2] "Practical" in the sense of *particular*, of course, not in the sense that the consequences may not be *mental* as well as physical.

the word has been used more broadly still, to cover the notion that the truth of any statement *consists* in the consequences, and particularly in their being good consequences. Here we get beyond affairs of method altogether; and since my pragmatism and this wider pragmatism are so different, and both are important enough to have different names, I think that Mr. Schiller's proposal to call the wider pragmatism by the name of " humanism " is excellent and ought to be adopted. The narrower pragmatism may still be spoken of as the " pragmatic method."

I have read in the past six months many hostile reviews of Schiller's and Dewey's publications; but with the exception of Mr. Bradley's elaborate indictment, they are out of reach where I write, and I have largely forgotten them. I think that a free discussion of the subject on my part would in any case be more useful than a polemic attempt at rebutting these criticisms in detail. Mr. Bradley in particular can be taken care of by Mr. Schiller. He repeatedly confesses himself unable to comprehend Schiller's views, he evidently has not sought to do so sympathetically, and I deeply regret to say that his laborious article throws, for my mind, absolutely no useful light upon the subject. It seems to me on the whole an *ignoratio elenchi*, and I feel free to disregard it altogether.

The subject is unquestionably difficult. Messrs. Dewey's and Schiller's thought is eminently an induction, a generalisation working itself free from all sorts of entangling particulars. If true, it involves much restatement of traditional notions. This is a kind of intellectual product that never attains a classic form of expression when first promulgated. The critic ought therefore not to be too sharp and logic-shopping in his dealings with it, but should weigh it as a whole, and especially weigh it against its possible alternatives. One should also try to apply it first to one instance and then to another to see how it will work. It seems to me that it is emphatically not a case for instant execution, by conviction of intrinsic absurdity or of self-contradiction,

or by caricature of what it would look like if reduced to skeleton shape. Humanism is in fact much more like one of those secular changes that come upon public opinion overnight, as it were, borne upon tides " too deep for sound or foam," that survive all the crudities and extravagances of their advocates, that you can pin to no one absolutely essential statement, nor kill by any one decisive stab.

Such have been the changes from aristocracy to democracy, from classic to romantic taste, from theistic to pantheistic feeling, from static to evolutionary ways of understanding life—changes of which we all have been spectators. Scholasticism still opposes to such changes the method of confutation by single decisive reasons, showing that the new view involves self-contradiction, or traverses some fundamental principle. This is like stopping a river by planting a stick in the middle of its bed. Round your obstacle flows the water and " gets there all the same." In reading some of our opponents, I am not a little reminded of those catholic writers who refute darwinism by telling us that higher species cannot come from lower because *minus nequit gignere plus*, or that the notion of transformation is absurd, for it implies that species tend to their own destruction, and that would violate the principle that every reality tends to persevere in its own shape. The point of view is too myopic, too tight and close to take in the inductive argument. Wide generalizations in science always meet with these summary refutations in their early days; but they outlive them, and the refutations then sound oddly antiquated and scholastic. I cannot help suspecting that the humanistic theory is going through this kind of would-be refutation at present.

The one condition of understanding humanism is to become inductive-minded oneself, to drop rigorous definitions, and follow lines of least resistance " on the whole." " In other words," an opponent might say, " resolve your intellect into a kind of slush." " Even so," I make reply, " if you will consent to use no politer word." For humanism,

conceiving the more "true" as the more "satisfactory" (Dewey's term), has sincerely to renounce rectilinear arguments and ancient ideals of rigour and finality. It is in just this temper of renunciation, so different from that of pyrrhonistic scepticism, that the spirit of humanism essentially consists. Satisfactoriness has to be measured by a multitude of standards, of which some, for aught we know, may fail in any given case; and what is more satisfactory than any alternative in sight, may to the end be a sum of *pluses* and *minuses*, concerning which we can only trust that by ulterior corrections and improvements a maximum of the one and a minimum of the other may some day be approached. It means a real change of heart, a break with absolutistic hopes, when one takes up this inductive view of the conditions of belief.

As I understand the pragmatist way of seeing things, it owes its being to the break-down which the last fifty years have brought about in the older notions of scientific truth. "God geometrizes," it used to be said; and it was believed that Euclid's elements literally reproduced his geometrizing. There is an eternal and unchangeable "reason"; and its voice was supposed to reverberate in *Barbara* and *Celarent*. So also of the "laws of nature," physical and chemical, so of natural history classifications—all were supposed to be exact and exclusive duplicates of pre-human archetypes buried in the structure of things, to which the spark of divinity hidden in our intellect enables us to penetrate. The anatomy of the world is logical, and its logic is that of a university professor, it was thought. Up to about 1850 almost every one believed that sciences expressed truths that were exact copies of a definite code of non-human realities. But the enormously rapid multiplication of theories in these later days has well-nigh upset the notion of any one of them being a more literally objective kind of thing than another. There are so many geometries, so many logics, so many physical and chemical hypotheses, so many classifications, each one of them good for so much

and yet not good for everything, that the notion that even the truest formula may be a human device and not a literal transcript has dawned upon us. We hear scientific laws now treated as so much "conceptual shorthand," true so far as they are useful but no farther. Our mind has become tolerant of symbol instead of reproduction, of approximation instead of exactness, of plasticity instead of rigour. "Energetics," measuring the bare face of sensible phenomena so as to describe in a single formula all their changes of "level," is the last word of this scientific humanism, which indeed leaves queries enough outstanding as to the reason for so curious a congruence between the world and the mind, but which at any rate makes our whole notion of scientific truth more flexible and genial than it used to be.

It is to be doubted whether any theorizer to-day, either in mathematics, logic, physics, or biology, conceives himself to be literally re-editing processes of nature or thoughts of God. The main forms of our thinking, the separation of subjects from predicates, the negative, hypothetic, and disjunctive judgments, are purely human habits. The ether, as Lord Salisbury said, is only a noun for the verb to undulate; and many of our theological ideas are admitted, even by those who call them "true," to be humanistic in like degree.

I fancy that these changes in the current notions of truth are what originally gave the impulse to Messrs. Dewey's and Schiller's views. The suspicion is in the air nowadays that the superiority of one of our formulas to another may not consist so much in its literal "objectivity," as in subjective qualities like its usefulness, its "elegance," or its congruity with our residual beliefs. Yielding to these suspicions, and generalizing, we fall into something like the humanistic state of mind. Truth we conceive to mean everywhere not duplication but addition; not the constructing of inner copies of already complete realities, but rather the collaborating with realities so as to bring about

a clearer result. Obviously this state of mind is at first full of vagueness and ambiguity. "Collaborating" is a vague term; it must at any rate cover conceptions and logical arrangements. "Clearer" is vaguer still. Truth must bring clear thoughts, as well as clear the way to action. "Reality" is the vaguest term of all. The only way to test such a programme at all is to apply it to the various types of truth, in the hope of reaching an account that shall be more precise. Any hypothesis that forces such a review upon one has one great merit, even if in the end it prove invalid; it gets us better acquainted with the total subject. To give the theory plenty of "rope" and see if it hangs itself eventually is better tactics than to choke it off at the outset by abstract accusations of self-contradiction. I think, therefore, that a decided effort at sympathetic mental play with humanism is the provisional attitude to be recommended to the reader.

When I find myself playing sympathetically with humanism, something like what follows is what I end by conceiving it to mean.

Experience is a process that continually gives us new material to digest. We handle this intellectually by the mass of beliefs of which we find ourselves already possessed, assimilating, rejecting, or rearranging in different degrees. Some of the apperceiving ideas are recent acquisitions of our own, but most of them are common-sense traditions of the race. There is probably not a common-sense tradition, of all those which we now live by, that was not in the first instance a genuine discovery, an inductive generalization like those more recent ones of the atom, of inertia, of energy, of reflex action, or of fitness to survive. The notions of one Time and of one Space as single continuous receptacles; the distinction between thoughts and things, matter and mind; between permanent subjects and changing attributes; the conception of classes with sub-classes within them; the separation of fortuitous from

regularly caused connections; surely all these were once definite conquests made at historic dates by our ancestors in their attempts to get the chaos of their crude individual experiences into a more shareable and manageable shape. They proved of such sovereign use as *denkmittel* that they are now a part of the very structure of our mind. We cannot play fast and loose with them. No experience can upset them. On the contrary, they apperceive every experience and assign it to its place.

To what effect? That we may the better foresee the course of our experiences, communicate with one another, and steer our lives by rule. Also that we may have a cleaner, clearer, more inclusive mental view.

The greatest common-sense achievement, after the discovery of one Time and one Space, is probably the concept of permanently existing things. When a rattle first drops out of the hand of a baby, he does not look to see where it has gone. Non-perception he accepts as annihilation until he finds a better belief. That our perceptions mean *beings*, rattles that are there whether we hold them in our hands or not, becomes an interpretation so luminous of what happens to us that, once employed, it never gets forgotten. It applies with equal felicity to things and persons, to the objective and to the ejective realm. However a Berkeley, a Mill, or a Cornelius may criticize it, it *works;* and in practical life we never think of "going back" upon it, or reading our incoming experiences in any other terms. We may, indeed, speculatively imagine a state of "pure" experience before the hypothesis of permanent objects behind its flux had been framed; and we can play with the idea that some primeval genius might have struck into a different hypothesis. But we cannot positively imagine to-day what the different hypothesis could have been, for the category of trans-perceptual reality is now one of the foundations of our life. Our thoughts must still employ it if they are to possess reasonableness and truth.

This notion of a *first* in the shape of a most chaotic pure

experience which sets us questions, of a *second* in the way of fundamental categories, long ago wrought into the structure of our consciousness and practically irreversible, which define the general frame within which answers must fall, and of a *third* which gives the detail of the answers in the shapes most congruous with all our present needs, is, as I take it, the essence of the humanistic conception. It represents experience in its pristine purity to be now so enveloped in predicates historically worked out that we can think of it as little more than an *Other*, of a *That* which the mind, in Mr. Bradley's phrase, "encounters," and to whose stimulating presence we respond by ways of thinking which we call "true" in proportion as they facilitate our mental or physical activities and bring us outer power and inner peace. But whether the Other, the universal *That*, has itself any definite inner structure, or whether, if it have any, the structure resembles any of our predicated *whats*, this is a question which humanism leaves untouched. For us, at any rate, it insists, reality is an accumulation of our own intellectual inventions, and the struggle for "truth" in our progressive dealings with it is always a struggle to work in new nouns and adjectives while altering as little as possible the old.

