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THE

RELIGION OF PHILOSOPHY.





THE

RELIGION OF PHILOSOPHY

OR

THE UNIFICATION OF KNOWLEDGE:

A COMPARISON

OF THE

CHIEF PHILOSOPHICAL AND RELIGIOUS SYSTEMS OF THE WORLD

MADE WITH A VIEW TO REDUCING THE CATEGORIES OF THOUGHT, OR THE
MOST GENERAL TERMS OF EXISTENCE TO A SINGLE PRINCIPLE,
THEREBY ESTABLISHING A TRUE CONCEPTION OF GOD.

RAYMOND S. PERRIN



WILLIAMS AND NORGATE

14, HENRIETTA STREET, COVENT GARDEN, LONDON AND 20, SOUTH FREDERICK STREET, EDINBURGH



PREFACE.

THERE is a popular dictum among priests and philosophers that God, or the First Cause, is unknowable, and yet all religions aim to teach the nature of God, and all philosophies strive to define the First Cause.

Here is a manifest contradiction; but the questions involved are of such magnitude and require so much study that, for the most part, it is allowed to pass unchallenged.

The cultivated mind, whatever its antecedents, holds a judicial position. That is to say, the educated and thoughtful members of society are looked to, to pass impartial judgments upon questions concerning the general welfare. This impartiality is particularly necessary in philosophy, for thought is hedged about with prejudices, and almost every man represents some logical sect or school which he feels it his duty to support.

The great obstacle which religion and philosophy alike encounter, in offering an explanation of the universe, is the difficulty of finding a symbol of divine power or unity. A symbol to have any real value must represent some fact, it must be the emblem of some experience. Otherwise it is a purely negative form of speech, a mere confession of ignorance.

The symbol which philosophy proposes for divine unity has precisely the same meaning as that which religion offers. They are both emblems of mystery; they are both confessions of ignorance. In so far, therefore, as these two great spheres of knowledge, called philosophy and religion, have attempted an ultimate analysis of existence they have failed; the labor of both is incomplete.

Philosophy, however, has approached this great problem from another side: it has endeavored to build up a synthesis of knowledge; to discover the harmony or interdependence of all facts. It has endeavored to reach, by proceeding from particulars to generals, a *universal principle*.

The theorists of philosophy, commonly known as metaphysicians, impatient of this slow method, would satisfy the natural craving for a true symbol of divine unity by postulating an *unknowable principle*, an emblem of mystery, as the ultimate fact. This postulate, however, has been steadily rejected, and the great quest goes on, insisting upon a true analysis of being.

In this endeavor of philosophy to arrive at an ultimate analysis, the great practical difficulty has been to reduce the categories of thought, or the most general terms of existence, to a single principle. The speculations of all ages contemplate this puzzle of universal terms, and endeavor with untiring purpose to form, from the dissimilar parts, a divine unity.

It is to the rules and principles of this great calculation that the present work is devoted. The data employed are derived from the most respected authorities, the conclusions reached are confined to the equivalents of these data, and the argument is developed in easy stages from the beginning to the end.

To solve the metaphysical problem is to point out the interdependence of all phases of knowledge by affiliating the activity of perception with general activity, or by showing the relation of the different aspects of existence, to existence in general. This is to accomplish the unification of knowledge, which has been the aim of all philosophies and of all religions.

By what more direct way could this end be achieved than by reviewing the story of human speculation from its relative beginning in ancient Greece to the present day, by tracing the efforts made in the same direction, although more indirect, which we find in the religions of the world, and comparing each of these organized attempts at an understanding of life with the result of an ultimate analysis?

By this treatment the story of ancient and modern philosophy is given a new interest. Instead of employing the old historical method, the nearness of the approach of each school to the solution of the problem of thought is pointed out; and the movement of the mind toward this goal is shown to be the inevitable course of human progress.

The contemporaneous systems of Herbert Spencer and G. H. Lewes are carefully reviewed and their results affiliated with the sum of philosophy. So important are the psychological and sociological questions dealt with in these systems that nearly one half of the space given to the review of philosophy is allotted to them.

The successful study of the subject of Religion is shown to be dependent upon a knowledge of the nature of language and perception. In order to separate the superstitious from the rational in belief, the history of all the great religions is examined and the generic relation of Christianity to the other faiths of the world is pointed out. As a consequence the mind and character of Jesus are subjected to established rules of historic and moral criticism. The ideals of humanity for which Jesus so earnestly contended are found to have been distinct principles in all the ancient civilizations, and it is urged that we will need, in order to realize these ideals, a higher intellectual and moral discipline than is taught by Christianity.

To the study of morality and the establishment of a true conception of God the best endeavors of the author have been directed. The enormous advantage which a just knowledge of the meaning of ultimate terms affords becomes apparent when the question of the relation of personal to general existence is discussed. The problems of ethics are completely beyond the mind that harbors the belief in a divine providence or a design in nature. These enthronements of personal existence distort all the higher logical perspectives, and a morality which depends upon such an understanding of life cannot be a true inspiration.



INTRODUCTION.

It is well known that religion, as well as philosophy, depends upon language for the expression of its truths. This seems a simple proposition, but what are its consequences? If language is the sole medium of development of the higher thoughts and feelings, in its genesis may we not hope to discover the deepest truths of life and mind?

Before the complex symbols which we call words came into use, and hence before the mind acquired the faculty of forming thoughts or extended comparisons, activities or motions were the only medium of expression between sentient beings. Language is the development of these expressive actions, and so highly complex has it become, so far removed from its rude beginnings, that it seems another order of creation, a system of miraculous origin. But when we remember that intelligence is a concomitant development with language, that thought or spirit is but a building up of words into ideas, and that these words are merely condensed memories, common experiences which have become current from tongue to tongue, is it not evident that there is no impenetrable mystery in speech, and that its product, mind, is a synthesis of simple and familiar truths?

Again, when we retrace sensibility or feeling, from which language has been gradually evolved, to its beginnings in organic life, we find no absolute demarcations; we find that all life, whether mental or physical, is interdependent.

Hence the wonders of the intellect or the soul are only wonders of complexity. The activities so intricately combined in thought and feeling are perfectly familiar to us in their simpler forms, and in the course of their development they include no facts which are not assimilable with our experiences. But this announcement of the divine unity of life, is not a welcome one to the majority of minds; on the contrary, it is generally regarded as an attack upon an ancient privilege of the mind,—the right to declare itself incomprehensible.

Thus, in endeavoring to construct a true philosophy, we encounter at the outset a deep-rooted prejudice against those simple explanations of life which spring from a comprehension of the nature of language. When the play of thought and feeling which constitutes every thing that is spiritual in our existence is discovered to be but a refinement of organic activities, the first impulse is to look with suspicion and dread upon such a levelling of the imagination. Alarmed for the safety of its venerable myths, religion opposes the analysis of mind, and loudly proclaims against a synthesis of knowledge which will bring all facts, whether human or superhuman, into the true order of their development.

Before the power of such an analysis as this, mysticism shrinks a frightened spectre from the theatre of mind, dragging in its train all the dissembling images of an undisciplined fancy. The hierarchy of heaven and the hosts of hell, that have so long ruled over us, awake in their precipitous retreat a tempest of emotions which rise to call them back in the name of all that is holy. The light which drives these spectres away leaves those who have worshipped them almost sightless. The God which they could touch and measure with their limited thoughts and feelings has vanished in the pure light of day, and in the cold immensity they are left alone, and, as they would believe, spiritually ruined. To such as these the truth seems terrible, that life is only action, that its possibilities lie in the direction of moral achievements, that its hopes, so far as they overstep these limits, are wild and fruitless fancies.

To language, then, which is responsible for the extravagances of human belief, we must look for the solution of the great enigma. The central truth of language is that it is an elaboration of the single principle of motion. In this fact all lines of thought and feeling converge. God is the divine unity of life, of which principle all individual existences are but limited expressions. Every event, every happening, whether human or extra-human, repeats this truth.

Mind, therefore, is the function of conditions which are far wider and deeper than human life; its images, so far as they are not true reflections of this universal order, are deceptive; its perceptions spring from the concurrence of laws which are as independent of consciousness as they are capable of explaining the whole range of mental activity.

Perception accounts for mind, not mind for perception; because perception is a simpler fact than language, and mind is the product of language. The activities of nature express conditions which are merely repeated in the processes of mind, for the simplest activity declares a truth as profound as any of the imaginings of the intellect. In this sense, and only in this sense, nature perceives itself, intelligence is universal.

But man would appropriate the principle of life and knowledge to himself. He would affirm that the infinity and eternity of relations, of which humanity is but the passing form, are subservient to his existence; that every thing happens in reference to himself; and, as the great currents of nature toss him about in his struggle at self-maintenance, he builds a world of phantom beings supposed to be independent of natural processes in order to keep his theories in countenance. As the history of the race progresses, and the mastery of ignorance increases, this burlesque of nature moves further and further into the background of thought, for, as our view of cause and effect is widened, fewer and fewer inconsistencies appear demanding to be clothed in these unearthly forms.

The discovery of the nature of language imparts to us the true knowledge of life. It discloses sensibility and feeling (which are but forms of motion) as inarticulate perception, and thought as an organic activity.

Language is the first fruit of social life. For ages, gestures or expressive motions were employed to eke out the indefinite meaning of words, and where the faculty of speech did not exist or was but slightly developed, gestures have constituted of themselves a rude language. It is the growth of definiteness in language which marks the progress of humanity. In the delicate and intricate articulations of thought we have the only instrument by which man can establish extended relationships between himself and the universe. Thought is not a thing apart from language; the spirit of a race breathes in the words and sentences which have grown up to express the common life, and in the simple laws which govern this development we find written the nature of the thinking being. The nature of a being, its origin and destiny, are revealed in the relations it bears with surrounding life. To adequately express such relations a definiteness of speech, hitherto unattained, is the first requisite: for how are we to weigh in the balance of the mind such fine proportions of thought unless the values of the terms we employ are first clearly distinguished?

The mind, then, is an activity which illuminates existence, exalting the delicacy and range of human relations, and giving to each individual that spirit of universal sympathy which we call morality.

Religion and philosophy are ever offering us symbols of existence, promising clearer views of life. But when we find that these symbols do not harmonize, we are told that there is an innate disorder in the uttermost regions of knowledge, that all analyses lead at last to impenetrable mysteries. And yet the universal measure of success in thought is the establishment of order in the place of disorder, of definite knowledge in the place of mystery. Does it not seem as though this explanation were but a subterfuge?

Ever since man has been able to state categorically his beliefs concerning life and nature, the problem of Motion has occupied the highest place among his thoughts. The effort to solve this problem can be traced in an unbroken thread from the dawn of philosophy to the present day. The categories of thought in which this problem is stated form the burden of all metaphysical speculations, and the reduction of these categories to the simple fact of Motion gives us the solution of the metaphysical problem.

In the more vague and emotional sphere of religion the same problem is unconsciously dealt with. The First Cause, the most general principle, the one God, or the highest among many gods, is the burden of all theological reasoning. As the attributes of deity become more refined; as they exchange, through the agency of thought, the anthropomorphic or personal for the divine or most general, their identity with the aspects of motion becomes evident; for the Infinite and the Absolute mean simply space and time, the objective and subjective aspects of Motion.

The principle of universal gravitation or the absolute interdependence of all things can be applied to mind and speech. All words centre about a single word, all activities, inorganic, organic, and superorganic, are strictly serial and interconnected; they are indivisible excepting in so far as they yield to classification. In a word, the activities of the mind, and of nature, are forms of motion and can be expressed in terms of its aspects, space, and time. Applying this rule to language we find it impossible to frame a sentence without employing a verb, the symbol of action, and all the parts of the sentence are but modifications of this action expressed in terms of place and time.

This generalization, apparently so simple, is of transcendent importance. It is fatal to every superstition and every form of mystery. It defines the limits of language and the nature of perception, for it shows that thought is in reality but action.

To establish so important a conclusion as this, analysis alone will not suffice. The analysis must be accompanied with a synthesis which shall join the culture of the past with that of the present and show that the unification of knowledge is the natural consequence of the intellectual and moral development of the race.

This means that we need a new religion—a religion which shall appeal to the reason as well as to the emotions; which shall establish not a divine mystery, but the divine unity of life and mind.

In Greece, thought was first emancipated from feeling; and true to the myth of the goddess Athenæ, reason sprang into the world a complete being armed *cap-u-pie*, ready for action. Before this, thought had been involved with feeling in religious sentiment: it had asserted its supremacy in many individuals and in many ways, but it had never obtained its freedom and established itself as an independent power in the world. This logical sovereignty, which was so firmly established in ancient Greece, has lasted through many vicissitudes to the present day. In the meantime society has developed to such an extent, that its other great forces clamor for an equal recognition. Feeling becomes louder and louder in her protestations of equality with the intellect. Her plea is that morality is not the function of the mind any more than of the organism, of reason any more than of slowly acquired habit; that the will is not a purely logical phenomenon, but that its energies spring from and disappear in the labyrinths of sentiency; that in a word, there is a logic of feeling as well as a logic of signs, and the intellect is the companion of the heart, not its despotic ruler. Thus the despotism of reason is disputed, and we have the extraordinary spectacle of philosophy—av, even metaphysics disproving the unreasonable pretensions of an alleged "pure reason" and winning success by the subjugation of these pretensions.

The Pythagoreans were the first who attempted a complete classification of the facts of the universe. Their effort, though feeble, was in the right direction; for the first principle of perception is analysis, or classification; and knowledge can never be unified until an ultimate or complete analysis has been performed. Aristotle repeated this effort, and inscribed his celebrated ten categories of thought.

The history of thought has moved on, through the inter-

ruptions of the decline of the Greek and Roman states, and the lethargy of the Dark and the Middle Ages. The light of Islam threw a pale glare upon the thought of Greece, but it soon faded out. Then the scholastic age ushered in the revival of learning, and the arena of intellectual war was reopened in Europe. Many and fierce have been its conflicts. Descartes and Spinoza followed upon the wrangling of the Schoolmen, and established great systems of original investigation. Bacon anticipated this effort, and opened the career of logic in England. Then Kant reared his unequalled monument of Idealism in Germany, his example being followed by an army of the most thorough and devoted students the world has produced. It was in Germany that the exclusive sovereignty of the mind reached its zenith, when Kant declared that all reality was subjective, that Mind was the cause of the universe. Against this audacious tenet Science entered a protest, which soon assumed the proportions of a great impeachment; and the psychologists of England superseded the idealists of Germany in the world of thought. The study of mind as the function of an organism was the form which this protest first took. It needed but a Darwin to show the perspectives of organic life, and a Spencer to point out that the individual was but a single link in the continuous chain of life and mind, for this great movement, supported by the best scholars on the Continent, to produce a silent revolution in knowledge.

The world, then, has fully entered upon a new era of thought. But whether this thought is to be the sole enjoyment of a few, or is to become the common property of a great civilization, is a question which time must decide. If it is to become general, the reform of knowledge must penetrate to the very foundations of society; which means that the religious and the intellectual faith of the multitude must be pledged to a single power or government. To accomplish this, a new civilization must arise, and whether it can arise out of any thing short of the ruins of the old, is the question which presses upon our age.

The civilization to which we belong bears, by common consent, the name of Christian. It has been brought to us in developed forms by different nations. Among us it has grown up into a new nation, different from any thing, in some respects greater than any thing, that the world has yet seen. But a rational view of history shows a certain monotony in our experiences which forbodes evil. For if we are passing through the same forms of development that past civilizations have experienced, what right have we to expect a better or a higher fate? With Roman principles of law and government, with Grecian love of the intellectual and the beautiful, with the Scandinavian worship of freedom, and the Semitic worship of God, we lack but one element of a great national life, which is morality. If Christianity could secure for us this greatest boon, we should be safe; but does it, can it, fulfil this all-important function? Morality is not merely the expression of the sentiments, or beliefs, of an individual or race; it is the type of its life. Its advocates must not, therefore, appeal to faith or to reason alone; they must appeal with equal force to both.

Christianity is a religion of faith. It is admitted far and wide, and among its most devout followers, that it cannot sustain itself against the keen analysis of science, or the commanding synthesis of history, but that it depends upon faith for its life. The question then arises: Is this a safe religion for our age? Can we afford to bring up children, in a world teeming with intellectual energies, under any thing less than the broadest and highest logical discipline?