It is hard to see why either Mr. Bradley's own logic or his metaphysics should oblige him to quarrel with this conception. He might consistently adopt it *verbatim et literatim*, if he would, and simply throw his peculiar absolute round it, following in this the good example of Professor Royce. Bergson in France, and his disciples, Wilbois the physicist and Leroy, are thoroughgoing humanists in the sense defined. Professor Milhaud also appears to be one; and the great Poincaré misses it by only the breadth of a hair. In Germany the name of Simmel offers itself as that of a humanist of the most radical sort. Mach and his school, and Hertz and Ostwald must be classed as humanists. The view is in the atmosphere and must be patiently discussed.

The best way to discuss it would be to see what the alternative might be. What is it indeed? Its critics make no explicit statement, Professor Royce being the only one so far who has formulated anything definite. The first service of humanism to philosophy accordingly seems to be that it will probably oblige those who dislike it to search their own hearts and heads. It will force analysis to the front and make it the order of the day. At present the lazy tradition that truth is *adæquatio intellectus et rei* seems all there is to contradict it with. Mr. Bradley's only suggestion is that true thought "must correspond to a determinate being which it cannot be said to make," and obviously that sheds no new light. What is the meaning of the word to "correspond"? Where is the "being"? What sort of things are "determinations," and what is meant in this particular case by "not to make"?

Humanism proceeds immediately to refine upon the loosenesss of these epithets. We correspond in *some* way with anything with which we enter into any relations at all. If it be a thing, we may produce an exact copy of it, or we may simply feel it as an existent in a certain place. If it be a demand, we may obey it without knowing anything more about it than its push. If it be a proposition, we may agree by not contradicting it, by letting it pass. If it be a relation between things, we may act on the first thing so as to bring ourselves out where the second will be. If it be something inaccessible, we may substitute a hypothetical object for it, which, having the same consequences, will cipher out for us real results. In a general way we may simply *add our thought to it;* and if it *suffers the addition,* and the whole situation harmoniously prolongs and enriches itself, the thought will pass for true.

As for the whereabouts of the beings thus corresponded to, although they may be outside of the present thought as well as in it, humanism sees no ground for saying they are outside of finite experience itself. Pragmatically, their reality means that we submit to them, take account of

them, whether we like to or not, but this we must perpetually do with experiences other than our own. The whole system of what the present experience must correspond to "adequately" may be continuous with the present experience itself. Reality, so taken as experience other than the present, might be either the legacy of past experience or the content of experience to come. Its determinations for *us* are in any case the adjectives which our acts of judging fit to it, and those are essentially humanistic things.

To say that our thought does not "make" this reality means pragmatically that if our own particular thought were annihilated the reality would still be there in some shape, though possibly it might be a shape that would lack something that our thought supplies. That reality is "independent" means that there is something in every experience that escapes our arbitrary control. If it be a sensible experience it coerces our attention; if a sequence we cannot invert it; if we compare two terms we can come to only one result. There is a push, an urgency, within our very experience, against which we are on the whole powerless, and which drives us in a direction that is the destiny of our belief. That this drift of experience itself is in the last resort due to something independent of all possible experience may or may not be true. There may or may not be an extra-experiential "ding an sich" that keeps the ball rolling, or an "absolute" that lies eternally behind all the successive determinations which human thought has made. But within our experience *itself*, at any rate, humanism says, some determinations show themselves as being independent of others; some questions, if we ever ask them, can only be answered in one way; some beings, if we ever suppose them, must be supposed to have existed previously to the supposing; some relations, if they exist ever, must exist as long as their terms exist.

Truth thus means, according to humanism, the relation of less fixed parts of experience (predicates) to other

relatively more fixed parts (subjects); and we are not required to seek it in a relation of experience as such to anything beyond itself. We can stay at home, for our behaviour as experients is hemmed in on every side. The forces both of advance and of resistance are exerted by our own objects, and the notion of truth as something opposed to waywardness or licence inevitably grows up solipsistically inside of every human life.

So obvious is all this that a common charge against the humanistic authors "makes me tired." "How can a deweyite discriminate sincerity from bluff?" was a question asked at a philosophic meeting where I reported on Dewey's *Studies*. "How can the mere [1] pragmatist feel any duty to think truly?" is the objection urged by Professor Royce. Mr. Bradley in turn says that if a humanist understands his own doctrine, "he must hold any idea, however mad, to be the truth, if any one will have it so." And Professor Taylor describes pragmatism as believing anything one pleases and calling it truth.

Such a shallow sense of the conditions under which men's thinking actually goes on seems to me most surprising. These critics appear to suppose that, if left to itself, the rudderless raft of our experience must be ready to drift anywhere or nowhere. Even though there were compasses on board, they seem to say, there would be no pole for them to point to. There must be absolute sailing-directions, they insist, decreed from outside, and an independent chart of the voyage added to the "mere" voyage itself, if we are ever to make a port. But is it not obvious that even though there be such absolute sailing-directions in the shape of prehuman standards of truth that we *ought* to follow, the only guarantee that we shall in fact follow them must lie in our human equipment. The "ought" would be a *brutum fulmen* unless there were a felt grain inside

[1] I know of no "mere" pragmatist, if *mereness* here means, as it seems to, the denial of all concreteness to the pragmatist's thought.

of our experience that conspired. As matter of fact the devoutest believers in absolute standards must admit that men fail to obey them. Waywardness is here, in spite of the eternal prohibitions, and the existence of any amount of reality *ante rem* is no warrant against unlimited error *in rebus* being incurred. The only *real* guarantee we have against licentious thinking is the circumpressure of experience itself, which gets us sick of concrete errors, whether there be a trans-empirical reality or not. How does the partisan of absolute reality know what this orders him to think? He cannot get direct sight of the absolute; and he has no means of guessing what it wants of him except by following the humanistic clues. The only truth that he himself will ever practically *accept* will be that to which his finite experiences lead him of themselves. The state of mind which shudders at the idea of a lot of experiences left to themselves, and that augurs protection from the sheer name of an absolute, as if, however inoperative, that might still stand for a sort of ghostly security, is like the mood of those good people who, whenever they hear of a social tendency that is damnable, begin to redden and to puff, and say "Parliament or Congress ought to make a law against it," as if an impotent decree would give relief.

All the *sanctions* of a law of truth lie in the very texture of experience. Absolute or no absolute, the concrete truth *for us* will always be that way of thinking in which our various experiences most profitably combine.

And yet, the opponent obstinately urges, your humanist will always have a greater liberty to play fast and loose with truth than will your believer in an independent realm of reality that makes the standard rigid. If by this latter believer he means a man who pretends to know the standard and who fulminates it, the humanist will doubtless prove more flexible; but no more flexible than the absolutist himself if the latter follows (as fortunately our present-day absolutists do follow) empirical methods of inquiry

in concrete affairs. To consider hypotheses is surely always better than to dogmatize *ins Blaue hinein.*

Nevertheless this probable flexibility of temper in him has been used to convict the humanist of sin. Believing as he does, that truth lies *in rebus*, and is at every moment our own line of most propitious reaction, he stands forever debarred, as I have heard a learned colleague say, from trying to convert opponents, for does not their view, being *their* most propitious momentary reaction, already fill the bill? Only the believer in the *ante-rem* brand of truth can on this theory seek to make converts without self-stultification. But can there be self-stultification in urging any account whatever of truth? Can the definition ever contradict the deed? "Truth is what I feel like saying"—suppose that to be the definition. "Well, I feel like saying that, and I want you to feel like saying it, and shall continue to say it until I get you to agree." Where is there any contradiction? Whatever truth may be said to be, that is the kind of truth which the saying can be held to carry. The *temper* which a saying may comport is an extra-logical matter. It may indeed be hotter in some individual absolutist than in a humanist, but it need not be so in another. And the humanist, for his part, is perfectly consistent in compassing sea and land to make one proselyte, if his nature be enthusiastic enough.

"But how *can* you be enthusiastic over any view of things which you know to have been partly made by yourself, and which is liable to alter during the next minute? How is any heroic devotion to the ideal of truth possible under such paltry conditions?"

This is just another of those objections by which the anti-humanists show their own comparatively slack hold on the realities of the situation. If they would only follow the pragmatic method and ask: "What is truth *known-as?* What does its existence stand for in the way of concrete goods?"—they would see that the name of it is the *Inbegriff* of almost everything that is valuable in our lives.

The true is the opposite of whatever is instable, of whatever is practically disappointing, of whatever is useless, of whatever is lying and unreliable, of whatever is unverifiable and unsupported, of whatever is inconsistent and contradictory, of whatever is artificial and eccentric, of whatever is unreal in the sense of being of no practical account. Here are pragmatic reasons with a vengeance why we should turn to truth—truth saves us from a world of that complexion. What wonder that its very name awakens loyal feeling! In particular what wonder that all little provisional fool's paradises of belief should appear contemptible in comparison with its bare pursuit! When absolutists reject humanism because they feel it to be untrue, that means that the whole habit of their mental needs is wedded already to a different view of reality, in comparison with which the humanistic world seems but the whim of a few irresponsible youths. Their own subjective apperceiving mass is what speaks here in the name of the eternal natures and bids them reject our humanism—as they apprehend it. Just so with us humanists, when we condemn all noble, clean-cut, fixed, eternal, rational, temple-like systems of philosophy. These contradict the *dramatic temperament* of our nature, as our dealings with nature and our habits of thinking have so far brought us to conceive it. They seem oddly personal and artificial, even when not bureaucratic and professional in an absurd degree. We turn from them to the great unpent and unstayed wilderness of truth as we feel it to be constituted, with as good a conscience as rationalists are moved by when they turn from our wilderness into their neater and cleaner intellectual abodes.

This is surely enough to show that the humanist does not ignore the character of objectivity and independence in truth. Let me turn next to what his opponents mean when they say that to be true, our thoughts must "correspond." [1]

[1] [I cannot forbear quoting as an illustration of the contrast between humanist and rationalist tempers of mind, in a sphere

The vulgar notion of correspondence here is that the thoughts must *copy* the reality—*cognitio fit per assimilationem cogniti et cognoscentis;* and philosophy, without having ever fairly sat down to the question, seems to have instinctively accepted this idea; propositions are held true if they copy the eternal thought; terms are held true if they copy extra-mental realities. Implicitly, I think that the copy-theory has animated most of the criticisms that have been made on humanism.