In advocating the Religion of Philosophy, there seems little hope of success. All imaginary advantages are on the side of the Religions of Faith. These religions do not scruple to hold out the promise of rich rewards in another world, for services and belief,—of æons of blissful existence for the faithful; nor do they hesitate to threaten the unbelieving with punishments too dreadful to be described. The Religions of Faith monopolize all the popular incentives to morality. As a consolation for the misery resulting from

the still unmastered passions, they emphasize the temporal character of human happiness, and contrast it with joys which they say are eternal. To the weary they promise rest; to the bereaved, reunion with the dead; to the poor, plenty; to the sick, health. All these obligations are accepted upon faith. Their redemption is postponed until the empire of time and space shall have passed away.

Philosophy takes none of these advantages: it stoops to no such disingenuous methods. It sounds the alarm of a fleeting existence, it teaches the dire limitation of personal life, it identifies time with eternity, and matter with infinite space. It teaches that as there is no absolute death, there is no absolute personal life; that the absolute means time, or the unchanging, and that individuality is transient and ever-changing. It teaches that cause and effect are but different aspects of each event, and that there is no need of a supernatural power to entail the effects of conduct, for they are inevitable. It appeals to nothing but the most impersonal sympathies as the incentive to morality; and yet it affirms that morality is the only real success of life. Thus without a single pretext of authority, except the voice of conscience pleading through the experience of ages the cause of humanity; unenforced by mysterious fears, unsustained by ecstatic hopes, it confronts the gorgeous imagery, the superb organization, the venerated associations of the Religions of Faith, and demands that their creeds shall be brought into harmony with the discoveries of science and history, that their promises shall be limited to their responsibility and their knowledge, and that their moral teachings shall be made to appeal to the highest nature of man.

With these reforms, and nothing less, will philosophy be satisfied. To the realization of this ideal will all its efforts be bent. And should the materials of our civilization prove unequal to the tension of these principles, it will become the mission of Philosophy to deposit among its ruins the germ of a higher life.



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PART I. THE SCOPE OF LANGUAGE.



PART I.

THE SCOPE OF LANGUAGE.

CHAPTER I.

THE DAWN OF PHILOSOPHY.

Thales-Anaximenes-Diogenes of Apollonia-Anaximander-Pythagoras.

In searching for the dawn of philosophy one becomes lost in the perspectives of the past. The comprehension of any study depends so largely upon what is brought to it by the student, upon the suggestions of his own knowledge, that in reading the myths and theories which have come down to us from the most ancient thinkers, it is natural to imagine them pregnant with the deepest meaning. We see in these early efforts to comprehend man and nature vague expressions of the very problems which occupy us to-day. Thus, owing to the plane of experience from which we regard ancient thought, we are apt to overestimate its significance. For us the difficulty is, to limit the meaning of the language of the ancients by the actual knowledge which they possessed.

In this difficulty a knowledge of the nature of language comes to our assistance. Language itself is but a system of symbols representing ideas by virtue of an agreement which is the slow outgrowth of usage. The nicety of the adjustment of words to ideas is to be estimated by the precision with which the ideas are called up by the words. If, for instance, a certain combination of words leaves a choice or uncertainty as to the idea intended to be conveyed, the expression is imperfect in proportion to the extent of the uncertainty. In thinking, we are obliged to employ words,

for thought itself is partly the function of words: language is a part of the structure of which thought is the activity.

This brings us to the great truth, that there is an interdependence between ideas and words, between thought and its expression; that order and success in the one imply symmetry and definiteness in the other. It follows, therefore, that in studying the history of philosophy we can estimate the quality of the thought of each age by the character as to directness or definiteness of the terms in which we find it expressed.

We shall have no need of going beyond the history of Greece for a beginning of philosophy. The contributions to thought which come from other and earlier sources are all represented in the efforts of the early Greek thinkers. The degree of definiteness depends so largely, after all, upon the actual experience of the race (its progress as indicated by the spread of knowledge), that the higher generalizations can never far supersede that classified particular thought known as Science. Viewing intellect in its broadest light, as the logical or moral aspect of life, actions express thought with even greater precision than words. Valid comparisons between early races and nations in respect to this quality of definiteness as displayed in their general conceptions, must therefore be made to include more factors than those which are commonly called "intellectual." Such comparisons must be extended to their whole civilizations, including the phenomena of their arts and sciences, their religions and their morals.

As a result of such a comparison, the Greek nation stands forward clearly as the progenitor of the higher types of European civilization and thought. In the history of Greek thought we find all the phases of speculative development which illustrate the inception and primary growth of the art of generalization; and as this is the whole field of philosophy, to extend our examples to those furnished by the Hindoos, Egyptians, Chinese, Persians, Hebrews, or any other nations, would be to needlessly lengthen what is at best a

tedious story. Tedious by reason of its slowness, but it is deeply interesting when viewed as the explanation of what we are, and as giving us some idea of what we may become.

Viewing thought as the perfecting process, or the purification of individual life, which is the most comprehensive theory of intellectual progress, the history of speculation becomes a matter of great practical interest. As we study the beginnings of human speculation and follow out its development we cannot but be impressed with the great logical possibilities which lie before us. Let us begin, therefore, this story of human speculation with the far-famed adventures of the Greek mind.

Thales, who is supposed to have been the first Greek philosopher, was born at Miletus, a Greek colony in Asia Minor. There are no means of determining the exact date of his birth, but the first year of the 36th Olympiad (B.C. 636) is generally accepted as correct. Like most of the prominent men of Greece, he seems to have taken an active interest in public affairs. Egypt is credited as the source of his learning, and, as he is said to have been a proficient in mathematics, there is little doubt that the famous Egyptian geometers were among his early instructors. The principal feature of his philosophy was the theory that water was the source of all things. In thus postulating a substance as a first cause, the battle of philosophy was begun. To the observing and thoughtful Greek, six hundred years before Christ, the universe was a chaos of unexplained and irreconcilable differences. The now familiar physical forces had not been disjoined in thought from the substances which manifested them. When, indeed, we consider the unquestioning belief in the absolute and ultimate character of these ideal separations which we may observe in the writings of Tyndall, Balfour Stewart, Tait, and other Physicists of our day, even the ancient Greeks might be regarded as having a logical advantage over modern science; yet the darkness in which the poverty of analysis, in the time of Thales, must have enshrouded all nature can hardly be overestimated. The procedure of the mind is ever constant; thought establishes its base-lines and triangulates its more or less accurate advances; and these projections reach toward a universal principle, a single fact by which all other facts may be explained.

Thales naturally sought out a cause, or chief antecedent, of all that he saw around him, and his induction was more elaborate than would at first appear. It was during his time that a spirit of contemplation and investigation first made its appearance among the Greeks. Hitherto men had contented themselves with accepting what they saw without explanation, remanding all obscure phenomena to the realm of superstitious adoration. Thales being the first in Greece who sought to establish a primal cause, is regarded as the originator of philosophic inquiry. It is not easy to return from our more advanced point of scientific observation to that of Thales. Yet there can be little doubt that his choice of water as the ultimate or formative principle of nature was based upon extended observation supplemented by thought. He was impressed with the universal presence of moisture in animals and plants, in the earth and in the skies. Seeds were apparently nourished by moisture; all life seemed due to the presence of water. His cosmological theory too was no doubt biased by the ancient superstition that the earth floated upon water; for it is natural to suppose, when we consider the matter in connection with more modern thought, that this early step taken to establish a first principle was not entirely free from the then ruling influence of myths. Thales also endeavored to explain that every thing was evolved from seed-germs; the whole world, as well as individual beings.

This, however, leads us to the doctrines of Anaximenes, who is said to have been born in the same Greek colony as Thales, in the 63d Olympiad (B.C. 529). His views were fundamentally the same as those of Thales, though his explanation of the primary essence was different. Anaximenes could not accept water as the cause of all, for to him *air* seemed to be life. He taught that air was the origin of all

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things: that it was *infinite*, and in its pure state invisible. Only through its qualities—heat, cold, moisture, and motion -could it be known to us. To its eternal motion he attributed all change, for he reasoned that motion alone is the power manifested in all the transformations of nature. He also believed that the condensation of air had produced the earth, which he supposed perfectly flat, and supported by air. He also thought that the heavenly bodies were flat: and he is said to have been the first to discover that the moon shone by the sun's light. Anaximenes goes a step further than Thales, for from individual life he endeavored to deduce universal life. It is true that this effort took the form of a theory, that the universe was a living organism. palpitating with the same kind of life observed in terrestrial organisms. So ancient is this belief, however, that it is hard to sav in what degree Anaximenes surpassed Thales in his conception of the truth which underlies it.

Another famous theory of the universe was offered in this epoch, by Diogenes of Apollonia, born about the 80th Olympiad (B.C. 460). He argued, with Anaximenes, that air was the origin of all things, but, giving it a deeper signification, he compared it to the soul; though the word soul, for him, meant life in a general sense, rather than mind distinctively. As the primary substance of Thales was more than the element itself-was water endowed with vital energy,so the air of Diogenes was more than the atmosphere; it was air full of vital qualities of warmth and life which ensouled the universe. Life was to him Intelligence: "For without reason," he says, "it would be impossible for all to be arranged so duly and proportionately as that all should maintain its fitting measure; winter and summer, day and night, the rain, the wind, and fair weather, and whatever object we consider, will be found to have been ordered in the best and most beautiful manner possible."

There is something very interesting in these intensely

¹ Diogenes of Apollonia is not to be confounded with Diogenes the cynic, the contemporary of Plato.

human if crude speculations. The accuracy with which they have been repeated by the thoughtful of subsequent ages speaks volumes for the constancy of mental procedures, if not for the progress of knowledge. It would not be difficult to find, even in our day, men of high standing in the intellectual world who reason precisely as did Diogenes of Apollonia, with regard to universal intelligence. In other words, they apply to matter and to general phenomena a word which expresses conditions of human sentiency that have been built up into what we term intelligence or mind. They imagine that the order of nature can only be explained by the sequences of thought; whereas all mental activity is but an expression of this order of nature, a consequence of conditions that are far wider and deeper than human life. It would thus be hardly fair, to charge Diogenes, who lived about twenty-three centuries ago, with anthropomorphism, for at that time the circumscriptions of human life, now so familiar, had scarcely been thought of, much less delineated: but to interpret, in our times, the order of nature as a manifestation of intelligence, is to lose sight of the limits of language and the nature of perception.

Diogenes believed that air was intelligence, or order itself. "That which has knowledge is what men call air; it is it that regulates and governs all; and hence is the use of air to pervade all, and to dispose all, and to be in all; for there is nothing that has not part in it."

It is seen from the above that Thales, Anaximenes, and Diogenes tried to explain the universe from a physical basis, citing water, air, and air-life as the origin of all things. There was a man, however, who lived about the same time as Thales, who seems to have divined the great truth that the physicial, substantial, or statical aspect of nature is not an ultimate fact, but rather a phase or aspect only of the ultimate fact. The learned disquisitions on the nature of matter, which form so prominent a feature of the philosophic literature of our century, were probably an unknown

¹ See Ritter, vol. I., p. 214.

luxury to the early Greek thinkers; so that we have no choice but to admire the independence and astuteness of Anaximander in taking a position so much in advance of that occupied by the teachers of modern physics. No one who studies the science of Physics, as it is taught in the universities of the world to-day, would suspect that matter was not an ultimate fact. Those who speak of the absolute weight and extension of atoms, postulating a material cause of all phenomena, reason precisely as did Thales, Anaximenes and Diogenes. To regard matter as an ultimate fact is to reverse the order of preception, for matter can never mean more than an aspect of motion.¹

Anaximander is said to have been born in the 42d Olympiad (B.C. 610). He excelled in the political and scientific knowledge of his time. "He was passionately addicted to mathematics, and framed a series of geometrical problems," and is credited with the invention of the sun-dial and the origination of the system of geographical maps.

Anaximander is stated to have been the first to use the term *principle* for the beginning of things. He defined this word as the *infinite*. One of his tenets was: "The Infinite is the origin of all things." In thus seizing upon a principle, not a substance, as the ultimate generalization,

¹To show how vain it is to consider any special property of matter as ultimate, we quote the pertinent objections which Judge Stallo brings against the habit of regarding weight or density as absolute.

[&]quot;The weight of a body is a function, not of its own mass alone, but also of that of the body or bodies by which it is attracted, and of the distance between them. A body whose weight, as ascertained by the spring-balance or pendulum, is a pound on the surface of the earth, would weigh but two ounces on the moon, less than one-fourth of an ounce on several of the smaller planets, about six ounces on Mars, two and one-half pounds on Jupiter, and more than twenty-seven pounds on the sun. And while the fall of bodies, in vacuo, near the surface of the earth amounts to about sixteen feet (more or less, according to latitude) during the first second, their corresponding fall near the surface of the sun is more than four hundred and thirty-five feet.

[&]quot;The thoughtlessness with which it is assumed by some of the most eminent physicists that matter is composed of particles which have an absolute primordial weight persisting in all positions and under all circumstances, is one of the most remarkable facts in the history of science."—"Modern Physics," p. 205.

Anaximander at once rose above materialism, and perceived that divine unity which alone can harmonize life and mind. Speaking of this principle, Ritter says: "The reason why Anaximander regarded the primary substance as infinite finds a natural explanation in the infinite variety of the evolutions of the world, which have their ground in it. He is represented as arguing that the primary substance must have been infinite to be all-sufficient for the limitless variety of produced things with which we are encompassed. Now, although Aristotle expressly characterizes this infinite as a mixture, we must not think of it as a mere multiplicity of primary material elements; for to the mind of Anaximander it was a unity, immortal and imperishable, an ever-producing ENERGY. This production of individual things was derived by Anaximander from an eternal motion of the infinite; from which it would appear that he ascribed to it an inherent vital energy, without, however, employing the terms life and production in any other acceptation than the only one allowable by the character of his philosophy.—in the sense, i. e., of motion, by which the primary elements of the infinite separate themselves one from another." 1

Anaximander acquired a great reputation for learning; and as the Greeks spoke little but their own language his wisdom was, for the most part, the result of a direct study of nature. "His calculations of the size and distance of the heavenly bodies were committed to writing in a small work, which is said to be the earliest of all philosophical writings." His inventions of the sun-dial and of geographical maps, and his passionate love of mathematics, above mentioned, declare him to have been a man of definiteness and thoroughness in his researches; and this is the more interesting when we consider that he struck the key-note of philosophy, that he framed an hypothesis which all subsequent research has proved unable to destroy.

¹ Ritter, vol. I., p. 269.

Lewes: "Biographical History of Philosophy," p. 11.

The speculations of Anaximander, coming to us from a period five centuries before the beginning of the Christian era, before even Greece had reached her political and literary supremacy, stand out with prominence from their faded historical surroundings. And when we think that the doctrines of Pythagoras were the natural outgrowth of these speculations, and that even they were said to have their exact counterparts in the philosophy of the "Jews, Indians, Egyptians, Chaldeans, Phænicians, nay, even the Thracians," we are compelled to acknowledge that the much vaunted progress of philosophy among us is a claim that at least should be investigated.

Pythagoras, about the time of whose birth there is much dispute, opinions varying from the 43d to the 64th Olympiad, was the founder of a very large and important school of thought.

To him we seem to owe the term *philosophy*; for although the word was not current in his time, he declared himself to be a lover of wisdom for its own sake, which is to-day the accepted definition of philosopher. He regarded contemplation as the highest exercise of man, and emphasized the distinction between seeking wisdom for ulterior purposes and seeking it for itself. It is to denote this distinction that he employed the term *philosopher*. His aim was to reform life by cultivating religious sentiment, and by instilling morality into politics.

The accounts of Pythagoras depict for us that spirit of exclusiveness which seems to have prevailed among the leaders of learning, as well as of religion, in the early history of thought. This tendency accounts for the constitution of the secret society of the Pythagoreans, into which initiation could only be obtained after five years of probation,—years during which many privations and other tests of character were imposed. Indeed, so severe were these disciplines, chief among which was the injunction of silence, that many novices gave up in despair; these were adjudged unworthy to enter the "sanctuary of science."

Pythagoras seems to have differed from the savants of his time in his ideas of the social and intellectual importance of women, fifteen of whom were among the members of his school. Some accounts say that he lectured to and taught women, and that his wife also was a philosopher.

The motto of the Pythagorean school was, "Not unto all should all be made known." Concerning its doctrines there is little unanimity of opinion; they are said to have been derived principally from the Eastern nations; and nothing indeed could be more natural than such a lineage, as from these nations came nearly all that was prior to Greek thought. The religious conceptions of Pythagoras, among all his teachings, are alone admitted to be of a Greek origin. Ritter tells us that the Egyptians taught him geometry, the Phænicians arithmetic, the Chaldeans astronomy, and the Magi morality.