A priori, however, it is not self-evident that the sole business of our mind with realities should be to copy them. Let my reader suppose himself to constitute for a time all the reality there is in the universe, and then to receive the announcement that another being is to be created who shall know him truly. How will he represent the knowing in advance? What will he hope it to be? I doubt extremely whether it could ever occur to him to fancy it as a mere copying. Of what use to him would an imperfect second edition of himself in the new comer's interior be? It would seem pure waste of a propitious opportunity. The demand would more probably be for something absolutely new. The reader would conceive the knowing humanistically.

remote from philosophy, these remarks on the Dreyfus "affaire," written by one who assuredly had never heard of humanism or pragmatism: "Autant que la Révolution, 'l'Affaire' est désormais une de nos 'origines.' Si elle n'a pas fait ouvrir le gouffre, c'est elle du moins qui a rendu patent et visible le long travail souterrain qui, silencieusement, avait preparé la séparation entre nos deux camps d'aujourd'hui, pour écarter enfin, d'un coup soudain, *la France des traditionalists (poseurs de principes, chercheurs d'unité, constructeurs de systèmes à priori) et la France éprise du fait positif et de libre examen;*—la France révolutionnaire et romantique si l'on veut, celle qui met très haut l'individu, qui ne veut pas qu'un juste périsse, fut-ce pour sauver la nation, et qui cherche la vérité dans toutes ses parties aussi bien que dans une vue d'ensemble. . . . Duclaux ne pouvait pas concevoir qu'on préferât quelque chose à la vérité. Mais il voyait autour de lui de fort honnêtes gens qui, mettant en balance la vie d'un homme et la raison d'État, lui avouaient de quel poids léger ils jugeaient une simple existence individuelle, pour innocente qu'elle fût. *C'etaient des classiques, des gens à qui l'ensemble seul importe.*"—*La Vie de Emile Duclaux,* par Mme. Em. D., Laval, 1906, pp. 243, 247-248.]

"' The new comer," he would say, " must *take account of my presence by reacting on it in such a way that good would accrue to us both.* If copying be requisite to that end, let there be copying; otherwise not." The essence in any case would not be the copying but the enrichment of the previous world.

I read the other day, in a book of Professor Eucken's, a phrase, "*Die Erhöhung des vorgefundenen Daseins,*" which seems to be pertinent here. Why may not thought's mission be to increase and elevate, rather than simply to imitate and reduplicate, existence? No one who has read Lotze can fail to remember his striking comment on the ordinary view of the secondary qualities of matter, which brands them as "illusory" because they copy nothing in the thing. The notion of a world complete in itself, to which thought comes as a passive mirror, adding nothing to fact, Lotze says is irrational. Rather is thought itself a most momentous part of fact, and the whole mission of the pre-existing and insufficient world of matter may simply be to provoke thought to produce its far more precious supplement.

" Knowing," in short, may, for aught we can see beforehand to the contrary, be *only one way of getting into fruitful relations with reality*, whether copying be one of the relations or not.

It is easy to see from what special type of knowing the copy-theory arose. In our dealings with natural phenomena the great point is to be able to foretell. Foretelling, according to such a writer as Spencer, is the whole meaning of intelligence. When Spencer's " law of intelligence " says that inner and outer relations must " correspond," it means that the distribution of terms in our inner time-scheme and space-scheme must be an exact copy of the distribution in real time and space of the real terms. In strict theory the mental terms themselves need not answer to the real terms in the sense of severally copying them, symbolic mental terms being enough, if only the real dates and places be

copied. But in our ordinary life the mental terms are images and the real ones are sensations, and the images so often copy the sensations that we easily take copying of the terms as well as of relations to be the natural significance of knowing. Meanwhile much, even of this common descriptive truth, is couched in verbal symbols. If our symbols *fit* the world, in the sense of determining our expectations rightly, they may even be the better for not copying its terms.

It seems obvious that the pragmatic account of all this routine of phenomenal knowledge is accurate. Truth here is a relation, not of our ideas to non-human realities, but of conceptual parts of our experience to sensational parts. Those thoughts are true which guide us to *beneficial interaction* with sensible particulars as they occur, whether they copy these in advance or not.

From the frequency of copying in the knowledge of phenomenal fact, copying has been supposed to be the essence of truth in matters rational also. Geometry and logic, it has been supposed, must copy archetypal thoughts in the Creator. But in these abstract spheres there is no need of assuming archetypes. The mind is free to carve so many figures out of space, to make so many numerical collections, to frame so many classes and series, and it can analyse and compare so endlessly that the very superabundance of the resulting ideas makes us doubt the "objective" pre-existence of their models. It would be plainly wrong to suppose a God whose thought consecrated rectangular but not polar co-ordinates, or Jevons's notations but not Boole's. Yet if, on the other hand, we assume God to have thought in advance of every *possible* flight of human fancy in these directions, his mind becomes too much like a Hindoo idol with three heads, eight arms, and six breasts, too much made up of superfoetation and redundancy for us to wish to copy it, and the whole notion of copying tends to evaporate from these sciences. Their objects can be

better interpreted as being created step by step by men, as fast as they successively conceive them.

If now it be asked how, if triangles, squares, square roots, genera, and the like, are but improvised human "artefacts," their properties and relations can be so promptly known to be "eternal," the humanistic answer is easy. If triangles and genera are of our own production we can keep them invariant. We can make them "timeless" by expressly decreeing that on *the things we mean* time shall exert no altering effect, that they are intentionally and it may be fictitiously abstracted from every corrupting real associate and condition. But relations between invariant objects will themselves be invariant. Such relations cannot be happenings, for by hypothesis nothing shall happen to the objects. I have tried to show in the last chapter of my *Principles of Psychology*[1] that they can only be relations of comparison. No one so far seems to have noticed my suggestion, and I am too ignorant of the development of mathematics to feel very confident of my own view. But if it were correct it would solve the difficulty perfectly. Relations of comparison are matters of direct inspection. As soon as mental objects are mentally compared, they are perceived to be either like or unlike. But once the same, always the same, once different, always different, under these timeless conditions. Which is as much as to say that truths concerning these man-made objects are necessary and eternal. We can change our conclusions only by changing our data first.

The whole fabric of the *a priori* sciences can thus be treated as a man-made product. As Locke long ago pointed out, these sciences have no immediate connection with fact. Only *if* a fact can be humanized by being identified with any of these ideal objects, is what was true of the objects now true also of the facts. The truth itself meanwhile was originally a copy of nothing; it was only a relation

[1] Vol ii. pp. 641 ff.

directly perceived to obtain between two artificial mental things.[1]

We may now glance at some special types of knowing, so as to see better whether the humanistic account fits. On the mathematical and logical types we need not enlarge further, nor need we return at much length to the case of our descriptive knowledge of the course of nature. So far as this involves anticipation, though that *may* mean copying, it need, as we saw, mean little more than "getting ready" in advance. But with many distant and future objects, our practical relations are to the last degree potential and remote. In no sense can we now get ready for the arrest of the earth's revolution by the tidal brake, for instance; and with the past, though we suppose ourselves to know it truly, we have no practical relations at all. It is obvious that, although interests strictly practical have been the original starting-point of our search for true phenomenal descriptions, yet an intrinsic interest in the bare describing function has grown up. We wish accounts that shall be true, whether they bring collateral profit or not. The primitive function has developed its demand for mere exercise. This theoretic curiosity seems to be the characteristically human *differentia*, and humanism recognizes its enormous scope. A true idea now means not only one that prepares us for an actual perception. It means also one that might prepare us for a merely possible perception, or one that, if spoken, would suggest possible perceptions to others, or suggest actual perceptions which the speaker cannot share. The *ensemble* of perceptions thus thought of as either actual or possible form a system which it is obviously advantageous to us to get into a stable and consistent shape; and here it is that the common-sense notion of permanent beings finds triumphant use. Beings acting outside of the thinker explain, not only his actual perceptions, past and future,

[1] Mental things which are realities of course within the mental world.

but his possible perceptions and those of every one else. Accordingly they gratify our theoretic need in a supremely beautiful way. We pass from our immediate actual through them into the foreign and potential, and back again into the future actual, accounting for innumerable particulars by a single cause. As in those circular panoramas, where a real foreground of dirt, grass, bushes, rocks, and a broken-down cannon is enveloped by a canvas picture of sky and earth and of a raging battle, continuing the foreground so cunningly that the spectator can detect no joint; so these conceptual objects, added to our present perceptual reality, fuse with it into the whole universe of our belief. In spite of all berkeleyan criticism, we do not doubt that they are really there. Though our discovery of any one of them may only date from now, we unhesitatingly say that it not only *is*, but *was* there, if, by so saying, the past appears connected more consistently with what we feel the present to be. This is historic truth. Moses wrote the Pentateuch, we think, because if he didn't all our religious habits will have to be undone. Julius Caesar was real, or we can never listen to history again. Trilobites were once alive, or all our thought about the strata is at sea. Radium, discovered only yesterday, must always have existed, or its analogy with other natural elements, which are permanent, fails. In all this, it is but one portion of our beliefs reacting on another so as to yield the most satisfactory total state of mind. That state of mind, we say, sees truth, and the content of its deliverances we believe.

Of course, if you take the satisfactoriness concretely, as something felt by you now, and if, by truth, you mean truth taken abstractly and verified in the long run, you cannot make them equate, for it is notorious that the temporarily satisfactory is often false. Yet at each and every concrete moment truth for each man is what man "troweth" at that moment with the maximum of satisfaction to himself; and similarly, abstract truth, truth verified by the long run, and abstract satisfactoriness, long-run

satisfactoriness, coincide. If, in short, we compare concrete with concrete and abstract with abstract, the true and the satisfactory do mean the same thing. I suspect that a certain muddling of matters hereabouts is what makes the general philosophic public so impervious to humanism's claims.

The fundamental fact about our experience is that it is a process of change. For the "trower" at any moment, truth, like the visible area round a man walking in a fog, or like what George Eliot calls "the wall of dark seen by small fishes' eyes that pierce a span in the wide Ocean," is an objective field which the next moment enlarges and of which it is the critic, and which then either suffers alteration or is continued unchanged. The critic sees both the first trower's truth and his own truth, compares them with each other, and verifies or confutes. *His* field of view is the reality independent of that earlier trower's thinking with which that thinking ought to correspond. But the critic is himself only a trower; and if the whole process of experience should terminate at that instant, there would be no otherwise known independent reality with which *his* thought might be compared.

The immediate in experience is always provisionally in this situation. The humanism, for instance, which I see and try so hard to defend is the completest truth attained from my point of view up to date. But, owing to the fact that all experience is a process, no point of view can ever be *the* last one. Every one is insufficient and off its balance and responsible to later points of view than itself. You, occupying some of these later points in your own person, and believing in the reality of others, will not agree that my point of view sees truth positive, truth timeless, truth that counts, unless they verify and confirm what it sees.

You generalize this by saying that any opinion, however satisfactory, can count positively and absolutely as true only so far as it agrees with a standard beyond itself; and

if you then forget that this standard perpetually grows up endogenously inside the web of the experiences, you may carelessly go on to say that what distributively holds of each experience, holds also collectively of all experience, and that experience as such and in its totality owes whatever truth it may be possessed of to its correspondence with absolute realities outside of its own being. This evidently is the popular and traditional position. From the fact that finite experiences must draw support from one another, philosophers pass to the notion that experience *überhaupt* must need an absolute support. The denial of such a notion by humanism lies probably at the root of most of the dislike which it incurs.

But is this not the globe, the elephant, and the tortoise over again? Must not something end by supporting itself? Humanism is willing to let finite experience be self-supporting. Somewhere being must immediately breast nonentity. Why may not the advancing front of experience, carrying its immanent satisfactions and dissatisfactions, cut against the black inane as the luminous orb of the moon cuts the caerulean abyss? Why should anywhere the world be absolutely fixed and finished? And if reality genuinely grows, why may it not grow in these very determinations which here and now are made?

In point of fact it actually seems to grow by our mental determinations, be these never so " true." Take the " great bear " or " dipper " constellation in the heavens. We call it by that name, we count the stars and call them seven, we say they were seven before they were counted, and we say that whether any one had ever noted the fact or not, the dim resemblance to a long-tailed (or long-necked?) animal was always truly there. But what do we mean by this projection into past eternity of recent human ways of thinking? Did an " absolute " thinker actually do the counting, tell off the stars upon his standing number-tally, and make the bear-comparison, silly as the latter is? Were

they explicitly seven, explicitly bear-like, before the human witness came? Surely nothing in the truth of the attributions drives us to think this. They were only implicitly or virtually what we call them, and we human witnesses first explicated them and made them "real." A fact virtually pre-exists when every condition of its realization save one is already there. In this case the condition lacking is the act of the counting and comparing mind. But the stars (once the mind considers them) themselves dictate the result. The counting in no wise modifies their previous nature, and, they being what and where they are, the count cannot fall out differently. It could then *always* be made. *Never* could the number seven be questioned, *if the question once were raised.*

We have here a quasi-paradox. Undeniably something comes by the counting that was not there before. And yet that something was *always true.* In one sense you create it, and in another sense you *find* it. You have to treat your count as being true beforehand, the moment you come to treat the matter at all.

Our stellar attributes must always be called true, then; yet none the less are they genuine additions made by our intellect to the world of fact. Not additions of consciousness only, but additions of "content." They copy nothing that pre-existed, yet they agree with what pre-existed, fit it, amplify it, relate and connect it with a "wain," a number-tally, or what not, and build it out. It seems to me that humanism is the only theory that builds this case out in the good direction, and this case stands for innumerable other kinds of cases. In all such cases, odd as it may sound, our judgment may actually be said to retroact and to enrich the past.

Our judgments at any rate change the character of *future* reality by the acts to which they lead. Where these acts are expressive of trust—trust, *e.g.* that a man is honest, that our health is good enough, or that we can make a successful effort—which acts may be a needed antecedent

of the trusted things becoming true, Professor Taylor says [1] that our trust is at any rate *untrue when it is made, i.e.*, before the action; and I seem to remember that he disposes of anything like a faith in the general excellence of the universe (making the faithful person's part in it at any rate more excellent) as a "lie in the soul." But the pathos of this expression should not blind us to the complication of the facts. I doubt whether Professor Taylor would himself be in favour of practically handling trusters of these kinds as liars. Future and present really mix in such emergencies, and one can always escape lies in them by using hypothetic forms. But Mr. Taylor's attitude suggests such absurd possibilities of practice that it seems to me to illustrate beautifully how self-stultifying the conception of a truth that shall merely register a standing fixture may become. Theoretic truth, truth of passive copying, sought in the sole interests of copying as such, not because copying is *good for something*, but because copying ought *schlechthin* to be, seems, if you look at it coldly, to be an almost preposterous ideal. Why should the universe, existing in itself, also exist in copies? How *can* it be copied in the solidity of its objective fulness? And even if it could, what would the motive be? "Even the hairs of your head are numbered." Doubtless they are, virtually; but why, as an absolute proposition, *ought* the number to become copied and known? Surely knowing is only one way of interacting with reality and adding to its effect.

The opponent here will ask: "Has not the knowing of truth any substantive value on its own account, apart from the collateral advantages it may bring? And if you allow theoretic satisfactions to exist at all, do they not crowd the collateral satisfactions out of house and home, and must not pragmatism go into bankruptcy, if she admits them at all?" The destructive force of such talk disappears

[1] In an article criticising Pragmatism (as he conceives it) in the *McGill University Quarterly*, published at Montreal, for May 1904.

as soon as we use words concretely instead of abstractly, and ask, in our quality of good pragmatists, just what the famous theoretic needs are known as and in what the intellectual satisfactions consist.

Are they not all mere matters of *consistency*—and, emphatically *not* of consistency between an absolute reality and the mind's copies of it, but of actually felt consistency among judgments, objects, and habits of reacting, in the mind's own experienceable world? And are not both our need of such consistency and our pleasure in it conceivable as outcomes of the natural fact that we are beings that do develop mental *habits*—habit itself proving adaptively beneficial in an environment where the same objects, or the same kinds of objects, recur and follow "law"? If this were so, what would have come first would have been the collateral profits of habit as such, and the theoretic life would have grown up in aid of these. In point of fact, this seems to have been the probable case. At life's origin, any present perception may have been "true"—if such a word could then be applicable. Later, when reactions became organized, the reactions became "true" whenever expectation was fulfilled by them. Otherwise they were "false" or "mistaken" reactions. But the same class of objects needs the same kind of reaction, so the impulse to react consistently must gradually have been established, and a disappointment felt whenever the results frustrated expectation. Here is a perfectly plausible germ for all our higher consistencies. Nowadays, if an object claims from us a reaction of the kind habitually accorded only to the opposite class of objects, our mental machinery refuses to run smoothly. The situation is intellectually unsatisfactory.

Theoretic truth thus falls *within* the mind, being the accord of some of its processes and objects—"accord" consisting here in well-definable relations. So long as the satisfaction of feeling such an accord is denied us, whatever collateral profits may seem to inure from what we believe in are but as dust in the balance—provided always that we

are highly organized intellectually, which the majority of us are not. The amount of accord which satisfies most men and women is merely the absence of violent clash between their usual thoughts and statements and the limited sphere of sense-perceptions in which their lives are cast. The theoretic truth that most of us think we "ought" to attain to is thus the possession of a set of predicates that do not explicitly contradict their subjects. We preserve it as often as not by leaving other predicates and subjects out.

In some men theory is a passion, just as music is in others. The form of inner consistency is pursued far beyond the line at which collateral profits stop. Such men systematize and classify and schematize and make synoptical tables and invent ideal objects for the pure love of unifying. Too often the results, glowing with "truth" for the inventors, seem pathetically personal and artificial to bystanders. Which is as much as to say that the purely theoretic criterion of truth can leave us in the lurch as easily as any other criterion, and that the absolutists, for all their pretensions, are "in the same boat" concretely with those whom they attack.

I am well aware that this paper has been rambling in the extreme. But the whole subject is inductive, and sharp logic is hardly yet in order. My great trammel has been the non-existence of any definitely stated alternative on my opponents' part. It may conduce to clearness if I recapitulate, in closing, what I conceive the main points of humanism to be. They are these:—

1. An experience, perceptual or conceptual, must conform to reality in order to be true.

2. By "reality" humanism means nothing more than the other conceptual or perceptual experiences with which a given present experience may find itself in point of fact mixed up.[1]

[1] This is meant merely to exclude reality of an "unknowable" sort, of which no account in either perceptual or conceptual terms

3. By "conforming," humanism means taking account of in such a way as to gain any intellectually and practically satisfactory result.

4. To "take account-of" and to be "satisfactory" are terms that admit of no definition, so many are the ways in which these requirements can practically be worked out.

5. Vaguely and in general, we take account of a reality by *preserving* it in as unmodified a form as possible. But, to be then satisfactory, it must not contradict other realities outside of it which claim also to be preserved. That we must preserve all the experience we can and minimize contradiction in what we preserve, is about all that can be said in advance.

6. The truth which the conforming experience embodies may be a positive addition to the previous reality, and later judgments may have to conform to *it*. Yet, virtually at least, it may have been true previously. Pragmatically, virtual and actual truth mean the same thing; the possibility of only one answer, *when once the question is raised.*

can be given. It includes of course any amount of empirical reality independent of the knower. Pragmatism is thus "epistemologically" realistic in its account.

XII

THE POSITIVE CONTENT OF RELIGIOUS EXPERIENCE[1]

THE material of our study of human nature is now spread before us; and in this parting hour, set free from the duty of description, we can draw our theoretical and practical conclusions. In my first lecture, defending the empirical method, I foretold that whatever conclusions we might come to could be reached by spiritual judgments only, appreciations of the significance for life of religion, taken "on the whole." Our conclusions cannot be as sharp as dogmatic conclusions would be, but I will formulate them, when the time comes, as sharply as I can.

Summing up in the broadest possible way the characteristics of the religious life, as we have found them, it includes the following beliefs:—

1. That the visible world is part of a more spiritual universe from which it draws its chief significance;

2. That union or harmonious relation with that higher universe is our true end;

3. That prayer or inner communion with the spirit thereof—be that spirit "God" or "law"—is a process wherein work is really done, and spiritual energy flows in and produces effects, psychological or material, within the phenomenal world.

Religion includes also the following psychological characteristics:—

[1] From *The Varieties of Religious Experience*, pp. 485–527.
[The title is supplied from the context. Some footnotes have been omitted.—ED.]

4. A new zest which adds itself like a gift to life, and takes the form either of lyrical enchantment or of appeal to earnestness and heroism.

5. An assurance of safety and a temper of peace, and, in relation to others, a preponderance of loving affections.

In illustrating these characteristics by documents, we have been literally bathed in sentiment. In re-reading my manuscript, I am almost appalled at the amount of emotionality which I find in it. After so much of this, we can afford to be dryer and less sympathetic in the rest of the work that lies before us.