The Pythagorean school is represented as being not only a scientific, but a religious and political society. Many marvellous things are told of its founder; but it is generally conceded that he attracted many students from distant countries; that nothwithstanding the symbolical nature of his doctrines he advanced scientific knowledge, especially mathematics; and that both in politics and in speculation he exerted a great influence over the age in which he lived. The attention which this school received from the later Greeks is instanced in the works of Aristotle, who modelled his categories of thought, or most general principles, upon the Pythagorean plan. Thus Aristotle describes its thought:

"In the age of these philosophers [the Eleats and Atomists], and even before them, lived those called Pythagoreans, who at first applied themselves to mathematics, a science they improved; and having been trained exclusively in it, they fancied that the principles of mathematics were the principles of all things.

"Since numbers are by nature *prior* to all things, in numbers they thought they perceived greater analogies with that which exists and that which is produced, than in fire, earth,

or water. So that a certain combination of numbers was Justice; and a certain other combination of numbers was Reason and Intelligence; and a certain other combination of numbers was Opportunity; and so for the rest.

"Moreover, they saw in numbers the combinations of harmony. Since, therefore, all things seemed formed similarly to numbers, and numbers being by nature anterior to things, they concluded that the elements of numbers are the elements of things; and that the whole heaven is a harmony and a number. Having indicated the great analogies between numbers and the phenomena of heaven and its parts, and with the phenomena of the whole world, they formed a system; and if any gap was apparent in the system, they used every effort to restore the connection. Thus, since ten appeared to them a perfect number, potentially containing all numbers, they declared that the moving celestial bodies were ten in number; but because only nine-are visible they imagined a tenth, the *Anticthorne*.

"We have treated of all these things more in detail elsewhere. But the reason why we recur to them is this—that we may learn from *these* philosophers also what they lay down as their first principles, and by what process they hit upon the causes aforesaid.

"They maintained that Number was the Beginning (Principle) of things, the cause of their material existence, and of their modifications and different states. The elements of number are Odd and Even. The Odd is finite; the Even, infinite. Unity, the One, partakes of both these, and is both Odd and Even. All number is derived from the One. The heavens, as we said before, are composed of numbers. Other Pythagoreans say there are ten Principia, those called co-ordinates:

[&]quot;The finite and the infinite.

[&]quot;The odd and the even.

[&]quot;The one and the many.

[&]quot;The right and the left.

[&]quot;The male and the female.

- "The quiescent and the moving.
- "The right line and the curve.
- "Light and darkness.
- "Good and evil.
- "The square and the oblong.
- "* * * All the Pythagoreans considered the elements as material; for the elements are in all things, and constitute the world. * * *

"*** The finite, the infinite, and the One, they maintained to be not separate existences, such as are fire, water, etc.; but the abstract Infinite and the abstract One are respectively the substance of the things of which they are predicated; and hence, too, Number is the substance of all things. They began by attending only to the Form, and began to define it; but on this subject they were very imperfect. They define superficially; and that which suited their definition they declared to be the essence of the thing defined; as if one should maintain that the double and the number two are the same thing, because the double is first found in the two. But two and the double are not equal (in essence); or if so, then the one would be many; a consequence which follows from their (the Pythagorean) doctrine."

It has been the aim of all historians of philosophy to classify the systems of belief which have reached us from the past, paying due regard to their succession in time, in certain groups, or types of thought, which are more or less closely identified with the localities or countries in which they have appeared. This seems the most natural method to pursue in writing a description of thought as it has occurred in history. But when the object is, as in the case of this work, to examine the whole subject of human knowledge, a less elaborate historical method will better serve. Instead of going through the tedious repetitions of detail in all the recognized philosophies, and pointing out their interdependencies, classifying them into such schools as the

¹ Lewes: "Bio. His. of Phil.," p. 34.

Ionian or physical, the Pythagorean or mathematical, the Eleatic, and the Megaric, we will content ourselves with a brief sketch of the most important systems, and a portrayal of the original features in each. The other method has been so exhaustively applied by such writers as Ritter, Tennemann, Degérando, Victor Cousin, Hegel, Zeller, and Ueberweg, and its results, after all, are so purely historical, so meagre in a logical and developmental sense, that there is little encouragement for others to follow it.

We will confine ourselves, therefore, to the endeavor to show, by selections from the accounts of these philosophies. that there has been one great problem of thought which they have all attempted to solve, and that the nearness of the approach of each to the solution of this problem has little or no connection with their relative positions in history. The organic history of our race is so incomparably great when measured by the few centuries of progress which make up the sum of recorded history, that in the strict sense of the word we have no ancient philosophy to study. The Greek mind suffers nothing by comparison with the mind of the nineteenth century. With regard to their natural capacity for dealing with the fundamental problems of thought, the Greeks were our peers. If introspection, or any purely logical achievement could have supplied this coveted knowledge, we should have inherited it from them in the same perfection in which their art has reached us. Neither with the Greeks nor the moderns has there been any want of intellectual acumen. There is a deeper cause for our failure, thus far, to grasp this problem of thought.

What is this cause? It is to be found in the limitations which have hitherto restricted our conceptions of knowledge. Human knowledge in the higher sense means human life, and the problem of thought can only be solved by the development of knowledge as a whole. From the time of the ancient Greeks to our day, the nature of man has progressed but very little. Human character appears rather in

the attitude of about ascending to a higher plane than of occupying it. And until this ascent has been actually made. we cannot look upon the struggles of the Greeks to solve the problems of thought as antique or alien. Their methods, their aspirations, and their successes, judged by accepted standards, were in essence like our own; and with our own they compare very favorably. In describing, therefore, the outlines of the thought of Thales and his immediate successors, and in emphasizing the success of Anaximander in his effort to reach a solution of the great problem before us, strange as it may seem, we have already drawn the logical boundaries of the whole history of philosophy. Notwithstanding that the achievements of Socrates, Plato, and Aristotle have not yet been mentioned, and that the writings of Descartes, Kant, and their successors, up to the time when contemporaneous writing begins, are yet to be described; the whole logical compass of these illustrious writers has been anticipated by previous thought, and the farthest reach of their speculations proves to have been familiar ground to prehistoric minds. The corroborations of these statements are to be heard on every hand. The futility of thought, the hopeless search of metaphysics, the limits of the knowable.—even so recent a movement in philosophy as agnosticism—the modern term for the belief in an unknowable-are but expressions of the common verdict, that these early Greeks, and their predecessors in the East, went just as far as we have gone, in an intellectual sense, toward solving the first problem of life.

When we say that the growth of knowledge as a whole will alone realize any actual progress in this constant effort of our race to achieve an ultimate analysis, we merely specify that science and religion as well as thought are necessary factors in this growth, and that what is known as speculation and unaided introspection are of themselves utterly impotent to accomplish the desired result. After this statement it may seem abrupt to offer the student a key to the ever-recurring enigmas of philosophical systems, as we find

them recorded in history. But as the charge, that philosophers have reasoned in a circle from the earliest records of human speculation, is not a new one, to emphasize the position here advanced we must demonstrate the possibility of progress.

It is the task of this work to show that knowledge is not merely thought, but that it includes conduct: that truth cannot find a fuller expression in words after all than in actions, and as a consequence, that we shall have to extend the sphere of metaphysics to that of morality, identifying these spheres as but phases of one fact of development in order to accomplish our demonstration. In offering, therefore, at the very outset, a key to the metaphysical problem. it might appear that I have anticipated our argument, but I do not go beyond that department of truth which is indicated by the general title of these chapters. As we approach the climax of Greek Philosophy, in the systems of Socrates, Plato, and Aristotle, if we are to show that the thought of these men has no higher significance than earlier speculations, it will be necessary to have some common measure for the significance of words;—for all philosophy aims at an ultimate analysis. This needed criterion, then, we will proceed to explain.

There is in England a school of geologists who have renounced all forms of generalization. They refuse to build up any theories of the organic history of our planet, but devote themselves entirely to the accumulation and classification of geological data. This resolution is the outgrowth of the many disappointments with which the generalizations or theories of geologists have met. The insuperable difficulties of estimating the comparative remoteness of events, when the only record of them is to be found in solidified sand and mud, all the results of physical forces and conditions which repeat themselves over and over again, leaving no traces of their chronological interdependence, have discouraged these scientists, and they have determined to hazard no further opinions until they have accumulated

more facts. This is a silent reproof to the less conscientious members of their profession who "have imagined that they could tell us what was going on at all parts of the earth's surface during a given epoch; and have talked of this deposit being contemporaneous with that deposit, until, from our little local histories of the changes at limited spots of the earth's surface, they have constructed a universal history of the globe as full of wonders and portents as any other story of antiquity."

The only radical distinction between the development of ancient and of modern philosophy is that which arises from the poverty of the ancients in scientific facts. In other words, the only difference between ancient and modern knowledge (leaving out for the present the moral aspect) is the growth of science. This does not deny to philosophy an exclusive sphere relatively independent both of science and religion; on the contrary, it circumscribes that sphere. It does emphatically deny, however, that there is any other method of mental apprehension used in any of these three spheres of human activity than that now universally acknowledged to be the method of science. Mind is a function of the organism, and has a definite and invariable mode of procedure. To identify the principle of this procedure with that of the humbler organic activities is the special task of the succeeding part of this work; but it is not too soon to make the statement that truth is independent of words, that facts express themselves. If we fail to interpret facts aright. it is a failure of harmony between our minds and our surroundings, a maladjustment of inner to outer activities. The classification of facts which constitutes our intelligence and accounts for every aspect of it is a classification These changes express relations which have their terms in other changes, and so on to eternity and infinity. If we would express these changes in numbers, we should merely reduce them to units of time; if we would express them in quantities, we should merely reduce them to units of space; if we would seize these changing phenomena and analyze them in order to determine their weights and affinities, we should merely express many relations in terms of simpler relations,—for weight and affinity are relations having for their terms more or less familiar conditions; if we would comprehend the aggregates of changes viewed in the heavens and on the earth, we should merely enlarge the scale of the very method of investigation which we have applied to lesser groups. If we turn our attention to our race and generalize the principles of its development, we use the same method and our effort expresses the same law; the analogy never ceases, and it never begins. We discover our lives to be the function of this *infinity* and eternity of conditions.

Philosophy, rebelling against imaginary limits to perception, would turn its face away and peer into the depths beyond. Resolutely it has held this attitude for centuries. Its eye has not dimmed, its hope has not abated, but the misty distances into which it has been peering have gradually been peopled with facts; for science has patiently plodded on, enlarging the sphere of reality until we find ourselves in a universe of facts grand enough to satisfy our proudest hopes. When we look back at this steadfast unsatisfied gaze of the ancients trying to penetrate phenomena, we regard them with a certain poignant pity, because their horizon of reality was so limited. But to-day where is the mind that has taken full advantage of its opportunities in this newer world of knowledge? Who can afford to look unintelligently or contemptuously upon our domain of facts? Who can complain of the method which has accomplished such rich results? Not the philosopher who would truly interpret nature. There are phases of nature, however, which seem to evade the scientific method; they are the phenomena of humanity. The questions which they raise are those of our origin and destiny, of our relations to one another and to the universe.

This is a philosophy which would still bid defiance to the slow teachings of experience; it is impatient of the restraints

and the discipline of universal order; it claims a higher source of knowledge than that of the classification or comparison of facts. This philosophy is called religion; to its study we devote the third division of this work. It is to that philosophy which stands between science and religion, which occupies the territory of mind or language, that we would now give our attention.

The word *entity* is a fiction. There is no such thing as an unrelated fact, an unconditioned existence. The mind represents a principle, but it is the principle of all activity. Both ancient and modern philosophy teem with efforts to reduce diversity to unity, the many to the one. This one is not a place or a time, but a *principle*. The word *principle* means first; the word *first* means one. Hence to succeed in this effort, to discover that unity which is the natural goal of classification, will be to accomplish the object of philosophy and amalgamate it with the departments of knowledge hitherto distinguished as science and religion.

For the discovery of this ultimate fact, so long sought, philosophy wholly depends upon that method of comparing facts which is pursued in the sciences. From the time of Thales to that of Kant, philosophy has consisted of nothing but the grouping of observed facts, and deductions from them. Words have never been more than an attempt to express what has already been expressed in these facts. If mind is a fact, it must be the product of other facts; if it is a phenomenon, it must be the function of its conditions; if it is a relation, it must have its terms in the other relations. To say that it is an entity, is to corrupt our language with hidden contradictions, to stultify the mind. As we have seen, the only ultimate difference between the philosophies of different ages is to be found in the command of facts enjoyed by each age. Apart from this, the scope of all philosophies has been identical. The question of the *ultimate* analysis was just as clearly stated in the speculations of Thales, Anaximander, and Pythagoras, as in Descartes, Spinoza, or Kant. The latter writers, especially Kant, had a vast accumulation of empirical data, scientific knowledge, to aid them in their speculations, but they had not successfully applied them to the science of mind. The postulate of Descartes ("I think, therefore I am"), the God of Spinoza, and the idealism of Kant, were no nearer the ultimate generalization than the speculations of the earliest thinkers. They one and all strove to reduce all imaginable diversities to one The vastly superior scientific knowledge of the modern thinkers only seemed to increase the field of their diversities, it did not bring them to the ultimate simplicity. This ultimate simplicity has many names; in seeking for it it has been denominated the ultimate unity, truth, fact, principle, cause, substance, energy, force, existence, or Thales, in the paucity of his scientific experience, thought that it was water: Anaximenes, that it was air: Diogenes of Apollonia, that it was living air: Anaximander of Miletus, that it was the eternal motion of the infinite; Descartes considered it a dual principle of mind and matter: Spinoza calls it God. Kant attributes this ultimate reality to mind alone, and Herbert Spencer calls it the "persistence of force." Where is the progress of the intervening twentyfive centuries? Surely it is in scientific knowledge, and not in pure philosophy.

Will it be too much to ask the reader to believe that this ultimate reality or principle is plainly and unmistakably confronting us wherever we turn, that it alone accounts for every experience, and that the only reason why it has so long escaped us is, that it is an inseparable and primordial quality of our very existence? It is too near to be seen, too easy to understand; and for this reason, and only for this reason, it is difficult to explain. If singleness of mind is strength, then indeed it requires the greatest intellectual power to grasp this fact. It would seem, though, that the requisite condition of the mind to appreciate this truth is not that of great tension, or a very high degree of training, but a self-discipline, a submission to the power of facts, a renunciation of mental or verbal conceit; in a word, the

very thing in an intellectual sense that religion demands of us in a sentimental sense in order to know God.

To present the argument in a scientific form, the whole burden is to prove that matter and space are words which have the same ultimate signification. Matter is clearly a generalization of the statical side of phenomena. Under analysis matter disappears in motion. Space is simply our term for infinity or extension, and therefore the argument turns upon the point whether the universe is a *plenum* or not. In further support of the fact that *it is*, I refer the reader to an argument in "Problems of Life and Mind," by G. H. Lewes, as a powerful corroboration of this view, that matter and space are terms which are logically indistinguishable. This argument, entitled "Action at a Distance," is given entire in Chapter XV., Part II., of the present work.

Some time after I had made an attempt to explain the above theory of the identity of matter and space, this essay gave me unexpected assistance. Although it does not state in terms that matter and space are the same thing, this is an irresistible inference from the argument. The question is one of such transcendent importance in philosophy, and this argument by Lewes seems to me so conclusive, that I thus refer to it in advance.

The consequences of this reasoning are momentous. Unless this theory stand, the categories of thought, or ultimate realities, will remain discrete, as we find them in Herbert Spencer's "Psychology," and in all other modern philosophies, namely, Space, Time, Matter, Force, and Motion. Some writers add Cause, but it is now generally admitted that Cause stands for merely one aspect of every phenomenon, the obverse side of which is Effect, cause being thus a term denoting a purely logical distinction. Others, again, postulate Consciousness as an ultimate reality. Spencer, for instance, distinctly declares consciousness to be an irreducible principle, but this error is fully met and set aside by Lewes.

¹ An anonymous brochure published in 1881.

The interdependence of the five ultimate terms, abovenamed, has not as yet been successfully demonstrated; but if matter and space are admitted to be the same reality, under different aspects, the difficulty at once disappears; for then motion becomes *the* ultimate reality and space and time become its obverse aspects. Space and time have no separate existence apart from motion; their identity is merged in this ultimate fact.

As stated above, the amount of mental reorganization or reform necessary to grasp this simplest of all facts is such as to place it practically beyond the reach of minds that have been trained to cherish the distinctions which this theory would destroy. We have met many people of scientific and philosophic training who are logically incapacitated for receiving this truth; they would no more believe that matter and space were the same thing than a devotee would surrender his faith. It is, therefore, to the younger class of thinkers that we must appeal,—thinkers who have not committed themselves too deeply, who are open to conviction, who are hospitable to new truths when they are clearly stated and amply sustained.

If motion is the ultimate reality, and space and time are its obverse aspects, all ultimate terms must be made to take their places in this trinity of realities. The word *infinite*, for instance, can have no signification beyond that of space; and the terms extension, coexistence, and unlimited, so often found in philosophic writings, all stand for the statical aspect of motion, the most convenient name for which is space. On the other hand, the word *absolute* has no signification beyond that of time, and the terms *sequence*, *invariable fluxion*, and *unconditioned*, mean in their deepest sense the same thing as time. With this understanding of the ultimate significance of the chief philosophic terms, it will be comparatively easy to continue our review of philosophy, for we have the key to every metaphysical situation.

CHAPTER II.

THE PRE-SOCRATIC PERIOD.

Xenophanes—Parmenides—Zeno of Elea—Heraclitus—Anaxagoras—Empedocles—Democritus,

ACCORDING to the well-known essay of Victor Cousin. Xenophanes was born in the 40th Olympiad (B.C. 620-616) and must therefore have been the contemporary of Thales. Although he is counted among the early philosophers, he was more a poet than a thinker. He is called the "Rhapsodist of Truth." Banished from his native city, probably on account of his convictions, he wandered over Sicily as a Rhapsodist during the remainder of his life, which lasted nearly a hundred years. His chief aim seems to have been to oppose to the worship of nature and of many gods a pure monotheism, to spread the doctrine of the unity and eternity of God, and to dispel the deep superstitions of his age. Although by no means indifferent to the beauty of the Homeric fables he fiercely opposed the religious falsehood which they contained. Plato, great as was his appreciation of every thing good in literature, took the same position, as can be seen by the latter part of the second and the beginning of the third books of his Republic. In fact, does it not appear as though the criticism of Plato might have been suggested by these verses of Xenophanes?

"'Such things of the Gods are related by Homer and Hesiod
As would be shame and abiding disgrace to any of mankind;
Promises broken, and thefts, and the one deceiving the other."

¹ The Rhapsodists were the minstrels of antiquity. They learned poems by heart, and recited them to assembled crowds on the occasions of feasts.

In another place the following verse occurs, showing how intimately religious feeling and philosophy were conjoined in the minds of the ancients:

"One God, of all things divine and human the greatest, Neither in body alike unto mortals, neither in spirit."

Identifying God with the universe—the All—Xenophanes again says:

"Wholly unmoved and unmoving, it ever remains in the same place, Without change in its place when at times it changes appearance."

God moved all finite things; "without labor he ruleth all things by reason and insight."

These things sung by a wandering Greek minstrel six hundred years before the beginning of our era, among a people whose only strong bonds of union were connected with religious observances, show how deep-scated are religious feelings, and how much they depend for expression and refinement upon the advance of knowledge.

Parmenides, who was born about the 61st Olympiad (B.C. 536), belonged to a wealthy and distinguished family of Elea. It is said that his early life was wasted in dissipation, and that it was only after his friends, Ameinias and Diochætes, had persuaded him to join the Pythagoreans that he embraced a philosophic life and began to contemplate "the bright countenance of Truth in the quiet and still air of delightful studies."

Parmenides made a great logical advance on Xenophanes when he warned us that to see Truth we must rely on our reason alone, and not trust our senses, which lead us merely to human Opinion. This discrimination is of much historic interest as it anticipates the doctrine of *innate ideas*. He believed in the unity of all Being, or, in other words, that all that exists is in its essence the same—the One; that Being alone fills space, while the fullness of all Being is Thought. Non-Being, he assumed, could not be, because nothing can come of nothing. If, therefore, Being

existed, it must embrace all existence. He regarded the senses as the cause of all error, as they reflect the appearance of plurality and mutability, and oblige us to follow our many sensuous impressions to apprehend the changeable and the many; thus preventing us from understanding the One—the divine truth in all its reality.

Parmenides wrote a philosophic treatise entitled "Nature," which was divided into two parts; the first described what he termed absolute Truth as disclosed to us by the reason; and the second endeavored to describe the difference between this absolute Truth and human Opinion; a task which has been attempted many times since, up to the present day. Parmenides expresses himself thus:

"Such as to each man is the nature of his many-jointed limbs,
Such also is the intelligence of each man; for it is
The nature of limbs (organization) which thinketh in men
Both in one and in all; for the highest degree of organization gives the highest degree of thought."

An advanced psychological theory as viewed from this century.

Parmenides denied motion in the abstract, but was obliged to admit that *according to appearance* there was motion.

Zeno was called by Plato the Palamedes of Elea, "on account of the readiness and scientific skill with which he indicated the contraries of all things." He was a singularly prominent character among the ancient philosophers. Born to high social position, which gave him political power, he early manifested a disdain for the honors of rank and office, and sought that seclusion which is the natural sphere of thought. Some accounts charge him with a misanthropic disposition, but there are good reasons for believing that the political corruption and general immorality of his age repelled him and held him aloof from public life. His character can be judged of from the following words which are attributed to him: "If the blame of my fellow-citizens

¹ Not Zeno the stoic.

² Ritter, vol., I., p. 470.

did not cause me pain their approbation would not cause me pleasure."

To Zeno's high character and austere conduct is due much of his celebrity. His contemporaries failed to understand how benevolent and studious occupations could wean him from the sensuous pleasures with which he was surrounded.

The invention of Dialectics—the name given to the first attempts at formal logical analysis—is by the universal consent of antiquity attributed to Zeno. "It may be defined as a refutation of error by the *reductio ad absurdum* as a means of establishing the truth."

Zeno was a devoted patriot, without being ambitious. This character he showed while Greece was freeing herself from the yoke of the Persians and trying to establish free institutions. He was much attached to his little colony of Elea and only occasionally visited Athens (where he had Pericles among his pupils) to spread abroad his doctrines. On his last return to his native colony, he found it in the hands of the tyrant Nearchus (or Diomedon, or Demylus). against whom he conspired. Failing in the attempt, he was dragged before the tyrant, when "he gave proof by his actions of the excellence of his master's doctrines, showing that a strong soul fears only that which is unworthy." called upon to testify against his fellow-conspirators, "he bit his tongue out and spat it in the face of the tyrant." The people, roused by this act of heroism, fell upon Nearchus and killed him. Here the story is lost, the manner of the philsopher's death being unknown.

It is said that Zeno was the first Eleatic philosopher who wrote in prose. To the system of Parmenides, his master, he brought nothing new, but he labored bravely to establish it. This he sought to do by his method of reasoning called Dialectics, which employs principles generally acknowledged to be true, as the bases upon which to build each structure of facts.

¹ Cousin: "Fragments Philosophiques," Zénon d'Elée.

Zeno argued particularly against multiplicity and motion. He said, like his teacher, that there was but One thing really existing and that every thing else was but the appearance of the One, and had no real existence. Motion he believed did not exist in reality, but only in appearance; for, he argued, every object filling a space equal to its size is at rest in that space at any given moment—as an arrow flying through the air is at each moment at rest in the same space. Of course space and time are here reduced to their most minute particles, and therefore he concludes that motion is not, but is only the appearance of, motion, or a number of spaces in which the object is momentarily at rest.

It will be seen at a glance, if it is remembered that matter and space are the same thing, how simple this great question of motion becomes. What Zeno tries to prove is, that a moving body never moves away from the space that it occupies, which is equivalent to saying that a thing cannot move away from itself,—a postulate so sensible that we cannot wonder at the force with which it struck the ancients.

These brief accounts of the early philosophies are given solely to show how invariably all attempts at generalization centre about a single problem, and how the various interpretations given to this problem are merely different expressions of the ultimate fact, motion. To reduce all systems of thought to their most abridged form, and place them in the order of their logical merit would suffice, therefore, if we were to regard philosophy from the ideal standpoint, as pure reason. But however much we may extol the power of "reason," we can never lift it above what it is. In the case of the individual it is simply the logical aspect of individual life; in the case of a society it is the logical aspect of social life. In the case of a race, the logic of action becomes incorporated in wider customs and broader principles forming what we call Conscience.

If we look deeper down into this logic of action we shall find it expressed in the very structure of the organism.

Thus the bee is a practical geometrician: it finds and employs in the construction of its cell the best angle for saving space and securing strength. Its little mind, or sensorium. is incapable of expressing this calculation in symbols, or of reducing it to those general principles which give it, for us. the form and value of a demonstrated problem: but the bee has inherited a nervous structure which is the expression and embodiment of the habits of its ancestors. Whether they were compelled, by the Darwinian theory of "the survival of the fittest," to use this best-adapted angle, or whether Mr. Spencer's auxiliary theory of "the direct adaptation of the organism to its environment" was the cause, the logic of the actions of the bee is expressed in its tiny organism; or, the formation of the proper angle in its waxen cells is the natural or logical activity of this organism.

Applying, now, this principle to our own life, the reasonings of every individual are attempts to convert into the symbolic form of language the logic of the actions of our race. All the excursions into the supposed conditions of life which philosophers have made, so far as they have failed to bring back some *clearer principle of action*, are but verbal constructions, curiosities in mental architecture. Those who love these ruins for their own sake, write minute histories of philosophy, making it their aim to record the details of each system. When, however, the object is to extract from the history of thought its modicum of truth we must adopt the method of measuring each system by a single logical standard, and we must regard the thought of each age as the natural and necessary consequence of its social or moral organization.

Philosophy, after all, is merely an attempt to identify human nature with more general principles. There are no laws of motion or of the most general existence.¹ The re-

^{1 &}quot;There is no form of material existence which is its own support or its own measure, and which abides either quantitatively or otherwise than in perpetual change, or an unceasing flow of mutations. * * * And the fact that every

current activities which we observe in phenomena are classified and reduced to more and more general principles until we come to the *most* general fact, which is Motion. No law or rule of action has pre-eminence, therefore, as being a law of motion otherwise than by virtue of its degree of simplicity.

If we would review philosophies, we must review lives and characters; if we would understand Greek thought, we must study Greek life and its surroundings; if we would understand universal thought, we must study the progress of civilization as pictured in the gradual formation of an ultimate generalization, or the conception of God as the divine unity or principle.

Heraclitus was the famous weeping philosopher, coupled in history with Democritus the laughing philosopher:

"One pitied, one condemned the woeful times;
One laugh'd at follies, and one wept o'er crimes."

Some writers think both of these characteristics are mythical, while others say they are no doubt exaggerations of truth; but "there must have been something in each of these philosophers which formed the nucleus round which the fables grew."

Heraclitus was born at Ephesus about the 69th Olympiad (B.C. 503). He is represented as being of a very haughty and melancholy temperament, holding his fellow-men and their pursuits in contempt, and as being too proud to accept the distinguished position offered him in his native city,

thing is, in its manifest existence, but a group of relations and reactions at once accounts for nature's inherent teleology. *** It follows therefore, that the establishment and verification of the laws of motion are impossible. And yet no one knew better than Euler himself that all experimental ascertainment and verification of dynamical laws, like all acts of cognition, depend upon the insulation of phenomena. *** Euler's proposition can have no other meaning than this, that the laws of motion cannot be established or verified unless we know its absolute direction and its absolute rate," which are contradictions in terms. [The italics are the author's.] Stallo: "Modern Physics," pp. 185, 186, 202.

because it would oblige him to associate with men lacking in moral character. He was a misanthrope, a critic of that severe order which fails to see any good in others. But his virtue, dogged as it was, became famous. The following letter, written by Heraclitus to Darius, king of Persia, in reply to a cordial invitation to visit his court, throws some light upon his character:

"Heraclitus of Ephesus to the king Darius, son of Hystaspes, health!

"All men depart from the path of truth and justice. They have no attachment of any kind but avarice; they only aspire to vain-glory with the obstinacy of folly. As for me, I know not malice; I am the enemy of no one. I utterly despise courts, and never will place my foot on Persian ground. Content with little, I live as I please."

It is not surprising to learn that the author of this letter "retired to the mountains and there lived on herbs and roots like an ascetic."

In opposition to the mathematical school which taught that reason was the source of all truth, and that impressions through the senses were the source of the uncertainty of knowledge, Heraclitus believed that it was through the organs of sense that we drank in all knowledge, all truth, and that it was only the ill-educated sense that gave false impressions.

The great question for him as well as for Parmenides, and indeed for all philosophers, was that of the origin of ideas. Thinkers on this important question, from ancient times to our day, have been divided into two principal classes, those who, like Parmenides, believe in idealism, holding sense in contempt, and those who, like Heraclitus, believe in materialism, holding that all knowledge is derived through the senses. Thus we find in these almost prehistoric times, the deepest questions of mind or perception discussed, and answered quite as satisfactorily as they are to-day by the great majority of metaphysicians. The only difference is, that all who discussed these questions in those days had the advantage

of being the originators, to at least some extent, of their different theories, whereas, in our time the metaphysician, however fantastic may be his taste, finds some theory readymade to please him, and hence by the practical world is generally regarded as a delver in an exhausted soil.

This popular impression with regard to metaphysicians cannot be complained of when it is considered that, as a class, they show no advance beyond the difficulties and delusions of their most remote predecessors. It is for this reason that such writers as Herbert Spencer treat metaphysics contemptuously, and openly declare it to be an effete science. They are, nevertheless, compelled to take up the very problems which this science treats of, and attempt to solve them. before they can fairly begin the study of mind. The question. What is the ultimate reality? must be answered before mental procedures can be fully understood. This is because the mind can be successfully studied only through its functions: activities which at the outset must be either distinguished from or identified with wider or more general activities. It would be unjust to say, that Spencer has not identified mental with universal activity, for he distinctly traces both to the principle which he calls "the persistence of force," but he does not identify this principle with motion, nor does he point out the relations which such ultimates as matter, space, force, and time bear to his principle. "the persistence of force," or to the principle called motion. He therefore, without acknowledging it, enters into the sphere of metaphysics, but leaves it in as great confusion as before the advent of his system.

When it is remembered that heat is a form of motion, the following generalization of Heraclitus will not appear so wide of the mark:

He conceived human intelligence to be a portion of the Universal Intelligence, man's soul but an emanation of the Universal Reason, or Fire; and thus man, being merely a part of the whole, must necessarily be imperfect and transient; while mankind came a little nearer to the truth, as many

parts approach nearer to the whole than one part. Fire, or heat, was to him the God, the One, from which all things emanated and to which all things would return. Life was but a constant change, and all things followed in a perpetual flux and reflux; the quicker and more perfect the motion, the higher and more perfect the life.

Ritter says in this regard: "The notion of life implies that of *alteration*, which by the ancients was generally conceived as a form of motion. The universal life is therefore an eternal motion, and consequently tends, as every motion must, toward some end, even though this end, in the course of the evolution of life, present itself to us as a mere transition to some ulterior end."

Heraclitus saw vital energy in all phenomena, endless change in all things; for him all was in motion, and he denied that there was any absolute rest, the harmony of the world was contained in its ever-conflicting impulses: even the very consciousness of life is founded on constant motion. Is any thing but a fuller knowledge of physical phenomena lacking in these inductions?

Anaxagoras is credited with having had such illustrious pupils as Pericles, Euripides, and Socrates. On leaving Clazomenæ, his native city, he went to Athens, at a time when this city was rising in political importance, and becoming the centre of Greek learning; when the great Age of Pericles was at its dawn, and commercial and military activity indicated a glorious epoch. "The young Sophocles, that perfect flower of antique art, was then in his bloom, meditating on that drama which he was hereafter to bring to perfection in the *Antigone* and the *Œdipus Rex.*"

With Anaxagoras Ionian philosophy became naturalized in Athens; though he had to struggle hard, during the many years he lived there, to overcome the prejudices of the people. His philosophy was astute, and commanded wide attention. But the names of his pupils remind us that we are approaching the close of what may be called the first growth

[&]quot;" Hist. of Ancient Philosophy," vol. I., p. 239.

of Greek thought, known as the pre-Socratic epoch. The tenets, therefore, of Anaxagoras have a certain freshness which subsequent systems lack, in proportion to their remoteness from early Greek philosophy. To show how disheartening the monotonous repetitions of philosophy are to those who compare ancient and modern thought, and how they encourage belief in that mystery or superstition called the *unknowable*, we have but to read such passages as the following from Lewes:

"Philosophy has been ever in movement, but the movement has been circular; and this fact is thrown into stronger relief by contrast with the linear progress of Science. stead of perpetually finding itself, after years of gigantic endeavor, returned to the precise point from which it started, Science finds itself year by year, and almost day by day, advancing step by step, each accumulation of power adding to the momentum of its progress; each evolution, like the evolutions of organic development, bringing with it a new functional superiority, which in its turn becomes the agent of higher developments. Not a fact is discovered but has its bearing on the whole body of doctrine; not a mechanical improvement in the construction of instruments but opens fresh sources of discovery. Onward, and forever onward, mightier, and forever mightier, rolls this wondrous tide of discovery, and the 'thoughts of men are widened by the process of the suns.' While the first principles of Philosophy are to this day as much a matter of dispute as they were two thousand years ago, the first principles of Science are securely established, and form the guiding lights of European progress. Precisely the same questions are agitated in Germany at the present moment as were agitated in ancient Greece; and with no more certain methods of solving them, with no nearer hopes of ultimate success." And this from the most eminent of modern philosophic writers.