The sentimentality of many of my documents is a consequence of the fact that I sought them among the extravagances of the subject. If any of you are enemies of what our ancestors used to brand as enthusiasm, and are, nevertheless, still listening to me now, you have probably felt my selection to have been sometimes almost perverse, and have wished I might have stuck to soberer examples. I reply that I took these extremer examples as yielding the profounder information. To learn the secrets of any science we go to expert specialists, even though they may be eccentric persons, and not to commonplace pupils. We combine what they tell us with the rest of our wisdom, and form our final judgment independently. Even so with religion. We who have pursued such radical expressions of it may now be sure that we know its secrets as authentically as any one can know them who learns them from another; and we have next to answer, each of us for himself, the practical question: what are the dangers in this element of life? and in what proportion may it need to be restrained by other elements, to give the proper balance?

But this question suggests another one which I will answer immediately and get it out of the way, for it has more than once already vexed us. Ought it to be assumed that in all men the mixture of religion with other elements should be identical? Ought it, indeed, to be assumed that the lives of all men should show identical religious elements?

In other words, is the existence of so many religious types and sects and creeds regrettable?

To these questions I answer " No " emphatically. And my reason is that I do not see how it is possible that creatures in such different positions and with such different powers as human individuals are, should have exactly the same functions and the same duties. No two of us have identical difficulties, nor should we be expected to work out identical solutions. Each, from his peculiar angle of observation, takes in a certain sphere of fact and trouble, which each must deal with in a unique manner. One of us must soften himself, another must harden himself; one must yield a point, another must stand firm—in order the better to defend the position assigned him. If an Emerson were forced to be a Wesley, or a Moody forced to be a Whitman, the total human consciousness of the divine would suffer. The divine can mean no single quality, it must mean a group of qualities, by being champions of which in alternation, different men may all find worthy missions. Each attitude being a syllable in human nature's total message, it takes the whole of us to spell the meaning out completely. So a " god of battles " must be allowed to be the god for one kind of person, a god of peace and heaven and home the god for another. We must frankly recognize the fact that we live in partial systems, and that parts are not interchangeable in the spiritual life. If we are peevish and jealous, destruction of the self must be an element of our religion; why need it be one if we are good and sympathetic from the outset? If we are sick souls, we require a religion of deliverance; but why think so much of deliverance if we are healthy-minded? Unquestionably, some men have the completer experience and the higher vocation, here just as in the social world; but for each man to stay in his own experience, whate'er it be, and for others to tolerate him there, is surely best.

But, you may now ask, would not this one-sidedness be

cured if we should all espouse the science of religions as our own religion? In answering this question I must open again the general relations of the theoretic to the active life.

Knowledge about a thing is not the thing itself. You remember what Al-Ghazzali told us in the Lecture on Mysticism—that to understand the causes of drunkenness, as a physician understands them, is not to be drunk. A science might come to understand everything about the causes and elements of religion, and might even decide which elements were qualified, by their general harmony with other branches of knowledge, to be considered true; and yet the best man at this science might be the man who found it hardest to be personally devout. *Tout savoir c'est tout pardonner.* The name of Renan would doubtless occur to many persons as an example of the way in which breadth of knowledge may make one only a dilettante in possibilities, and blunt the acuteness of one's living faith. If religion be a function by which either God's cause or man's cause is to be really advanced, then he who lives the life of it, however narrowly, is a better servant than he who merely knows about it, however much. Knowledge about life is one thing; effective occupation of a place in life, with its dynamic currents passing through your being, is another.

For this reason, the science of religions may not be an equivalent for living religion; and if we turn to the inner difficulties of such a science, we see that a point comes when she must drop the purely theoretic attitude, and either let her knots remain uncut or have them cut by active faith. To see this, suppose that we have our science of religions constituted as a matter of fact. Suppose that she has assimilated all the necessary historical material and distilled out of it as its essence the same conclusions which I myself a few moments ago pronounced. Suppose that she agrees that religion, wherever it is an active thing, involves a belief in ideal presences, and a belief that in our prayerful communion with them, work is done, and something real comes to pass. She has now to exert her critical activity,

and to decide how far, in the light of other sciences and in that of general philosophy, such beliefs can be considered *true*.

Dogmatically to decide this is an impossible task. Not only are the other sciences and the philosophy still far from being completed, but in their present state we find them full of conflicts. The sciences of nature know nothing of spiritual presences, and on the whole hold no practical commerce whatever with the idealistic conceptions towards which general philosophy inclines. The so-called scientist is, during his scientific hours at least, so materialistic that one may well say that on the whole the influence of science goes against the notion that religion should be recognized at all. And this antipathy to religion finds an echo within the very science of religions itself. The cultivator of this science has to become acquainted with so many grovelling and horrible superstitions that a presumption easily arises in his mind that any belief that is religious probably is false. In the "prayful communion" of savages with such mumbo-jumbos of deities as they acknowledge, it is hard for us to see what genuine spiritual work—even though it were work relative only to their dark savage obligations—can possibly be done.

The consequence is that the conclusions of the science of religions are as likely to be adverse as they are to be favourable to the claim that the essence of religion is true. There is a notion in the air about us that religion is probably only an anachronism, a case of "survival," an atavistic relapse into a mode of thought which humanity in its more enlightened examples has outgrown; and this notion our religious anthropologists at present do little to counteract.

This view is so widespread at the present day that I must consider it with some explicitness before I pass to my own conclusions. Let me call it the "Survival theory" for brevity's sake.

The pivot round which the religious life, as we have traced it, revolves, is the interest of the individual in his private

personal destiny. Religion, in short, is a monumental chapter in the history of human egotism. The gods believed in—whether by crude savages or by men disciplined intellectually—agree with each other in recognizing personal calls. Religious thought is carried on in terms of personality, this being, in the world of religion, the one fundamental fact. To-day, quite as much as at any previous age, the religious individual tells you that the divine meets him on the basis of his personal concerns.

Science, on the other hand, has ended by utterly repudiating the personal point of view. She catalogues her elements and records her laws, indifferent as to what purpose may be shown forth by them, and constructs her theories quite careless of their bearing on human anxieties and fates. Though the scientist may individually nourish a religion and be a theist in his irresponsible hours, the days are over when it could be said that for Science herself the heavens declare the glory of God and the firmament showeth his handiwork. Our solar system, with its harmonies, is seen now as but one passing case of a certain sort of moving equilibrium in the heavens, realized by a local accident in an appalling wilderness of worlds where no life can exist. In a span of time which as a cosmic interval will count but as an hour it will have ceased to be. The Darwinian notion of chance production, and subsequent destruction, speedy or deferred, applies to the largest as well as to the smallest facts. It is impossible, in the present temper of the scientific imagination, to find in the driftings of the cosmic atoms, whether they work on the universal or on the particular scale, anything but a kind of aimless weather, doing and undoing, achieving no proper history, and leaving no result. Nature has no one distinguishable ultimate tendency with which it is possible to feel a sympathy. In the vast rhythm of her processes, as the scientific mind now follows them, she appears to cancel herself. The books of natural theology which satisfied the intellects of our grandfathers seem to us quite grotesque, representing, as they did, a God who conformed

the largest things of nature to the paltriest of our private wants. The God whom science recognizes must be a God of universal laws exclusively, a God who does a wholesale, not a retail business. He cannot accommodate his processes to the convenience of individuals. The bubbles on the foam which coats a stormy sea are floating episodes, made and unmade by the forces of the wind and water. Our private selves are like those bubbles—epiphenomena, as Clifford, I believe, ingeniously called them; their destinies weigh nothing and determine nothing in the world's irremediable currents of events.

You see how natural it is, from this point of view, to treat religion as a mere survival, for religion does in fact perpetuate the traditions of the most primeval thought. To coerce the spiritual powers, or to square them and get them on our side, was, during enormous tracts of time, the one great object in our dealings with the natural world. For our ancestors, dreams, hallucinations, revelations, and cock-and-bull stories were inextricably mixed with facts. Up to a comparatively recent date such distinctions as those between what has been verified and what is only conjectured, between the impersonal and the personal aspects of existence, were hardly suspected or conceived. Whatever you imagined in a lively manner, whatever you thought fit to be true, you affirmed confidently; and whatever you affirmed, your comrades believed. Truth was what had not yet been contradicted, most things were taken into the mind from the point of view of their human suggestiveness, and the attention confined itself exclusively to the aesthetic and dramatic aspects of events.

How indeed could it be otherwise? The extraordinary value, for explanation and prevision, of those mathematical and mechanical modes of conception which science uses, was a result that could not possibly have been expected in advance. Weight, movement, velocity, direction, position, what thin, pallid, uninteresting ideas! How could the richer animistic aspects of Nature, the peculiarities and

oddities that make phenomena picturesquely striking or expressive, fail to have been first singled out and followed by philosophy as the more promising avenue to the knowledge of Nature's life? Well, it is still in these richer animistic and dramatic aspects that religion delights to dwell. It is the terror and beauty of phenomena, the "promise" of the dawn and of the rainbow, the "voice" of the thunder, the "gentleness" of the summer rain, the "sublimity" of the stars, and not the physical laws which these things follow, by which the religious mind still continues to be most impressed; and just as of yore, the devout man tells you that in the solitude of his room or of the fields he still feels the divine presence, that inflowings of help come in reply to his prayers, and that sacrifices to this unseen reality fill him with security and peace.

Pure anachronism! says the survival-theory—anachronism for which deanthropomorphization of the imagination is the remedy required. The less we mix the private with the cosmic, the more we dwell in universal and impersonal terms, the truer heirs of Science we become.

In spite of the appeal which this impersonality of the scientific attitude makes to a certain magnanimity of temper, I believe it to be shallow, and I can now state my reason in comparatively few words. That reason is that, so long as we deal with the cosmic and the general, we deal only with the symbols of reality, but *as soon as we deal with private and personal phenomena as such, we deal with realities in the completest sense of the term.* I think I can easily make clear what I mean by these words.

The world of our experience consists at all times of two parts, an objective and a subjective part, of which the former may be incalculably more extensive than the latter; and yet the latter can never be omitted or suppressed. The objective part is the sum total of whatsoever at any given time we may be thinking of, the subjective part is the inner "state" in which the thinking comes to pass. What we think of may be enormous—the cosmic times and spaces,

for example—whereas the inner state may be the most fugitive and paltry activity of mind. Yet the cosmic objects, so far as the experience yields them, are but ideal pictures of something whose existence we do not inwardly possess but only point at outwardly, while the inner state is our very experience itself; its reality and that of our experience are one. A conscious field *plus* its object as felt or thought of *plus* an attitude towards the object *plus* the sense of a self to whom the attitude belongs—such a concrete bit of personal experience may be a small bit, but it is a solid bit as long as it lasts; not hollow, not a mere abstract element of experience, such as the "object" is when taken all alone. It is a *full* fact, even though it be an insignificant fact; it is of the *kind* to which all realities whatsoever must belong; the motor currents of the world run through the like of it; it is on the line connecting real events with real events. That unsharable feeling which each one of us has of the pinch of his individual destiny as he privately feels it rolling out on fortune's wheel may be disparaged for its egotism, may be sneered at as unscientific, but it is the one thing that fills up the measure of our concrete actuality, and any would-be existent that should lack such a feeling, or its analogue, would be a piece of reality only half made up.