Anaxagoras thus announces the principles of his system:
"Wrongly do the Greeks suppose that aught begins

or ceases to be; for nothing comes into being or is destroyed; but all is an aggregation or secretion of pre-existent things; so that all becoming might more correctly be called becoming-mixed, and all corruption becoming-separate."

This idea recalls Spencer's definition of Evolution, "the progress from the simple, indefinite, and homogeneous, to the complex, definite, and heterogeneous."

The *Nous* of Anaxagoras is employed as the creative principle or ultimate fact. The mistake which the critics of this system generally make is to imagine that this Nous is similar to human intelligence. When on further examination into the system they find that such an intelligence has no place in it, as an ultimate fact, that it means the simple fact of motion not the complex fact of mind, they declare that there is a contradiction; without seeing that they are themselves alone responsible for it. The original power of the universe Anaxagoras declared to be this *Nous*, which is generally interpreted as Intelligence, hence he is said to have opposed mind to matter. This principle he identified with all motion, viewing it as the source of all order in the universe. It was the rarest and purest of all things, something above the confusion of phenomena, its characteristics being singleness, power, and life. He rejected Fate and Chance as empty words having no ultimate significance.

A short time before the Peloponnesian war, Anaxagoras was accused by his enemies of impiety, and was tried and condemned to banishment. On leaving Athens his proud remark was, "It is not I who have lost the Athenians; it is the Athenians who have lost me." He was an old man when he retired to Lampsacus, where he was much respected by the citizens, and lived quietly until his death, which occurred about the year 428 B.C. On his tomb may be seen this inscription:

"This tomb great Anaxagoras confines,
Whose mind explored the heavenly paths of Truth,"

¹Ritter, vol. I., p. 284.

According to our best authorities. Empedocles was born at Agrigentum in Sicily: he descended from a powerful and eminent family, and enjoyed a high reputation through his espousal of the democratic cause, at the same time that his native city rose to its greatest splendor and became the rival This was about the 84th Olympiad (444 B.C.). of Syracuse. Like most of the early philosophers, he is said to have travelled much in distant lands, and to have acquired a great store of knowledge in the East. His love of distinction was so great that it led him to allow a belief in his divinity. He dressed in gorgeous robes, wore a golden girdle and the Delphic crown, and surrounded himself with a courtly train of attendants. It was said that he possessed power to perform miracles, to calm the winds, and to call the dead to life. In fact his personal history is so full of marvellous stories, so embellished by fable, that it is a very difficult matter to arrive at any truth concerning it. But we may say with certainty that he possessed rare intellectual gifts, and that he was extremely disinterested and generous, as he refused the government of Agrigentum when the citizens offered it to him, and he is said to have devoted most of his wealth to giving dowries to poor girls that they might marry young men of rank.

Of the doctrines of Empedocles, Ueberweg¹ says: "Empedocles posits in his didactic poem 'On Nature,' as the material principles or 'roots' of things, the four elements, earth, water, air, and fire, to which he joins as moving forces two ideal principles, love as a uniting and hate as a separating force. The periods of the formation of the world depend on the alternate prevalence of love and hate."

To thus express the economy of the universe in symbols of human emotions, is but to follow the principle of idealism to one of its logical consequences. To say that "the mingling of the elements is the work of Love, their separation is effected by Hate," is the same order of reasoning as that great tenet of idealism which declares mind to be

¹ Ueberweg: "History of Philosophy," translated by G. S. Morris.

the absolute cause of all phenomena, and that the universe is governed by a supreme intelligence. Any theory which makes human methods and human feelings universal, any theory which disregards the limits of human life, is a species of idealism. Perhaps the mildest form of this idealism is the belief that love is universal; for what is love but affinity? and how natural it is to attribute to universal affinities the warmth and individuality of the strongest human sentiment. The procedure of perception is from one fact to many—from the fact of personal existence to that of general existence. In Idealism we have a system which has established its inability to look beyond personal existence.

The belief of Empedocles, that Love was the chief creative power, and that it was identified with the Universal Principle, is also interesting, as it throws light upon the logical origin of the central principle of Christianity.

Democritus, the laughing philosopher, was born at Abdera, in the 80th Olympiad (B.C. 460). One writer suggests that perhaps the native stupidity of his countrymen, who were famous for abusing the privilege of being stupid, afforded him continual cause for merriment. His family, who were noble and wealthy, entertained Xerxes at Abdera, and the king, as a recompense, left some of his magi as instructors for the young Democritus.

The gathering mists in the history of philosophy, even at this early date, are to be seen in the efforts of leading writers to classify the philosophy of Democritus. "Reinhold, Brandis, Marbach, and Hermann, view him as an Ionian; Buhle and Tennemann, as an Eleatic; Hegel, as the successor of Heraclitus and the predecessor of Anaxagoras; Ritter, as a Sophist; and Zeller, as the precursor of Anaxagoras." Is it not already apparent that the sphere of philosophy is limited to the determination of an ultimate principle, and that the approach of each age to the solution of this problem is the measure of its knowledge? The systems we have reviewed are the efforts of powerful minds to pene-

¹G. H. Lewes: "Biographical History of Philosophy."

trate beyond sensible impressions to a logical focus, in which all lines of observation converge, disclosing the unity of cause. The ancients' knowledge of cause and effect, although limited, was not too limited to constantly suggest the possibility of this final generalization; and all thought which attempted this problem was by common consent called philosophic, without analyzing its merit. There was no adequate standard of definite knowledge by which to test the validity of thought, and therefore the classes into which historians have divided the ancient systems are of very little use, except as aids to the memory in acquiring an historical knowledge of philosophy; for the logical distinctions upon which these classifications are based are too vague and contradictory to be of any real value.

As I have heretofore suggested, the question of merit in philosophic systems reduces itself to a comparison of the directness and definiteness of the ultimate or most general terms employed.

If we are in the possession of the secret which all these systems seek, we shall have little difficulty in judging of the nearness of their approach to it. The fulness of our appreciation of this great truth depends upon the quality and extent of our knowledge, the training of the character as well as the intellect, for knowledge does not live in words alone. The progress of knowledge, therefore, is the development of this greatest of all truths among men, and the history of philosophy is but a register of their efforts to get at the beginning, or greatest simplification of knowledge; not its end. Is it not clear that the beginning of knowledge should be the deepest or most general fact?

We have aleady said that, as far as unaided introspection could accomplish the result, the ancients made as much progress in philosophy as has been realized at any subsequent time. They detected the principle of universal unity, they declared it to be a *principle*, not a *person*, and they gave it such names as God, Motion, Love, Intelligence, Unity, and Mind. Their deepest thought was always religious, their

deepest feeling always gravitated toward morality. Was it possible for them to form a conception of the universal principle such as we can form? They had not the wealth of discovered facts which science has bequeathed to our age. Could they reason that light and radiant heat are different aspects of one kind of energy; that the ray of light reaching us from the farthest star is not a fluid passing from space to space, but a definite agitation of an interstellar medium of infinite extension, and that therefore there can be no break in it, no absolute vacuum; that the universe is a plenum; that all differences between resistance and non-resistance. between matter and space, are relative, not absolute? Could they have ascertained the fact that all words meaning unconditioned, such as absolute, abstract sequence, or force considered apart from matter, were simply outgrowths of the conception of *Time*, that they can mean nothing more than is given in this subjective aspect of *Motion*? Or could they have known that all words signifying unlimited, such as infinite, abstract co-existence, extension, or matter considered apart from force, were simply outgrowths of the conception of Space, that they can mean nothing more than is given in this objective aspect of *Motion?* This deepest of all truths, the idea of one in three and three in one, has been dimly reflected in the minds of the oldest thinkers which even tradition tells of; it has found its way into religions and taken upon itself interpretations which almost forbid its recognition; but it is the beginning of knowledge, not its end; the only use that can be made of it is to enable us to declare a common agreement with regard to first principles, and devote our attention to Knowledge, which is Life.

This agreement will not take place until Science has made these first principles so clear that they will become the common property of the world. This result cannot be reached until the ultimate signification of our most general (metaphysical) terms has been placed beyond dispute. When a term meaning *time* is used, we have a right to insist upon the limits of that conception, and so with the term *space*. Thus armed with clear and definite ideas of the scope of language, the most ordinary intellect can expose the fallacies of the conventional metaphysicians, and the tortures to which these autocrats of our higher speculations have subjected common-sense minds for the past twenty-five centuries will happily cease.

To continue our narrative: Democritus declared Being to consist in an infinite number of small invisible bodies moving in the void,—these were the primary elements, and all production was caused by the change of relation among them. He accepted motion as something eternal, and did not attempt to explain it. Atoms, he said, being indivisible, must necessarily be self-existent, and all consists of Atoms and the Void.

The atomism of Democritus is a very profound speculation. In it he tried to distinguish between the ideas of force and those of weight, and of course did not succeed. Lewes, anxious to compare Democritus to Leibnitz, declares that the atoms of Democritus had no weight, only force; while on the same subject Zeller says: "Democritus supposed that all atoms are too small to be perceived by our senses; this he was compelled to assume because every substance perceptible to sense is divisible, changeable, and of determinate quality. But magnitude directly involves weight, for weight belongs to every body as such; and as all matter is homogeneous, it must equally belong to all bodies; —so that all bodies of the same mass are of the same weight. The proportion of weight of particular bodies is therefore exclusively conditioned by the proportion of their masses, and corresponds entirely with this; and when a large body appears to be lighter than a smaller one, this is only because it contains in it more empty space, and therefore its mass is really less than that of the other. Thus the atoms must have weight, and the same specific weight; but at the same time they must differ in weight quite as much as in magnitude. This doctrine is of great importance for the Atomic

system: texts which maintain the contrary are to be considered erroneous."

It is difficult to perceive what progress modern physicists, who regard matter as an ultimate fact, have made beyond this ancient theory.

CHAPTER III.

THE CLIMAX OF GREEK THOUGHT.

The Sophists-Socrates-Plato.

Before attempting a description of the doctrines of Socrates, Plato, and Aristotle, which are looked upon as the climax of Greek thought, it will be well to call attention to the storm of common sense that swept over Greece just before and during the advent of these men. It was a general movement of dissatisfaction with the results of philosophic thought: a reaction which has often repeated itself since then. Its leaders are referred to in the writings of their opponents as Sophists; and as these writings constitute the chief literature of that epoch, our notions of the Sophists have been modelled by their bitter antagonists. The doctrines of the Sophists were the natural consequence of the decline of the first schools of philosophy. They were of use in bringing the different schools into comparison and showing the defects of each. Protagoras, the first and most accomplished of the Sophists, was born at Abdera. It is stated that Democritus instructed him in philosophy, but there is probably little truth in the statement, as Protagoras was older than Democritus; still it indicates a certain connection between the thought of the two philosophers. Protagoras endeavored to trace the origin of all conceptions to sensation. His doctrine was, that all thought is the same as sensation, and is limited by it; and that as all sensation is but relatively true, all knowledge is relative, and therefore imperfect. In the energetic mind of Protagoras these conclusions led to outright skepticism. It resulted in the formula: "Man is the measure of all things"; an epigram which expresses with wonderful clearness the doctrine of Kant and the great school of modern idealists. In tracing all thought to sensation, however, we have a forecast of modern psychology. The following translation from Sextus Empiricus is perhaps the best description extant of the psychological doctrines of Protagoras.

"Matter," says Protagoras, "is in a perpetual flux; whilst it undergoes augmentations and losses, the senses also are modified, according to the age and disposition of the body."

"The reasons of all phenomena (appearances) resided in matter as *substrata*; so that matter, in itself, might be whatever it appeared to each. But men have different perceptions at different times, according to the changes in the thing perceived. Whoever is in a healthy state perceives things such as they appear to all others in a healthy state, and *vice versa*. A similar course holds with respect to different ages, as well as in sleeping and waking. Man is therefore the criterion of that which exists; all that is perceived by him exists, that which is perceived by no man does not exist."

It would be hard to find a simpler and more lucid expression of the Kantian theory of perception than this doctrine of Protagoras. From the speech of Callicles, in "Plato's Gorgias," we can gain an idea of the way in which the Sophists regarded philosophy.

"Philosophy is a graceful thing when it is moderately cultivated in youth; but, if any one occupies himself with it beyond the proper age, it ruins him; for, however great may be his natural capacity, if he philosophizes too long, he must of necessity be inexperienced in all those things which one who would be great and eminent must be experienced in. He must be unacquainted with the laws of his country, and with the mode of influencing other men in the intercourse of life, whether private or public, and with the pleas-

^{1 &}quot; Pyrrhon. Hypot.," p. 44. (Trans. by Lewes.)

ures and passions of men: in short, with human characters and manners. And when such men are called upon to act. whether on a private or public occasion, they expose themselves to ridicule, just as politicians do when they come to your conversation, and attempt to cope with you in argument: for every man, as Euripides says, occupies himself with that in which he finds himself superior: that in which he is inferior he avoids, and speaks ill of it, but praises what he excels in, thinking that in doing so he is praising himself. The best thing, in my opinion, is to partake of both. good to partake of philosophy by way of education, and it is not ungraceful in a young man to philosophize. But if he continues to do so when he grows older, he becomes ridiculous, and I feel toward him as I should toward a grown person who lisped and played at childish plays. When I see an old man still continuing to philosophize. I think he deserves to be flogged. However great his natural talents, he is under the necessity of avoiding the assembly and public places, where, as the poet says, men become eminent, and to hide himself, and to pass his life whispering to two or three striplings in a corner, but never speaking out any thing great. and bold, and liberal,"

It is to be seen by this that the Sophists were merely aggressive skeptics. They lost faith in the power of man to reason out his relations with the universe, and turned their attention to studying the relations of men to one another. Both the skeptics and the Sophists were convinced of the insufficiency of all knowledge, but the former contented themselves with reasoning upon this conviction, while the latter turned from philosophy and devoted themselves to politics and rhetoric.

Thus Plato represents Protagoras as arguing, "that the wise man is the physician of the soul. He cannot, indeed, induce truer thoughts into the mind, for all are alike true, but better and more profitable; thus he may heal the souls not merely of individuals, but also of States, since, by the power of oratory, he may introduce good and useful senti-

ments and opinions in the place of the base and the hurtful."

In Grote's "History of Greece," as well as in Lewes' "History of Philosophy," a spirited defence of the Sophists is made against the many and bitter attacks of Plato and of those who followed his example. It is worthy of remark that the criticisms which Socrates directed against the Sophists are free from that party spirit which characterizes the attacks of the Platonists. We find no such bitterness between Socrates and the Sophists in the biographical work of Xenophon.

The Sophists acquired wealth and power by educating the children of rich and noble families; and judging from the constant polemics of Plato against them, their influence must have been great. It is said of them that they held as a principle that nothing was right by nature, but only by convention, and that following this pernicious rule of expediency they made all law and justice yield to personal interest. But these are too general terms in which to condemn any class. They suggest more antithesis than is possible between right and reason. It must be remembered that with the Sophists disputation became an art, and that, like many of our modern journalists and lawyers, carried away by their own eloquence, they sometimes made the worse cause appear the better. When it is said that much of the immorality of the time is attributable to the influence of their teaching, the limit of just criticism is reached. They were the intellectual leaders of their age, but the degeneracy of that age had causes far beyond their control. certain that about this period egotism reigned supreme, State trampled upon State, and the people of Greece, losing all respect for law, were not slow in violating private as well as public rights. The quibbling nature of the Greeks, and their excessive love of lawsuits, led them to value the art of oratory like that of arms, as an important means of selfdefence, especially as each citizen was obliged to appear in

¹ Ritter: "Hist. of Ancient Philosophy," vol. I., p. 578.

person before the courts of justice and plead his own cause. To become a master in the art of disputation was the ambition of all, for no one could hope to attain to a high position without this acquirement. It would be ungrateful to the Sophists, however, not to acknowledge the indirect benefits which we have derived from their influence; for "if forensic oratory does sometimes make the worse appear the better reason, it also makes the good appear in all its strength. The former is a necessary evil, the latter is the very object of a court of justice."