If this be true, it is absurd for science to say that the egotistic elements of experience should be suppressed. The axis of reality runs solely through the egotistic places —they are strung upon it like so many beads. To describe the world with all the various feelings of the individual pinch of destiny, all the various spiritual attitudes, left out from the description—they being as describable as anything else—would be something like offering a printed bill of fare as the equivalent for a solid meal. Religion makes no such blunder. The individual's religion may be egotistic, and those private realities which it keeps in touch with may be narrow enough; but at any rate it always remains infinitely less hollow and abstract, as far as it goes, than a

science which prides itself on taking no account of anything private at all.

A bill of fare with one real raisin on it instead of the word "raisin," with one real egg instead of the word "egg," might be an inadequate meal, but it would at least be a commencement of reality. The contention of the survival-theory that we ought to stick to non-personal elements exclusively seems like saying that we ought to be satisfied forever with reading the naked bill of fare. I think, therefore, that however particular questions connected with our individual destinies may be answered, it is only by acknowledging them as genuine questions, and living in the sphere of thought which they open up, that we become profound. But to live thus is to be religious; so I unhesitatingly repudiate the survival-theory of religion as being founded on an egregious mistake. It does not follow, because our ancestors made so many errors of fact and mixed them with their religion, that we should therefore leave off being religious at all.[1] By being religious we establish ourselves

[1] Even the errors of fact may possibly turn out not to be as wholesale as the scientist assumes. We saw in Lecture IV. how the religious conception of the universe seems to many mind-curers "verified" from day to day by their experience of fact. "Experience of fact" is a field with so many things in it that the sectarian scientist, methodically declining, as he does, to recognize such "facts" as mind-curers and others like them experience, otherwise than by such rude heads of classification as "bosh," "rot," "folly," certainly leaves out a mass of raw fact which, save for the industrious interest of the religious in the more personal aspects of reality, would never have succeeded in getting itself recorded at all. We know this to be true already in certain cases; it may, therefore, be true in others as well. Miraculous healings have always been part of the supernaturalist stock in trade, and have always been dismissed by the scientist as figments of the imagination. But the scientist's tardy education in the facts of hypnotism has recently given him an apperceiving mass for phenomena of this order, and he consequently now allows that the healings may exist, provided you expressly call them effects of "suggestion." Even the stigmata of the cross on Saint Francis's hands and feet may on these terms not be a fable. Similarly, the time-honoured phenomenon of diabolical possession is on the point of being admitted by the scientist as a fact, now that he has the name of "hystero-demonopathy" by which to apperceive it. No one can

in possession of ultimate reality at the only points at which reality is given us to guard. Our responsible concern is with our private destiny after all.

You see now why I have been so individualistic throughout these lectures, and why I have seemed so bent on rehabilitating the element of feeling in religion and subordinating its intellectual part. Individuality is founded in feeling; and the recesses of feeling, the darker, blinder strata of character, are the only places in the world in which we catch real fact in the making, and directly perceive how events happen, and how work is actually done. Compared with this world of living individualized feelings, the world of generalized objects which the intellect contemplates is without solidity or life. As in stereoscopic or kinetoscopic pictures seen outside the instrument, the third dimension, the movement, the vital element, are not there. We get a beautiful picture of an express train supposed to be moving, but where in the picture, as I have heard a friend say, is the energy or the fifty miles an hour?

Let us agree, then, that Religion, occupying herself with personal destinies and keeping thus in contact with the only absolute realities which we know, must necessarily play an eternal part in human history. The next thing to decide is what she reveals about those destinies, or whether indeed she reveals anything distinct enough to be considered a general message to mankind. We have done, as

foresee just how far this legitimation of occultist phenomena under newly found scientist titles may proceed—even "prophecy," even "levitation," might creep into the pale.

Thus the divorce between scientist facts and religious facts may not necessarily be as eternal as it at first sight seems, nor the personalism and romanticism of the world, as they appeared to primitive thinking, be matters so irrevocably outgrown. The final human opinion may, in short, in some manner now impossible to foresee, revert to the more personal style, just as any path of progress may follow a spiral rather than a straight line. If this were so, the rigorously impersonal view of science might one day appear as having been a temporarily useful eccentricity rather than the definitively triumphant position which the sectarian scientist at present so confidently announces it to be.

you see, with our preliminaries, and our final summing up can now begin.

I am well aware that after all the palpitating documents which I have quoted, and all the perspectives of emotion-inspiring institution and belief that my previous lectures have opened, the dry analysis to which I now advance may appear to many of you like an anti-climax, a tapering-off and flattening-out of the subject, instead of a crescendo of interest and result. I said awhile ago that the religious attitude of Protestants appears poverty-stricken to the Catholic imagination. Still more poverty-stricken, I fear, may my final summing up of the subject appear at first to some of you. On which account I pray you now to bear this point in mind, that in the present part of it I am expressly trying to reduce religion to its lowest admissible terms, to that minimum, free from individualistic excrescences, which all religions contain as their nucleus, and on which it may be hoped that all religious persons may agree. That established, we should have a result which might be small but would at least be solid; and on it and round it the ruddier additional beliefs on which the different individuals make their venture might be grafted, and flourish as richly as you please. I shall add my own over-belief (which will be, I confess, of a somewhat pallid kind, as befits a critical philosopher), and you will, I hope, also add your over-beliefs, and we shall soon be in the varied world of concrete religious constructions once more. For the moment let me dryly pursue the analytic part of the task.

Both thought and feeling are determinants of conduct, and the same conduct may be determined either by feeling or by thought. When we survey the whole field of religion, we find a great variety in the thoughts that have prevailed there; but the feelings on the one hand and the conduct on the other are almost always the same, for Stoic, Christian, and Buddhist saints are practically indistinguishable in their lives. The theories which Religion generates, being thus variable, are secondary; and if you wish to grasp her

essence you must look to the feelings and the conduct as being the more constant elements. It is between these two elements that the short circuit exists on which she carries on her principal business, while the ideas and symbols and other institutions form loop-lines which may be perfections and improvements, and may even some day all be united into one harmonious system, but which are not to be regarded as organs with an indispensable function, necessary at all times for religious life to go on. This seems to me the first conclusion which we are entitled to draw from the phenomena we have passed in review.

The next step is to characterize the feelings. To what psychological order do they belong?

The resultant outcome of them is in any case what Kant calls a "sthenic" affection, an excitement of the cheerful, expansive, "dynamogenic" order which, like any tonic, freshens our vital powers. In almost every lecture, but especially in the lectures on Conversion and on Saintliness, we have seen how this emotion overcomes temperamental melancholy and imparts endurance to the Subject, or a zest, or a meaning, or an enchantment and glory to the common objects of life. The name of "faith-state," by which Professor Leuba designates it, is a good one. It is a biological as well as a psychological condition, and Tolstoy is absolutely accurate in classing faith among the forces *by which men live*. The total absence of it, anhedonia, means collapse.

The faith-state may hold a very minimum of intellectual content. We saw examples of this in those sudden raptures of the divine presence, or in such mystical seizures as Dr. Bucke described. It may be a mere vague enthusiasm, half spiritual, half vital, a courage, and a feeling that great and wondrous things are in the air.[1]

[1] Example: Henri Perreyve writes to Gratry: "I do not know how to deal with the happiness which you aroused in me this morning. It overwhelms me; I want to *do* something, yet I can do nothing and am fit for nothing. . . . I would fain do *great things*." Again, after an inspiring interview, he writes: "I went homewards,

When, however, a positive intellectual content is associated with a faith-state, it gets invincibly stamped in upon belief, and this explains the passionate loyalty of religious persons everywhere to the minutest details of their so widely differing creeds. Taking creeds and faith-states together, as forming "religions," and treating these as purely subjective phenomena, without regard to the question of their "truth," we are obliged, on account of their extraordinary influence upon action and endurance, to class them amongst the most important biological functions of mankind. Their stimulant and anaesthetic effect is so great that Professor Leuba, in a recent article, goes so far as to say that so long as men can *use* their God, they care very little who he is, or even whether he is at all. "The truth of the matter can be put," says Leuba, "in this way: *God is not known, he is not understood; he is used*—sometimes as meat-purveyor, sometimes as moral support, sometimes as friend, sometimes as an object of love. If he proves himself useful, the religious consciousness asks for no more than that. Does God really exist? How does he exist? What is he? are so many irrelevant questions. Not God, but life, more life, a larger, richer, more satisfying life, is, in the last analysis, the end of religion. The love of life, at any and every level of development, is the religious impulse."

At this purely subjective rating, therefore, Religion must be considered vindicated in a certain way from the attacks of her critics. It would seem that she cannot be a mere anachronism and survival, but must exert a permanent function, whether she be with or without intellectual content, and whether, if she have any, it be true or false.

intoxicated with joy, hope, and strength. I wanted to feed upon my happiness in solitude, far from all men. It was late; but, unheeding that, I took a mountain path and went on like a madman, looking at the heavens, regardless of earth. Suddenly an instinct made me draw hastily back—I was on the very edge of a precipice, one step more and I must have fallen. I took fright and gave up my nocturnal promenade."—A. Gratry, *Henri Perreyve*, London, 1872, pp. 92, 89.

We must next pass beyond the point of view of merely subjective utility, and make inquiry into the intellectual content itself.

First, is there, under all the discrepancies of the creeds, a common nucleus to which they bear their testimony unanimously?

And second, ought we to consider the testimony true? I will take up the first question first, and answer it immediately in the affirmative. The warring gods and formulas of the various religions do indeed cancel each other, but there is a certain uniform deliverance in which religions all appear to meet. It consists of two parts:—

1. An uneasiness; and

2. Its solution.

1. The uneasiness, reduced to its simplest terms, is a sense that there is *something wrong about us* as we naturally stand.