The reign of doubt, both scientific and moral, which invaded all departments of Greek life during the supremacy of the Sophists, received a strong check from the influence of a great moral teacher, whom the needs of the times produced. This teacher was Socrates, who was born B.C. 469, during the golden period of Greek intellectual life, though his career was synchronous with the decline of Athenian political power. The story of his trial and execution is one of the most touching and impressive in history. The Peloponnesian war, which ended in the fall of Athens, was carried on during the active life of Socrates; and the causes which were working the ruin of the Athenian Empire—the decline of manhood and patriotism—seemed to call this great moral teacher into being.

"Every thing about Socrates is remarkable—personal appearance, moral physiognomy, position, object, method, life, and death."

Among the art treasures of the Acropolis there was for many years a group of graces which tradition accredited to Socrates. According to Diogenes Laertius the young sculptor attracted the interest of Crito, a wealthy Athenian, who provided for his education, and afterward became a devoted disciple of the moral reformer whose powers he had so early recognized.

In the second division of this work, entitled *The Nature* of *Perception*, we have attempted to demonstrate that thought is a manifestation of natural laws; that it is an expression

of the conditions of life,—the inevitable expression; but the conditions are far too complex to admit of any predictions of events, excepting in the most general terms. In the case of great moral teachers or prophets, such as Socrates, that which constitutes their influence and enraptures others, is not a mystical power of divination concerning the particulars of the future, but the grasp of truth expressed in the grandeur and purity of their lives. Their powers of divination are wholly natural. They perceive the future because they have discerned the deepest principles of life, and apply them in judging coming events. Knowing and feeling these principles more deeply than others, they command a wider view of human life.

Modern psychology teaches that perception is a purely natural activity akin with activities which we regard as simple or comprehensible; what distinguishes mental from what are known as natural phenomena is simply the higher complexity of the conditions. Moral perceptions, therefore, such as have made Socrates immortal, presuppose but a higher and broader life, deeper sympathy, further insight, greater logical sensitiveness.

Many suppose with regard to men as with regard to religions, that "if they contained no mystery they would inspire no reverence." This is only true for those who are entirely beyond the influence of the divine unity of nature, who imagine that familiar things are somehow isolated from the unfamiliar, who have never thought out the great truth that every fact is indissolubly connected with all facts, and that it is the principle of perception that discloses to us that universal fact which explains both life and mind. Any hypothesis concerning future events can only be a more or less intelligent judgment of consequences from experiences. prophesies of future events are by nature imagined experiences, what shall we say of predictions which are declared to be entirely beyond the pale of experience? The nature of language declares them to be self-contradictory; for language, and thought, which is in great part the function of language, to be intelligible must represent experiences. Under this category of self-contradictory statements must come all attempted descriptions of a future life—essentially different from the life which we experience. To be intelligible, every thought must be subordinate to the broad generalization that life is an eternal and infinite principle without beginning or end, and that this principle is manifested in every kind and degree of phenomena.

These remarks are required by the fact that we are about to recount the earliest attempt to establish a philosophical basis for the belief in a future existence.

Among all the earlier nations, and among nearly all savage tribes, a future life has been more or less distinctly believed in. In fact, it would be difficult to find a religion or a philosophy in which this belief is not a prominent feature. But a refinement of intelligence which can alone come with an increased definiteness in our understanding of general terms, a purification of language, brings these vague and unrestrained beliefs under a higher and higher discipline. The details of a physical immortality are one by one rejected as inconsistent, until the belief, as it is held by the better class of minds, to-day is a formless principle, which they dare not limit even by the most general description. Closely allied to the belief in immortality is the idea of a personal God, or a design in nature commonly known as the doctrine of a Divine Providence.

All these beliefs, which are logically inseparable, we find warmly entertained by the great moralist of ancient Greece. Although Socrates was not the first to treat of the immortality of the soul, he was the first, as we have said, to give it a philosophical basis. We find in his arguments in support of the theory of a divine providence many anticipations of the modern writers upon Natural Theology.

All those deep sentiments which are more or less perfectly voiced in the religions of the world were constantly arising in his mind and asserting themselves in his conversations. "How is it, Aristodemus, thou rememberest or remarkest

not, that the kingdoms and commonwealths most renowned, as well for their wisdom as antiquity, are those whose piety and devotion have been the most observable? and that even man himself is never so well disposed to serve the Deity¹ as in that part of life when reason bears the greatest sway, and his judgment is supposed to be in its full strength and maturity? * * * Then shalt thou, my Aristodemus, understand there is a Being whose eye pierceth throughout all nature, and whose ear is open to every sound; extended to all places, extending through all time; and whose bounty and care can know no other bound than those fixed by his own creation." ²

The fitting mission of Socrates was the education of youth, for he saw more honor in making wise and virtuous citizens and rulers than in being chief ruler of the state himself. He was willing to assist all in the paths of knowledge, but each must conquer truth for himself. The injunction of the Delphic god, "know thyself," seemed to realize his philosophy. He confined himself chiefly to ethical questions concerning both public and private life, seeking to counteract the influences of sophistry, with its debasing opinion that there was no truth for man, only the shadow of it, with which he might "disporte himself at will."

Order seems to have been the motive of Socrates' method. He lived in a time when science was in its infancy. The method of science, well understood to-day to be wholly that of sensible experiences and their logical extension into the sphere of mind, was then hopelessly confused with vague theories and speculations. Socrates did not by any means penetrate to the principle of perception. His psychology was of the rudest sort, but he insisted upon order in mental procedures by demanding definitions. His whole method was simply an effort to systematize the every-day thinking

^{1 &}quot;Although both in doctrine and conduct Socrates invariably evinced his respect for the national deities, still it cannot be denied that he shared the opinion which had led many of the earliest philosophers to attack and reject polytheism, namely, that one supreme God ruled all human things."—Ritter, vol. II., 27.

² Xenophon: "Memorabilia," chap. iv.

of his fellow-men. He would take the most familiar subjects, and ask his pupils to give their understanding of them. Hence common observation, not minute research, was his field. Of course in these conversations it was necessary to classify objects, forming them into groups and sub-groups. The words genus and species, and the notion of the individuals included in them, were employed by Socrates. For him these classes merely represented different families of objects and the individuals composing them, classified on the basis of certain kinds of relationships. This primitive classification, without the aid of which it is impossible to proceed to any great lengths in reasoning, was the beginning of logic—a very much abused as well as an overestimated word. The simplest thought involves logic, which word means, in its plainest sense, a conscious employment of the fundamental process of all thought, the classification of objects. So that Socrates was merely an orderly thinker of great natural benevolence and integrity, who found so much disorder of thought and action about him that he devoted his life to giving others the two-fold benefit of his clearer intellectual perceptions and of his higher ideals of conduct. That he produced a revolution in thought, initiated the inductive method, and founded Greek Philosophy (which are claims that his biographers repeatedly make), are only other ways of expressing the above facts. The point to which we would call attention is, that Socrates, while he was the subtlest of disputants, was not, in our sense, a metaphysician. Up to his day, and during his time, metaphysics were in too rude a state to be recognized as a form of investigation. Philosophy had not as yet agreed upon a vocabulary which could make the separation of metaphysics and science possible. Taking the experiences of daily life for his data, his conclusions had to do with human actions more than with ultimate principles. The only ultimate principle that he posited was the existence of God, his symbol of perfect action. He devoted himself to the study of the nature of Knowledge as expressed in human conduct, and his chief

conclusion was the identification of Virtue and Knowledge.

Socrates hovered on the threshold of that long avenue of thought which in its détours has included the whole field of metaphysical speculation. His pupil Plato, followed by Aristotle, plunged into this labyrinth, and they have been followed by the great majority of those who have become what might be called professional thinkers; but Socrates held on so firmly to the principle that thought and action are but different sides of the great fact called Knowledge. that he never exchanged the world of facts for the world of words, in which metaphysicians live. We do not mean that Socrates consciously grasped this principle in any thing like the fulness with which it can be understood in this age: for this fulness is the product of its growth in the countless directions which scientific investigation has taken. There are also many indications of the metaphysical tendency of mistaking words for things in his teachings. He saw that all phenomena were but coördinated changes, and he sought for a stable existence. But he never declared that this stable or unchanging existence was an inherent quality of words (or of the ideas which they represent), as distinguished from the objects of thought which give rise to both the words and the ideas. This assumption constitutes the first and last mistake of metaphysics.2

Plato did make this assumption, and, having once made it, he was forced to elaborate the error into a system of explanations from which modern idealism has sprung.

In approaching the works of Plato, it will be well to define again the position which we have taken, namely, that the logical circle in which all attempts at ultimate analysis inevitably revolve has already been described by the philosophy of Greece. The point or principle at which all analysis ends

¹ We would call the reader's attention to the fact that the phrase "unchanging existence," although often employed in metaphysical writings, is a meaningless contradiction in terms, because all existence has for its source or ultimate fact the principle of change.

^{2&}quot; Names henceforth have the force of things." See Plato's "Cratylus," passim.

and all synthesis begins has already been disclosed through the speculations of the pre-Socratic philosophers. Hence, now that we are about to examine the genius of another thinker, let us bear in mind that any truths which he may have to offer us, if they are new, are only other applications of this fundamental truth which we have discovered. In other words, the only field for novelty left to those who have solved the metaphysical problem is that of variety, for we have established the divine unity in performing an ultimate analysis.

We must not adopt the prevalent notion that Plato was essentially a poetical idealist, a dreaming philosopher, and the author of the popular conception of platonic love. "Plato [says Lewes] was any thing but a dreamer or an idealist; he was a severe thinker, a confirmed dialectician, and a great quibbler. He gathered into a beautiful whole the scattered results of the earlier Greek philosophy, and yet his metaphysics are so abstract as to puzzle all but the most persevering student. His moral character has come down to us free from stain. Both his morals and his politics are of the highest logical severity, almost above the reach of humanity. He seems to have regarded human passions and pleasures with contempt. For him life was worth nothing if not devoted entirely to the search of truth."

Aristocles, surnamed Plato (the broad-browed), was born at Athens or Ægina, in the 87th Olympiad (B.C. 430), about the time of the Peloponnesian war and the death of Pericles. By birth he was connected with some of the most distinguished families of Athens. He received an excellent education, in which gymnastics were not neglected; for, like a true Greek, he considered that gymnastics did for the body what dialectics did for the mind. His early youth was devoted to poetry, music, and rhetoric; but at the age of twenty, when he became acquainted with Socrates, he abandoned these pursuits and devoted himself entirely to philosophy. The melancholy meditative mind of this remarkable scholar led him to love the contemplation of Nature. Skepticism, that fever of the age, was not without

its effect upon him. Along with doubt went the deep craving for belief, and under the guidance of his beloved master he earnestly sought for truth. He remained with Socrates until death separated them. He sought at the trial to defend his master, but this was not permitted him; he then begged Socrates to accept a sufficient sum of money to buy his life, but Socrates preferred to die for his convictions.

A public garden in the neighborhood of Athens, called the Academia, was the resort of Plato and his pupils. Here the famous lectures were given which are still imitated in almost every seat of learning in Christendom, and it will be our special endeavor to explain the subtle errors which are involved in the reasonings of this greatest of the ancient dialecticians.

The story which has been so widely circulated concerning the inscription over the door of his academy, "Let none but Geometricians enter here," is supposed to have originated in the purely argumentative nature of the discourse. The chief objection to its authenticity was that Plato regarded mathematics as entirely distinct from philosophy, not only in its objects but in its method of reasoning. Nor did he admit poetry to his philosophy. Poets he held to be inspired madmen, unconscious of what fell from their lips.

Throughout a long lifetime of thought, many changes of opinion must naturally take place in an active mind, and it is most necessary to remember this in regard to Plato. We find that in his old age he discards the idea of Socrates, which identifies virtue with knowledge, and vice with ignorance, thereby making vice involuntary. Plato adds *incontinence* to ignorance as the cause of our errors; and in speaking of anger and pleasure as the causes of our faults, he mentions ignorance as being a third cause.

Like Socrates, he was in doubt respecting the certainty of knowledge; and if his life was devoted to the search of truth, it was without professing to have found it.

Plato approached to the solution of the central question

of metaphysics—and this is the more wonderful when we consider the condition of science in his day—for Aristotle says that Plato, in the *Timæus*, maintained space and matter to be the same, but that, in what are called the unwritten opinions, he considered space and place to be the same.

Socrates, in his investigations, relied mainly on the inductive mode of reasoning, and on definitions. These did not satisfy Plato: he found it necessary to go still further, and to insist upon analysis as a philosophic process, it being impossible to understand the whole without first understanding the parts, or, as he says, "seeing the One in the many." Long before Plato's time the idea had become prevalent that sense-perception was unreliable and incomplete, as it was but the knowledge of the changeable, or of phenomena. But it was far too early in the history of knowledge to grasp the idea that all life is change, and that the unchangeable which they sought was the principle of Unity, and not another kind of existence. In transitory phenomena Plato did not perceive the true existence, but only the image of it. To know real existence (his words were deeper than he knew) one must seek to discover the invariable in the variable, the One in the many.

During the summer of 1881, I had occasion to visit the Concord School of Philosophy, in Massachusetts, which I had been informed was founded principally upon the doc-There was a little rustic chapel built trines of Plato. among trees in a picturesque position. It was at some distance from the village, so that the lecturers and students had a pleasant walk to and from the grove. I arrived in time to hear an evening lecture; it was on the subject of Faded Metaphors,—a very pleasing discourse, of a character to serve as an interlude to the heavy philosophic arguments which were the order of the place. After the lecture I met a school-teacher from the west, who had come there determined to learn philosophy; and, being very anxious to know the drift of the thought of the school, I asked him if he was able to make the philosophy which he learned there agree with such knowledge or facts as he possessed? He replied with perfect earnestness: "In this school we learn a philosophy that is above the range of what are generally termed facts." "But," I insisted, "supposing you cannot make what you learn agree with such facts as you have, what do you do then?" "Then," he replied, "we make the facts agree with our philosophy."

In the morning, there was a lecture upon the Idealism of Plato, given in the tone of a disciple of that great master. It occupied two hours. One of the illustrations used—and it cannot be denied that it is a fair consequence of Platonic reasoning—was this: "The St. Louis Bridge does not really exist in the structure that spans the Mississippi: its real existence is in the idea of the engineer who constructed it." Here is Plato's answer to Diogenes, who thought he had demolished the theory of idealism by saying, "I see indeed a table, but I see no idea of a table." Plato replied, "Because you see with your eyes and not with your reason." Twentythree centuries after this reply was made, we find the disciples of Plato in America teaching the same difference between the perception of the senses and that of the reason. Both Plato and his modern disciples agree in saying that the phenomenal, the changing, or the unreal, is that which is perceived by the senses, and that the noumenon, the unchanging, or the real, is that which is perceived by the reason.

"Plato," says Lewes, "held that human knowledge is necessarily imperfect, that sensation troubles the *intellectual eye*, and that only when the soul is free from the hindrances of the body shall we be able to discern things in all the ineffable splendor of truth."

We would not question the fact that the "ineffable splendor of truth" is obscure, and that we need purification of mind and life to perceive it, but we wish to emphasize the great truth that the aspect of the natural procedure of perception, which is known as the perception of the senses, is not to be regarded as a degraded aspect because in the narrow view taken of it we cannot see the highest results of

thought. We should regard the perception of the senses as a means to an end; we should remember that the limits we give it have no *objective existence*, that they are purely the effect of our method of classification, which is another name for perception itself; and that therefore the perception of the senses is just as exalted in its *nature* as the highest achievements of the reason.

This principle of Idealism, this disease of philosophy, which was announced by Plato, burlesqued by Berkeley, perpetuated by Kant, renewed by Hegel, and revived in this country by the Concord School of Philosophy, is, that there are two distinct kinds of human perception,—one the perception of the reason, and the other the perception of the senses; the product of the one being *noumena*, ideas, reality, and that of the other *phenomena*, objects, change.

This is not the place to demonstrate the fallacy of supposing that there are two distinct kinds of perception, producing different results. In the second division of this work I hope to show the inconsistency of this idealistic theory from the organic standpoint; but here we have to do with the super-organic sphere, that of language, and we must depend upon the demonstrated significance of words for our refutation. Are not the means at hand? If the ultimate principle, existence, reality, is the fact of motion, or change, how can phenomena, which is another word for change, have less to do with reality than noumena, which is a term created to express unchanging existence? Where shall we find unchanging existence? Two other terms which we find contrasted by the ideal theory are reality and change; and this contrast illuminates the whole question; for do we not sufficiently understand the meaning of metaphysical terms to see that change and reality both stand for the same ultimate principle? Thus the antithesis which idealism seeks to establish between reality and change falls to the ground when the contrasted terms are measured by one standard of reality. But there is one more position which Plato holds, namely, the contrast of reality between ideas and objects.

Aristotle says: "Plato followed Socrates respecting definitions, but, accustomed as he was to inquiries into universals, he supposed that definitions should be those of *intelligibles* (i. e. noumena) rather than of sensibles (i. e. phenomena): for it is impossible to give a general definition to sensible objects, which are always changing. Those Intelligible Essences he called Ideas; adding that sensible objects were different from Ideas, and received from them their names; for it is in consequence of their participation in Ideas, that all objects of the same genus receive the same name as the Ideas."

It is with a certain reluctance that we make this quotation; for, although it is one of the clearest of all the interpretations of Plato's idealism, it has that fatal mist about it which has permanently enshrouded so many powerful minds. Here are the quicksands of philosophy which have swallowed up so many thinkers, who by their gigantic efforts to extricate themselves have made enduring fame. Recognizing the danger of this perilous place, let us remember our principles, and we shall be safe.

To repeat: "Definitions should be those of intelligibles (i. e. noumena) rather than of sensibles (i. e. phenomena), for it is impossible to give a general definition to sensible objects, which are always changing." Intelligibles which are afterward identified with ideas are unchanging existences (i. e., noumena), and sensibles which are afterward identified with objects are changing existences (i. e. phenomena). The object of Plato is to prove that intelligibles, ideas, unchanging existences, noumena—terms which are all identified as having the same ultimate significance—represent reality; and that sensibles, objects, changing existences, phenomena—which are also identified as terms having the same ultimate significance—represent the opposite of reality. This brings out Plato's central idea (of the truth of which we are now able to judge), namely, that unchanging means real, and that changing means unreal. This is the idealist theory as it first appeared in the world, reduced to its simplest terms.

¹ Metaph. I., 6, p. 28. Bohn.

It is next to impossible for minds trained to this school of thought to escape this dogma and recognize that the central fact of the universe is *change*.

Plato's thought is susceptible of a much higher interpretation than is to be found in modern Idealism, as he "sought to detect the One amidst the multiplicity of material phenomena, and, having detected it, declared it to be the real essence of matter, so also did he seek to detect the One amidst the multiplicity of ideas, and, having detected it, declared it to be God. What ideas were to phenomena, God was to ideas—the last result of generalization. God was thus the One Being comprising within himself all other Beings, the Cause of all things, celestial and terrestrial. God was the supreme Idea. Whatever view we take of the Platonic cosmology—whether God created ideas, or whether he only fashioned unformed matter after the model of ideas —we are equally led to the conviction that God represented the supreme Idea of all existence: the great Intelligence. source of all other intelligences; the Sun whose light illumined creation." 1

This interpretation is clearly a logical development of the thought of Plato. It discloses the highest results of the Platonic reasonings, and does not confine itself to what is said in the original. The ability of Lewes to thus instil a higher meaning into the dialectics of Plato cannot be doubted by those who have read his invaluable writings on the "Problems of Life and Mind," which will be fully reviewed in Part II. It is nevertheless difficult to read this far-seeing interpretation of Plato's thought without wondering that its author failed to perceive the simple solution of the metaphysical problem, especially as we find abundant evidence in Lewes' works that he was conscious of the need and of the possibility of this solution.

Plato held that intelligence was another name for God. He reasons that, in this world of changing phenomena, evil dwells, and to overcome the evil we must lead the life of

¹ Lewes: "Hist, of Philosophy," p. 229.

the gods. Now, what was the life of the gods? Every Platonist will tell you that it is a life of the eternal contemplation of Truth, of Ideas. Man must find his salvation in dialectics.

A glance at Plato's psychology will give us a still better idea of the character of his thought, and its degree of divergence from what is acknowledged in our day as safe or scientific reasoning. Plato considered the soul as a self-subsisting essence, the principle of all motion in the universe: it always has been, and always will be. It does not depend for its existence on its union with the body; and as it existed before the union, so it will exist after the separation. The difference between animate and inanimate bodies is. that the former has a soul which moves it from within, while the latter is moved from without; so the soul is everywhere the moving force, which can neither be produced nor decay, else all motion would eventually cease. This double-edged belief in immortality (the belief in a prenatal as well as in a future existence) is really the only consistent form which it can take.

Thus we see that during the time of Plato there were just as pure conceptions of the Deity as can be found in our time. God, by the best minds then, was regarded as a principle, not as a person; the source of all light and good, and the end of all generalization. The concrete conceptions of the Deity, so prevalent among us, which ascribe to him the attributes and limits of humanity, are merely less successful efforts to reach an ultimate principle, although they occur in a later age. It is also to be seen that morality, in ancient Greece, was taught with a directness and freshness which compares with any method to be found in our age, and that these moral teachings are the more to be admired on account of their freedom from those personal incentives which have crept into the ethics of more recent times. The great moral teacher of Galilee, who bore the same relation to the decline of Roman power and manhood that Socrates bore to the decline of the power and manhood of ancient Greece,

was not to be heard for nearly four centuries, and yet there is not a precept which he taught, nor a sentiment which he breathed, that has not its counterpart and peer in the annals of Greek thought and feeling. It would be well, before leaving Plato, to call attention to the fact that Lewes objects to calling Plato an idealist, as that phrase is usually understood; and in the same breath he says, "Plato was an inveterate dialectician." It is these fine distinctions between different degrees of error in metaphysics which make this study perhaps the most fruitless and discouraging in the whole field of research.

Speaking of Plato's ideal theory, Lewes says: "Plato, according to Aristotle, gave to General Terms a distinct existence, and called them Ideas. He asserted that there was the *abstract man* no less than the *concrete men*; the latter were men only in as far as they participated in the ideal man." If this is not idealism, as the word is usually understood, then the word idealism cannot be used to indicate any definite type of belief.

Again Lewes says: "Dialectics was the base of the Platonic doctrine. Indeed, Plato believed in no other science; dialectics and philosophy were synonymous. For dialectics (or logic) to be synonymous with philosophy, the theory of Ideas was necessary. Dialectics is the science of general propositions, of general terms, of universals. To become the science, it must necessarily be occupied with more important things. Ideas are these important things; for Ideas are at once the only real Existences and General Terms."

If Dialectics is the science of universals, and universals are ideas, and ideas are the only *real existences*, surely dialectics, at least as Plato taught the science, is nothing more nor less than Idealism. If Plato's ideas, however, were continually changing, as we are told they were, while the meaning of his terms remained relatively constant, there is plenty of room for confusion in expounding his thought.

The influence of Plato upon subsequent ages is only second to that of Aristotle. Throughout the time of the Alex-

andrian school, in which Plato's philosophy received so many interpretations, until the second century of our era, when Ammonius Saccas founded the school of the Neo-Platonists, the mind of Plato seems to have presided over the most thoughtful part of the world.

The second generation of the Neo-Platonists went to great lengths in mysticism, citing texts from the writings of their "God-enlightened master" as authority for all sorts of extravagances of faith, among which were the revival of the ancient rites of expiation, divination, astrology, and the interpretation of visions; all of which had been strongly condemned by Plato. Plutarch, and Boethius (the last of the Neo-Platonists), redeemed somewhat the character of this philosophy, until it almost disappeared after the Emperor Justinian interdicted all instruction in the Platonic schools.

The early Christian Fathers owe much of their theology to Plato. "Justin Martyr, Jerome, and Lactantius, all speak of him as the wisest and greatest of philosophers. St. Augustine calls him his converter, and thanks God that he became acquainted with Plato first and with the Gospel afterward." Passages of his Dialogues bear a close resemblance to parts of the Scriptures, and the moral ideals which are pictured in the Platonic accounts of the death of Socrates are reproduced with singular faithfulness in the Christian accounts of the tragedy of Christ.

Thus the metaphysical teachings and the original genius of Plato have become insensibly merged in Christianity. In the bosom of the Christian Church Plato survives through the dark ages, when the classics were read only by monks and churchmen, and Platonism, with its natural logical opponent the Aristotelian faith, produced through the agency of Scholasticism that marvellous compound of Greek thought and primitive science known as Mediæval Theology. When in the wake of this development the revival of learning in Europe brought into life a modern philosophy, the influence of Plato again asserted itself, and the German idealists have made this great teacher immortal.

CHAPTER IV.

ARISTOTLE, THE STOICS, THE CYNICS, AND THE SKEPTICS OF THE NEW ACADEMY.

Aristotle—Zeno the Stoic—Antisthenes—Diogenes—Epicurus—Pyrrho—Arcesilaus—Carneades.

ARISTOTLE was the scientist of antiquity. His life was given rather to the investigation of facts than to abstract speculation. He had an aversion to the unrealities of metaphysics, and yet he was obliged, in common with every thinker of every school, to offer his solution of the great metaphysical problem. This effort led to the formation of his celebrated ten categories of thought, or the classification of the ultimate realities, which will receive full treatment as we proceed.

Aristotle was born at Stagira, a colony of Thrace on the western shores of the Strymonic Gulf, in the 99th Olympiad (B.C. 384). His life was one long devotion to the pursuit of knowledge. His writings were numerous, but only a fourth part of them is supposed to have descended to us; and the authenticity of even these has long been a subject of discussion among scholars. The influence of these works, spurious and genuine, upon Eastern as well as European culture, it is impossible to estimate. "Translated in the fifth century of the Christian era into the Syriac language by the Nestorians, who fled into Persia, and from Syriac into Arabic four hundred years later, his writings furnished the Mohammedan conquerors of the East with a germ of science which, but for the effect of their religious and political institutions, might have shot up into as tall a tree as it did produce in

the West; while his logical works, in the Latin translation which Boethius, 'the last of the Romans,' bequeathed as a legacy to posterity, formed the basis of that extraordinary phenomenon, the Philosophy of the Schoolmen. An empire like this, extending over nearly twenty centuries of time, sometimes more and sometimes less despotically, but always with great force, recognized in Bagdad and in Cordova, in Egypt and in Britain, and leaving abundant traces of itself in the language and modes of thought of every European nation, is assuredly without a parallel."

The ceaseless civil wars and counter-invasions which make up the major part of the history of Greece had exhausted the nation, enabling Philip of Macedon to subjugate the Greek States. Philip gave the charge of the education of his son Alexander to Aristotle, who taught the illustrious boy philosophy during four years. They separated at the beginning of the Macedonian war. Aristotle went to Athens to open his school, which received the name of Peripatetic, from his habit of walking up and down the shady groves of the Lyceum while explaining his philosophy. Alexander departed on his Indian expedition accompanied by Calisthenes, a pupil and kinsman of Aristotle. The philosopher long enjoyed the favor of Philip and Alexander. "The conqueror is said, in Athenæus, to have presented his master with the sum of eight hundred talents (about one million dollars) to meet the expenses of his 'History of Animals,' and, enormous as the sum is, it is only in proportion to the accounts we have of the vast wealth acquired by the plunder of the Persian treasures. Pliny also relates that some thousands of men were placed at his disposal for the purpose of procuring zoölogical specimens which served as materials for this celebrated treatise." 2 It is a work based on knowledge evidently acquired by close inspection and special studies of dissection, and is one which naturalists may still consult with profit.

Aristotle severely criticised the Ideal theory of Plato, for

Blakesley: "Life of Aristotle."

² Blakeslev, p. 68.

he was convinced that this theory had its origin in introspective, not in physical, researches: that it sought to separate the universal from the material, and put forth doctrines concerning things which did not correspond with phenomena. He denied to ideas an objective being, and could not. like Plato, give to qualities, such as weight, size, and color. separate existences. While Plato believed that from a single idea man could arrive at the knowledge of all ideas. Aristotle maintained that all knowledge comes through experience; that every idea is caused by a separate sensation. and that the universal principle is a principle of contradiction, man having power to perceive difference only through comparing like with unlike. His method was new, his conceptions just; but, in that early age of knowledge, and with such narrow data to generalize from, he could not accomplish much. Though both these philosophers admitted that science could only be derived from universals, one gave Experience as the basis of all science, and taught men to observe and question Nature; the other gave Reason as the basis, and taught men the contemplation of Ideas.

It will be asked: If Aristotle was a cautious thinker, and closely followed what has since received the name of the Scientific Method, how could he have been at the same time so famous a metaphysician?

This question will be answered by getting at the nature, not particularly of Aristotle's metaphysics, but of metaphysics in general. Perhaps the most exact metaphysical thought which the world has produced up to the time of the appearance of Lewes's "Problems of Life and Mind," is to be found in the writings of Herbert Spencer; and yet Mr. Spencer would, no doubt, be astonished were he called a metaphysician. The fact is, no one can take an intelligent view of life and its surroundings without becoming in some degree a metaphysician. The moment we attempt any thing like ultimate questions, we are in the midst of the most profound metaphysical problems. Aristotle stated what he took to be the ultimate realities or principles of all things, his ten categories of thought, as follows:

Relation,
Quantity,
Action,
The Where,
Position in Space,

Substance, Quality, Passion, The When, Possession.

It will be seen at a glance that there are repetitions in these principles. If we refer back to the beginning of Greek philosophy, we shall find that the ten double principles of Pythagoras, to whose school Aristotle gave a great deal of attention, probably suggested the above categories. However this may be, Aristotle reduced the number of these principles by one half, as those of the Pythagoreans were double or coördinates, making twenty in all. Modern thought has reduced these principles or ultimate realities to five. In Spencer's system, which agrees substantially with the best contemporaneous writings upon the subject, they are stated as follows:

Space, Matter, Time, Force.

Motion.1

I contend that a generalization of these principles is possible; that they are all aspects of the single principle of Motion. There are so many repetitions, however, among the terms employed to represent them, that confusion inevitably results. It should be the aim of a true system of metaphysics to do away with this tautology. For as Matter and Space are but different aspects of the statical appearance of the universe, Time and Force are also the obverse aspects of the dynamical appearance of the universe. The greatest difficulty in making physics and metaphysics harmonize, or in making the experiences of phenomena agree with the ruling principles of all things, is to identify motion and the thing moved; or, in other words, to overcome what

¹ In Spencer's "First Principles" there are six ultimate realities postulated, as *Consciousness* is added to the five above cited; it is a fair inference from other parts of his works, however, that Consciousness is a relative, not an absolute, fact.

is simply a logical or subjective separation of an indivisible fact. A large class of scientists persist in imagining a force as the cause of motion; in imagining a matter in itself inert and propelled by this force; the two being in some way conjoined, they do not attempt to say how, make what we call Motion. They then introduce Time to the combination as another necessary element, and considerately supply an infinite Space for its convenience and occupancy. These logical preliminaries being arranged, the universe goes on without difficulty. Is it not wonderful that all these principles should work together so well in spite of the inartistic way in which they have been put together by human physicists?

Dr. Holmes says somewhere that whenever he comes in contact with a mathematician he imagines he hears the click of the wheels within his head; but if we must imagine that there are wheels in the heads of mathematicians, to account for the accuracy of their calculations, what shall be our symbol for the stupendous cohesive and organizing power supplied by the modern physicist who can make isolated principles hold together and work out all the wonders of evolution? How much more in accord with our attitude as students of the majestic sequences of evolution, having for their obverse aspects what we call infinite space and absolute time, would it be to recognize that divine unity, that universal principle, which we symbolize as power in so many ways, which we apprehend through the ever-increasing experiences of life. Let us not regard this principle as a veil which obscures reality from us, as a limit to knowledge, or a boundary of the "unknowable," for it is that of which Life or Knowledge consists.

Aristotle's metaphysics were about as coherent as the science or actual knowledge of his time; and this is the highest compliment that can be paid to any thinker. All the early thinkers sought with wonderful perseverance the knowledge of the First Cause. The Four Causes of Aristotle, though they had been separately recognized, had not

all been proclaimed necessary. Aristotle, like a true philosopher, while he considered nothing that happens unworthy of notice, yet gave his chief attention to the solution of the problem of First Causes. He maintained that there were four, as follows: First, the Material Cause, or Essence; second, the Substantial Cause; third, the Efficient Cause, or the principle of motion; fourth, the Final Cause, or the Purpose and End.¹

After what has been said, it is hardly necessary to go into the merit of these speculations; they are obviously the expression of a very high order of reasoning power, making the best use of such materials as were at hand. We cannot help regarding them with respect, considering the opportunities of their author; and as they occur again in the works of later thinkers, we should maintain the same attitude toward them; for the superior advantage which we enjoy in the way of scientific knowledge is partly a product of these very speculations.