2. The solution is a sense that *we are saved from the wrongness* by making proper connection with the higher powers.

In those more developed minds which alone we are studying, the wrongness takes a moral character, and the salvation takes a mystical tinge. I think we shall keep well within the limits of what is common to all such minds if we formulate the essence of their religious experience in terms like these:—

The individual, so far as he suffers from his wrongness and criticizes it, is to that extent consciously beyond it and in at least possible touch with something higher, if anything higher exist. Along with the wrong part there is thus a better part of him, even though it may be but a most helpless germ. With which part he should identify his real being is by no means obvious at this stage; but when stage 2 (the stage of solution or salvation) arrives, the man identifies his real being with the germinal higher part of himself; and does so in the following way. He becomes conscious that this higher part is conterminous and continuous with a MORE of the same quality, which is operative in the universe

outside of him, and which he can keep in working touch with, and in a fashion get on board of and save himself when all his lower being has gone to pieces in the wreck.

It seems to me that all the phenomena are accurately describable in these very simple general terms. They allow for the divided self and the struggle; they involve the change of personal centre and the surrender of the lower self; they express the appearance of exteriority of the helping power and yet account for our sense of union with it; and they fully justify our feelings of security and joy. There is probably no autobiographic document, among all those which I have quoted, to which the description will not well apply. One need only add such specific details as will adapt it to various theologies and various personal temperaments, and one will then have the various experiences reconstructed in their individual forms.

So far, however, as this analysis goes, the experiences are only psychological phenomena. They possess, it is true, enormous biological worth. Spiritual strength really increases in the subject when he has them, a new life opens for him, and they seem to him a place of conflux where the forces of two universes meet; and yet this may be nothing but his subjective way of feeling things, a mood of his own fancy, in spite of the effects produced. I now turn to my second question: What is the objective "truth" of their content?

The part of the content concerning which the question of truth most pertinently arises is that "MORE of the same quality" with which our own higher self appears in the experience to come into harmonious working relation. Is such a "more" merely our own notion, or does it really exist? If so, in what shape does it exist? Does it act, as well as exist? And in what form should we conceive of that "union" with it of which religious geniuses are so convinced?

It is in answering these questions that the various theologies perform their theoretic work, and that their diver-

gencies most come to light. They all agree that the " more " really exists; though some of them hold it to exist in the shape of a personal god or gods, while others are satisfied to conceive it as a stream of ideal tendency embedded in the eternal structure of the world. They all agree, moreover, that it acts as well as exists, and that something really is effected for the better when you throw your life into its hands. It is when they treat of the experience of " union " with it that their speculative differences appear most clearly. Over this point pantheism and theism, nature and second birth, works and grace and karma, immortality and reincarnation, rationalism and mysticism, carry on inveterate disputes.

At the end of my lecture on Philosophy I held out the notion that an impartial science of religions might sift out from the midst of their discrepancies a common body of doctrine which she might also formulate in terms to which physical science need not object. This, I said, she might adopt as her own reconciling hypothesis, and recommend it for general belief. I also said that in my last lecture I should have to try my own hand at framing such an hypothesis.

The time has now come for this attempt. Who says " hypothesis " renounces the ambition to be coercive in his arguments. The most I can do is, accordingly, to offer something that may fit the facts so easily that your scientific logic will find no plausible pretext for vetoing your impulse to welcome it as true.

The " more," as we called it, and the meaning of our " union " with it, form the nucleus of our inquiry. Into what definite description can these words be translated, and for what definite facts do they stand? It would never do for us to place ourselves off-hand at the position of a particular theology, the Christian theology, for example, and proceed immediately to define the " more " as Jehovah, and the " union " as his imputation to us of the righteousness of Christ. That would be unfair to other religions, and,

from our present standpoint at least, would be an over-belief.

We must begin by using less particularized terms; and, since one of the duties of the science of religions is to keep religion in connection with the rest of science, we shall do well to seek first of all a way of describing the "more," which psychologists may also recognize as real. The *subconscious self* is nowadays a well-accredited psychological entity; and I believe that in it we have exactly the mediating term required. Apart from all religious considerations, there is actually and literally more life in our total soul than we are at any time aware of. The exploration of the transmarginal field has hardly yet been seriously undertaken, but what Mr. Myers said in 1892 in his essay on the Subliminal Consciousness is as true as when it was first written: "Each of us is in reality an abiding psychical entity far more extensive than he knows—an individuality which can never express itself completely through any corporeal manifestation. The Self manifests through the organism; but there is always some part of the Self unmanifested; and always, as it seems, some power of organic expression in abeyance or reserve." Much of the content of this larger background against which our conscious being stands out in relief is insignificant. Imperfect memories, silly jingles, inhibitive timidities, "dissolutive" phenomena of various sorts, as Myers calls them, enter into it for a large part. But in it many of the performances of genius seem also to have their origin; and in our study of conversion, of mystical experiences, and of prayer, we have seen how striking a part invasions from this region play in the religious life.

Let me then propose, as an hypothesis, that whatever it may be on its *farther* side, the "more" with which in religious experience we feel ourselves connected is on its *hither* side the subconscious continuation of our conscious life. Starting thus with a recognized psychological fact as our basis, we seem to preserve a contact with "science"

which the ordinary theologian lacks. At the same time the theologian's contention that the religious man is moved by an external power is vindicated, for it is one of the peculiarities of invasions from the subconscious region to take on objective appearances, and to suggest to the Subject an external control. In the religious life the control is felt as "higher"; but since on our hypothesis it is primarily the higher faculties of our own hidden mind which are controlling, the sense of union with the power beyond us is a sense of something, not merely apparently but literally true.

This doorway into the subject seems to me the best one for a science of religions, for it mediates between a number of different points of view. Yet it is only a doorway, and difficulties present themselves as soon as we step through it, and ask how far our transmarginal consciousness carries us if we follow it on its remoter side. Here the over-beliefs begin: here mysticism and the conversion-rapture and Vedantism and transcendental idealism bring in their monistic interpretations and tell us that the finite self rejoins the absolute self, for it was always one with God and identical with the soul of the world. Here the prophets of all the different religions come with their visions, voices, raptures, and other openings, supposed by each to authenticate his own peculiar faith.

Those of us who are not personally favoured with such specific revelations must stand outside of them altogether and, for the present at least, decide that, since they corroborate incompatible theological doctrines, they neutralize one another and leave no fixed result. If we follow any one of them, or if we follow philosophical theory and embrace monistic pantheism on non-mystical grounds, we do so in the exercise of our individual freedom, and build out our religion in the way most congruous with our personal susceptibilities. Among these susceptibilities intellectual ones play a decisive part. Although the religious question is primarily a question of life, of living or not living in the

higher union which opens itself to us as a gift, yet the spiritual excitement in which the gift appears a real one will often fail to be aroused in an individual until certain particular intellectual beliefs or ideas which, as we say, come home to him, are touched. These ideas will thus be essential to that individual's religion;—which is as much as to say that over-beliefs in various directions are absolutely indispensable, and that we should treat them with tenderness and tolerance so long as they are not intolerant themselves. As I have elsewhere written, the most interesting and valuable things about a man are usually his over-beliefs.

Disregarding the over-beliefs, and confining ourselves to what is common and generic, we have in *the fact that the conscious person is continuous with a wider self through which saving experiences come*, a positive content of religious experience which, it seems to me, *is literally and objectively true as far as it goes*. If I now proceed to state my own hypothesis about the farther limits of this extension of our personality, I shall be offering my own over-belief—though I know it will appear a sorry under-belief to some of you—for which I can only bespeak the same indulgence which in a converse case I should accord to yours.

The farther limits of our being plunge, it seems to me, into an altogether other dimension of existence from the sensible and merely "understandable" world. Name it the mystical region, or the supernatural region, whichever you choose. So far as our ideal impulses originate in this region (and most of them do originate in it, for we find them possessing us in a way for which we cannot articulately account), we belong to it in a more intimate sense than that in which we belong to the visible world, for we belong in the most intimate sense wherever our ideals belong. Yet the unseen region in question is not merely ideal, for it produces effects in this world. When we commune with it, work is actually done upon our finite personality, for we are turned into new men, and consequences in the way of conduct follow in the natural world upon our regenerative

change. But that which produces effects within another reality must be termed a reality itself, so I feel as if we had no philosophic excuse for calling the unseen or mystical world unreal.

God is the natural appellation, for us Christians at least, for the supreme reality, so I will call this higher part of the universe by the name of God. We and God have business with each other; and in opening ourselves to his influence our deepest destiny is fulfilled. The universe, at those parts of it which our personal being constitutes, takes a turn genuinely for the worse or for the better in proportion as each one of us fulfils or evades God's demands. As far as this goes, I probably have you with me, for I only translate into schematic language what I may call the instinctive belief of mankind: God is real since he produces real effects.

The real effects in question, so far as I have as yet admitted them, are exerted on the personal centres of energy of the various subjects, but the spontaneous faith of most of the subjects is that they embrace a wider sphere than this. Most religious men believe (or "know," if they be mystical) that not only they themselves, but the whole universe of beings to whom the God is present, are secure in his parental hands. There is a sense, a dimension, they are sure, in which we are *all* saved, in spite of the gates of hell and all adverse terrestrial appearances. God's existence is the guarantee of an ideal order that shall be permanently preserved. This world may indeed, as science assures us, some day burn up or freeze; but if it is part of his order, the old ideals are sure to be brought elsewhere to fruition, so that where God is, tragedy is only provisional and partial, and shipwreck and dissolution are not the absolutely final things. Only when this farther step of faith concerning God is taken, and remote objective consequences are predicted, does religion, as it seems to me, get wholly free from the first immediate subjective experience, and bring a *real hypothesis* into play. A good hypothesis in science must have other properties than those of the

phenomenon it is immediately invoked to explain, otherwise it is not prolific enough. God, meaning only what enters into the religious man's experience of union, falls short of being an hypothesis of this more useful order. He needs to enter into wider cosmic relations in order to justify the subject's absolute confidence and peace.

That the God with whom, starting from the hither side of our own extra-marginal self, we come at its remoter margin into commerce should be the absolute world-ruler, is of course a very considerable over-belief. Over-belief as it is, though, it is an article of almost every one's religion. Most of us pretend in some way to prop it upon our philosophy, but the philosophy itself is really propped upon this faith. What is this but to say that Religion, in her fullest exercise of function, is not a mere illumination of facts already elsewhere given, not a mere passion, like love, which views things in a rosier light? It is indeed that, as we have seen abundantly. But it is something more, namely, a postulator of new *facts* as well. The world interpreted religiously is not the materialistic world over again, with an altered expression; it must have, over and above the altered expression, a natural constitution different at some point from that which a materialistic world would have. It must be such that different events can be expected in it, different conduct must be required.

This thoroughly "pragmatic" view of religion has usually been taken as a matter of course by common men. They have interpolated divine miracles into the field of nature, they have built a heaven out beyond the grave. It is only transcendentalist metaphysicians who think that, without adding any concrete details to Nature, or subtracting any, but by simply calling it the expression of absolute spirit, you make it more divine just as it stands. I believe the pragmatic way of taking religion to be the deeper way. It gives it body as well as soul, it makes it claim, as everything real must claim, some characteristic realm of fact as its very own. What the more characteristi-

cally divine facts are, apart from the actual inflow of energy in the faith-state and the prayer-state, I know not. But the over-belief on which I am ready to make my personal venture is that they exist. The whole drift of my education goes to persuade me that the world of our present consciousness is only one out of many worlds of consciousness that exist, and that those other worlds must contain experiences which have a meaning for our life also; and that although in the main their experiences and those of this world keep discrete, yet the two become continuous at certain points, and higher energies filter in. By being faithful in my poor measure to this over-belief, I seem to myself to keep more sane and true. I *can*, of course, put myself into the sectarian scientist's attitude, and imagine vividly that the world of sensations and of scientific laws and objects may be all. But whenever I do this, I hear that inward monitor of which W. K. Clifford once wrote, whispering the word "bosh!" Humbug is humbug, even though it bear the scientific name, and the total expression of human experience, as I view it objectively, invincibly urges me beyond the narrow "scientific" bounds. Assuredly, the real world is of a different temperament—more intricately built than physical science allows. So my objective and my subjective conscience both hold me to the over-belief which I express. Who knows whether the faithfulness of individuals here below to their own poor over-beliefs may not actually help God in turn to be more effectively faithful to his own greater tasks?

In writing my concluding lecture I had to aim so much at simplification that I fear that my general philosophic position received so scant a statement as hardly to be intelligible to some of my readers. I therefore add this epilogue, which must also be so brief as possibly to remedy but little the defect. In a later work I may be enabled to state my position more amply and consequently more clearly.

Originality cannot be expected in a field like this, where all the attitudes and tempers that are possible have been exhibited in literature long ago, and where any new writer can immediately be classed under a familiar head. If one should make a division of all thinkers into naturalists and supernaturalists, I should undoubtedly have to go, along with most philosophers, into the supernaturalist branch. But there is a crasser and a more refined supernaturalism and it is to the refined division that most philosophers at the present day belong. If not regular transcendental idealists, they at least obey the Kantian direction enough to bar out ideal entities from interfering causally in the course of phenomenal events. Refined supernaturalism is universalistic supernaturalism; for the " crasser " variety " piecemeal " supernaturalism would perhaps be the better name. It went with that older theology which to-day is supposed to reign only among uneducated people, or to be found among the few belated professors of the dualisms which Kant is thought to have displaced. It admits miracles and providential leadings, and finds no intellectual difficulty in mixing the ideal and the real worlds together by interpolating influences from the ideal region among the forces that causally determine the real world's details. In this the refined supernaturalists think that it muddles disparate dimensions of existence. For them the world of the ideal has no efficient causality, and never bursts into the world of phenomena at particular points. The ideal world, for them, is not a world of facts, but only of the meaning of facts; it is a point of view for judging facts. It appertains to a different " -ology," and inhabits a different dimension of being altogether from that in which existential propositions obtain. It cannot get down upon the flat level of experience and interpolate itself piecemeal between distinct portions of nature, as those who believe, for example, in divine aid coming in response to prayer, are bound to think it must.

Notwithstanding my own inability to accept either

popular Christianity or scholastic theism, I suppose that my belief that in communion with the Ideal new force comes into the world, and new departures are made here below, subjects me to being classed among the supernaturalists of the piecemeal or crasser type. Universalistic supernaturalism surrenders, it seems to me, too easily to naturalism. It takes the facts of physical science at their face value, and leaves the laws of life just as naturalism finds them, with no hope of remedy, in case their fruits are bad. It confines itself to sentiments about life as a whole, sentiments which may be admiring and adoring but which need not be so, as the existence of systematic pessimism proves. In this universalistic way of taking the ideal world, the essence of practical religion seems to me to evaporate. Both instinctively and for logical reasons, I find it hard to believe that principles can exist which make no difference in facts. But all facts are particular facts, and the whole interest of the question of God's existence seems to me to lie in the consequences for particulars which that existence may be expected to entail. That no concrete particular of experience should alter its complexion in consequence of a God being there seems to me an incredible proposition, and yet it is the thesis to which (implicitly at any rate) refined supernaturalism seems to cling. It is only with experience *en bloc*, it says, that the Absolute maintains relations. It condescends to no transactions of detail.

I am ignorant of Buddhism and speak under correction, and merely in order the better to describe my general point of view; but as I apprehend the Buddhistic doctrine of Karma, I agree in principle with that. All supernaturalists admit that facts are under the judgment of higher law; but for Buddhism as I interpret it, and for religion generally so far as it remains unweakened by transcendentalistic metaphysics, the word "judgment" here means no such bare academic verdict or platonic appreciation as it means in Vedantic or modern absolutist systems; it carries, on the contrary, *execution* with it, is *in rebus* as well as *post rem*,

and operates " causally " as partial factor in the total fact. The universe becomes a gnosticism pure and simple on any other terms. But this view that judgment and execution go together is that of the crasser supernaturalist way of thinking, so the present volume must on the whole be classed with the other expressions of that creed.

I state the matter thus bluntly, because the current of thought in academic circles runs against me, and I feel like a man who must set his back against an open door quickly if he does not wish to see it closed and locked. In spite of its being so shocking to the reigning intellectual tastes, I believe that a candid consideration of piecemeal supernaturalism and a complete discussion of all its metaphysical bearings will show it to be the hypothesis by which the largest number of legitimate requirements are met. That, of course, would be a programme for other books than this; what I now say sufficiently indicates to the philosophic reader the place where I belong.

If asked just where the differences in fact which are due to God's existence come in, I should have to say that in general I have no hypothesis to offer beyond what the phenomenon of " prayerful communion," especially when certain kinds of incursion from the subconscious region take part in it, immediately suggests. The appearance is that in this phenomenon something ideal, which in one sense is part of ourselves and in another sense is not ourselves, actually exerts an influence, raises our centre of personal energy, and produces regenerative effects unattainable in other ways. If, then, there be a wider world of being than that of our everyday consciousness, if in it there be forces whose effects on us are intermittent, if one facilitating condition of the effects be the openness of the " subliminal " door, we have the elements of a theory to which the phenomena of religious life lend plausibility. I am so impressed by the importance of these phenomena that I adopt the hypothesis which they so naturally suggest. At these places at least, I say, it would seem as though transmundane energies,

God, if you will, produced immediate effects within the natural world to which the rest of our experience belongs.

The difference in natural "fact" which most of us would assign as the first difference which the existence of a God ought to make would, I imagine, be personal immortality. Religion, in fact, for the great majority of our own race *means* immortality and nothing else. God is the producer of immortality, and whoever has doubts of immortality is written down as an atheist without farther trial. I have said nothing in my lectures about immortality or the belief therein, for to me it seems a secondary point. If our ideals are only cared for in "eternity," I do not see why we might not be willing to resign their care to other hands than ours. Yet I sympathize with the urgent impulse to be present ourselves, and in the conflict of impulses, both of them so vague yet both of them noble, I know not how to decide. It seems to me that it is eminently a case for facts to testify. Facts, I think, are yet lacking to prove "spirit-return," though I have the highest respect for the patient labours of Messrs. Myers, Hodgson, and Hyslop, and am somewhat impressed by their favourable conclusions. I consequently leave the matter open, with this brief word to save the reader from a possible perplexity as to why immortality got no mention in the body of this book.

The ideal power with which we feel ourselves in connection, the "God" of ordinary men, is, both by ordinary men and by philosophers, endowed with certain of those metaphysical attributes which in the lecture on Philosophy I treated with such disrespect. He is assumed as a matter of course to be "one and only" and to be "infinite"; and the notion of many finite gods is one which hardly any one thinks it worth while to consider, and still less to uphold. Nevertheless, in the interests of intellectual clearness, I feel bound to say that religious experience, as we have studied it, cannot be cited as unequivocally supporting the infinitist belief. The only thing that it unequivocally testifies to is that we can experience union with *something* larger than

ourselves and in that union find our greatest peace. Philosophy, with its passion for unity, and mysticism with its monpideistic bent, both " pass to the limit " and identify the something with a unique God who is the all-inclusive soul of the world. Popular opinion, respectful to their authority, follows the example which they set.

Meanwhile the practical needs and experiences of religion seem to me sufficiently met by the belief that beyond each man and in a fashion continuous with him there exists a larger power which is friendly to him and to his ideals. All that the facts require is that the power should be both other and larger than our conscious selves. Anything larger will do, if only it be large enough to trust for the next step. It need not be infinite, it need not be solitary. It might conceivably even be only a larger and more godlike self, of which the present self would then be but the mutilated expression, and the universe might conceivably be a collection of such selves, of different degrees of inclusiveness, with no absolute unity realized in it at all. Thus would a sort of polytheism return upon us—a polytheism which I do not on this occasion defend, for my only aim at present is to keep the testimony of religious experience clearly within its proper bounds.

Upholders of the monistic view will say to such a polytheism (which, by the way, has always been the real religion of common people, and is so still to-day) that unless there be one all-inclusive God, our guarantee of security is left imperfect. In the Absolute, and in the Absolute only, *all* is saved. If there be different gods, each caring for his part, some portion of some of us might not be covered with divine protection, and our religious consolation would thus fail to be complete. It goes back to what was said about the possibility of there being portions of the universe that may irretrievably be lost. Common sense is less sweeping in its demands than philosophy or mysticism have been wont to be, and can suffer the notion of this world being partly saved and partly lost. The ordinary

moralistic state of mind makes the salvation of the world conditional upon the success with which each unit does its part. Partial and conditional salvation is in fact a most familiar notion when taken in the abstract, the only difficulty being to determine the details. Some men are even disinterested enough to be willing to be in the unsaved remnant as far as their persons go if only they can be persuaded that their cause will prevail—all of us are willing whenever our activity-excitement rises sufficiently high. I think, in fact, that a final philosophy of religion will have to consider the pluralistic hypothesis more seriously than it has hitherto been willing to consider it. For practical life at any rate, the *chance* of salvation is enough. No fact in human nature is more characteristic than its willingness to live on a chance. The existence of the chance makes the difference, as Edmund Gurney says, between a life of which the keynote is resignation and a life of which the keynote is hope. But all these statements are unsatisfactory from their brevity, and I can only say that I hope to return to the same questions in another book.

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