The progress of knowledge consists of an ebb and flow between hypothesis and verification, thought, and science; and it is the rivalry or interaction of these opposite modes of procedure repeated in the individual, the school, the epoch which constitutes the true progress of our race.

The strength of Aristotle lay in his marvellous command of facts and in his power of grouping them. Plato will always be regarded as a finer writer, and, in the literary sense, as a greater genius. Aristotle never reached the sublime heights of abstraction which we find in the theology of Plato; he rather occupied himself with bringing the results of previous thought into harmony with actual knowledge, and enlarging this knowledge through the agency of new facts,—a more patient and thorough method than Plato's.

The science of Logic is said to have been originated by Aristotle. If we admit this to be the case, we must be careful

¹Ritter gives the four causes as follows: The Material, the Formal, the Moving, and the Final: and says that Aristotle sometimes speaks of only three Causes, identifying the *Form* with the *End*. He calls Form that which a thing is in truth and apart from matter,—it is the notion of the Essence.

to limit the definition of logic to an exposition of the laws and methods of reasoning, for it is clear that actual reasoning is little dependent upon a knowledge of this science. Some of the greatest feats of reasoning which history records occurred before Aristotle was born, before logic was recognized as a science. Logic enables us to compel assent to propositions, rather than to discover truth. In other words, it too often constitutes merely a training in the art of disputation. People are disconcerted and defeated more than convinced by its processes. In his treatment of logic Aristotle seems to have laid aside in part his distinct scientific character.

He made the mistake of regarding logic as the art of thinking, instead of "a portion of the art of thinking." He saw the dependence of thought upon words, and imagined that truth or falsehood in logical processes wholly depended upon combinations of words, or propositions, instead of upon the facts or things which the propositions represent. The fine distinction that Aristotle made between the definitions of words and those of things is declared by Mill to be futile. As this theory of Aristotle involves a mistaken idea with regard to the scope of language, we will give the argument of Mill at length.

"The distinction between nominal and real definitions, between definitions of words and what are called definitions of things, though conformable to the ideas of most of the Aristotelian logicians, cannot, as it appears to us, be maintained. We apprehend that no definition is ever intended to 'explain and unfold the nature of the thing.' It is some confirmation of our opinion, that none of those writers who have thought that there were definitions of things, have ever succeeded in discovering any criterion by which the definition of a thing can be distinguished from any other proposition relating to the thing. The definition, they say, unfolds the nature of the thing: but no definition can unfold its whole nature; and every proposition in which any quality whatever is predicated of the thing, unfolds some part of its nature. The true state of the case we take to be this. All definitions are of names, and of names only; but, in some definitions, it is clearly apparent that nothing is intended except to explain the meaning of the word; while in others, besides explaining the meaning of the word, it is intended to be implied that there exists a thing, corresponding to the word. Whether this be or be not implied in any given case,

¹ See J. S. Mill's "System of Logic," p. 26.

cannot be collected from the mere form of the expression. 'A centaur is an animal with the upper parts of a man and the lower parts of a horse,' and 'a triangle is a rectilineal figure with three sides,' are, in form, expressions precisely similar, although in the former it is not implied that any thing conformable to the term really exists, while in the latter it is implied as may be seen by substituting, in both definitions, the word means for is. In the first expression, 'a centaur means an animal,' etc., the sense would remain unchanged; in the second, 'a triangle means,' etc., the meaning would be altered, since it would be obviously impossible to deduce any of the truths of geometry from a proposition expressive only of the manner in which we intend to employ a particular sign.

"There are, therefore, expressions, commonly passing for definitions, which include in themselves more than the mere explanation of the meaning of a term. But it is not correct to call an expression of this sort a peculiar kind of definition. Its difference from the other kind consists in this, that it is not a definition, but a definition and something more. The definition above given of a triangle obviously comprises not one but two propositions, perfectly distinguishable; the one is, 'there may exist a figure bounded by three straight lines'; the other, 'this figure may be termed a triangle.' The former of these propositions is not a definition at all; the latter is a mere nominal definition, or explanation, of the use and application of a term. The first is susceptible of truth or falsehood, and may therefore be made the foundation of a train of reasoning. The latter can neither be true nor false; the only character it is susceptible of is that of conformity or disconformity to the ordinary usage of language.

"There is a real distinction, then, between definitions of names and what are erroneously called definitions of things; but it is that the latter, along with the meaning of a name, covertly asserts a matter of fact. This covert assertion is not a definition, but a postulate. The definition is a mere identical proposition, which gives information only about the use of language, and from which no conclusions affecting matters of fact can possibly be drawn. The accompanying postulate, on the other hand, affirms a fact, which may lead to consequences of every degree of importance. It affirms the actual or possible existence of things possessing the combination of attributes set forth in the definition; and this, if true, may be foundation sufficient on which to build a whole fabric of scientific truth." ¹

From the above it is seen that the operation on words or symbols, of which logic consists, is limited in its results by the collateral understanding of the symbols employed; so that the formalities of logic are entirely subordinated to the original thought and investigation which enrich and make more definite the meaning of words.

Thought is, no doubt, the function or activity of words or

¹ J. S. Mill: "System of Logic," pp. 112, 113.

language, but it is independent of words in the sense that words are at best but copies of actions, while thought, in the deepest sense, is action.

There is a divergence between the Aristotelian and the Platonic methods which lasts throughout the subsequent history of philosophy. The two systems were opposite views of a single group of facts, or a different selection of facts from a single organon of truth.

Aristotle was a scientist, Plato a theologian. Aristotle endeavored to build up a synthesis of thought from a wide range of facts, and was comparatively indifferent to an ultimate generalization: Plato, on the contrary, regarded all facts as subservient to a single fact, and never tired in his efforts to illustrate the omnipresence of this principle by expressing every thought and feeling in terms of a divine Unity. From these two schools we trace the growth of science and of metaphysics, of patient investigation accompanied by verification, and the contemplation of universals. The natural philosophy of Aristotle was far more metaphysical than that of the present day. The natural philosophy of modern times is a science based upon mathematics, and begins with such general principles as are given, for instance, in the Principia of Newton. This science considers all ultimate questions concerning existence and first cause as beyond its sphere. Aristotle, on the contrary, sought to base his theories of Nature upon ultimate conceptions; he tried to make the line of thought unbroken between the most abstruse metaphysical reasonings and his interpretations of physical phenomena. The difficulty in finding an ultimate reality upon which to build knowledge, Aristotle met by acknowledging the impossibility of any unconditioned or absolute creation or beginning to the universe. By a dexterous verbal manœuvre he explained that the regions from which all things have sprung are those of the possible or potential, and that the transition from this mystic state brings us to the actual. Possibility and Actuality, therefore, he tells us, are the opposite poles of reality, and the meaning of the often-recurring "is" and "became," or the perplexing problems of existence and first cause, are thus disposed of. Aristotle speaks of "Nature" as "a principle of motion and rest essentially inherent in things, whether that motion be locomotion, increase, decay, or alteration." He reasons that there is only one Universe or Cosmos, and that outside of this there is "neither space, nor vacuum, nor time." The irresponsible way in which so many modern writers on metaphysics and theology speak of space and time, and separate the idea of time and eternity, can be traced to Aristotle, who said that "the things outside" of the Cosmos "existing in neither space nor time, enjoy for all eternity a perfect life of absolute joy and peace. This is the region of the divine, in which there is life and consciousness, though perhaps no personality: it is increate, immutable, and indestructible.

"Descending from this region—if that can be called region which is out of space altogether—we come in the Aristotelian system to the 'First Heaven,' the place of the fixed stars, which ever revolves with great velocity from the left to the right. In a lower sphere, revolving in the contrary direction, are the sun, moon, and planets; and we are told that we must not suppose that either stars or planets are composed of fire. Their substance is ether, that fifth element, or quinta essentia, which enters also into the composition of the human soul. They only seem bright like fire because the friction caused by the rapidity with which they are carried round makes them red-hot. The reason why the stars twinkle, but the planets do not, is merely that the former are so far off that our sight reaches them in a weak and trembling condition; hence their light seems to us to quiver, while really it is our eyesight which is quivering. Sun, moon, and stars alike are living beings, unwearied, and in the enjoyment of perfect happiness. * * *

"Aristotle argued that if the earth were to move, it could only do so 'unnaturally,' by the application of external force in contradiction to its own natural tendency to rest round the centre, and that no such forced movement could be kept up forever, whereas the arrangements of the Cosmos must be for all eternity. Therefore the earth must be at rest! As to its shape, Aristotle was more correct; he proved it to be spherical." ¹

Alexander von Humboldt says: "The great influence which the writings of Aristotle exercised on the whole of the Middle Ages renders it a cause of extreme regret that he should have been so opposed to the grander and juster views of the fabric of the universe entertained by the more ancient Pythagorean school."

"Unconvinced by the speculations of the Pythagorean school, and of Aristarchus of Samos, the great Alexandrian astronomer, Ptolemy, in the second century of our era, reaffirmed the Aristotelian views as to the spherical form and motion of the heavens, as to the earth's position in the centre of the heavens, and as to its being devoid of any motion of translation. And the Ptolemaic system satisfied men's minds until, with Copernicus and Galileo, modern astronomy began."

The firm hold which the speculations of Aristotle obtained upon the world can be judged of when we remember that the theories of Copernicus, supported by Galileo and Descartes, were so slow in gaining ground against the Ptolemaic system, that Shakespere died in the belief that the world held a fixed position with regard to the rest of the universe; and Milton framed his plan of the universe, in "Paradise Lost," according to the teaching of the Ptolemaic school, in which he had been educated.

The cause of this is that Christianity incorporated with its faith the Aristotelian philosophy, further elaborated by Ptolemy and St. Thomas Aquinas. As a reminder of which the peripatetic logic and metaphysics still survive, as a part of the formal instruction in Roman Catholic ecclesiastical institutions of the present day.

¹ See Alexander Grant's "Aristotle," pp. 138, 140, 141.

² "Cosmos," vol. I., note 48.

The Stoics no more than the Sophists can be said to have founded any special doctrine, or set of principles, clearly distinguishable from the complex of philosophy. Like the Cynics, their doctrines were widely diversified, and represented a sort of general criticism of philosophy, rather than any type of thought that could be clearly demarcated from the established schools. It was not so with the pronounced Skeptics. Skepticism is a well-defined belief; and although the strongest types have disappeared, the logical characteristics which Pyrrho and Carneades brought into such prominence in ancient Greece are still constantly asserting themselves in every form of society. The Stoics were numerous, and many of them celebrated. Zeno founded the sect, and Brutus and Marcus Antonius were among the last who contributed to its renown.

The Stoics classed themselves as followers of Socrates, and they were in fact nearly related to him by their doctrines. They seem to have been the most rational of the Greek philosophers; they made logic and physics auxiliary to ethics, teaching that action or conduct was the chief problem of man. They taught that the supreme end of life, or the highest good, is virtue; for virtue is inseparable from perfect happiness. This they supported by the still higher principle that virtue is sufficient for happiness.

"Physics, with the Stoics, includes not only Cosmology, but also Theology. They teach that whatever is real is material. Matter and force are the two ultimate principles. Matter is *per se* motionless and unformed, though capable of receiving all motions and all forms. Force is the active, moving, and molding principle. It is inseparably joined with matter. The working force in the universe is God." ¹

Zeno, who was probably the most illustrious of the Stoics, was born at Cittium, a small city in the island of Cyprus, of Phænician origin, but inhabited by Greeks. The time of his birth is not known. In his youth he was engaged in commerce, as his father was a merchant; but after reading the

¹ Ueberweg: "Hist. of Philosophy," vol. I., p. 194.

works of Socrates, which his father brought him from Athens, his mind became entirely occupied with philosophy. In his mature age, on his first visit to Athens, he was shipwrecked, and, having lost all, he joined the Cynics, whose ostentatious display of poverty pleased him at the time. But his moral sensibility soon revolted at their grossness and insolence. After twenty years of serious study in different schools, he formed one of his own at Athens. The place selected was the Stoa, or Porch, which had once been the place of meeting of the poets, but was now deserted; and from this Stoa the school derived its name.

Zeno was much admired for the temperance and austerity of his habits. Though possessed of a delicate constitution, by leading an abstemious life he lived to an old age. The Athenians respected him so much that they entrusted him with the keys of the city; and at his death they erected monuments in his honor, with inscriptions to the effect that his life had been in perfect harmony with his philosophy. It was certainly the highest praise that they could have bestowed upon him.

Greek civilization was now in its decline, and Rome was fast taking the place in political power that Athens had once held. Zeno, alarmed at the skepticism of the age, turned his thoughts chiefly upon moral questions, holding in contempt knowledge which did not immediately refer to conduct.

"The fundamental criterion of truth with the Stoics is sensuous distinctness in the mental representation"; or, as Descartes said many centuries afterward, "all clear and distinct ideas are true." Sextus Empiricus tells us that the Stoics called this criterion of truth the "Cataleptic Phantasm," that is, the sensuous apprehension.

In the review of Plato, in the preceding chapter, this question of the sensuous and intellectual apprehension has already been dealt with. A more thorough examination of it requires a careful study of the *nature of perception*, which the reader will find in Part II.

¹ Ueberweg, vol. I., p. 191.

Antisthenes, an Athenian, born of a Phrygian or Thracian mother, was a pupil of Gorgias, the Sophist. After finishing his studies, he established a school of his own, which he subsequently gave up when he had made the acquaintance of Socrates. His admiration for this wise man was such that, with more modesty than most philosophers possess, he became his disciple, and persuaded all his own pupils to follow him, telling them that in so doing they could best learn wisdom. He took such pride in his poverty that Socrates one day said to him: "I see thy vanity, Antisthenes, peering through the holes in thy cloak."

It is difficult even for wise men to walk in the narrow path of moderation; and Antisthenes, after the death of his master, carried poverty to such extremes that he became repulsive. In his virtuous zeal he carried every thing to excess, ignoring completely the Socratic moderation. He held all sensuous enjoyment in such contempt that he is represented as saying: "I would rather be mad than sensual." Indeed, he and his followers became so indecent and uncouth, that their manners finally resembled those of dogs rather than men, and caused the refined Athenians to give them the name of Cynics.

"The doctrine of Antisthenes was mainly confined to morals; but, even in this portion of philosophy, it is exceedingly meagre and deficient, scarcely furnishing any thing beyond a general defence of the olden simplicity and moral energy against the luxurious indulgence and effeminacy of later times."

Diogenes of Sinope, the famous scholar of Antisthenes, was the son of a banker who was accused of debasing the coin. His son, being implicated, was obliged to fly to Athens, where he was soon reduced to the most abject poverty. He then went to Antisthenes, who refused to receive him; and, as Diogenes would not depart, the Cynic threatened to strike him with his staff. "Strike!" answered Diogenes, "you will not find a stick hard enough to

¹ Ritter, vol. II., p. 110.

conquer my perseverance." He was then accepted as a pupil.

The Cynics despised the Athenians for their joyous way of life, and opposed to it the greatest self-denial. They maintained that the wise man must hold himself superior to all outward influences, and out of their utter disregard for social institutions arose their brutal coarseness.

By the Cynics, philosophy was reduced to the art of life, but life stripped of all beauty, grace, and pleasure. They denied that science or definite knowledge was possible, and refused to accept the Socratic idea, that a definition was the essence of a thing. Thus they opposed facts to arguments, maintaining that definitions might prove that there was no such thing as motion, but this was merely a manipulation of words and did not alter the facts, which remained the same. In this it must be admitted that they had an insight into the great truth that facts express themselves, and are, therefore, in one sense, independent of words; a truth which indicates the limitations of language.

We find among the Cynics the most extraordinary example of the influence which skepticism can exert upon conduct. As far as their opposition to the tenets of philosophy was concerned, their skepticism was of a mild type, but their moral distrust amounted to fanaticism. They arbitrarily dissociated the mind from the body, and regarded the functions of the one as holy and of the other as unholy. They made the further mistake of estimating the degradation of bodily functions by the degree of pleasure derived from their They may have had an excuse for this belief in the excesses of the age, but it brought them to the consequence of such a doctrine—the belief that pain is in itself a They saw that virtue could only be attained by reasoning with the desires,—by a stern self-discipline: connecting this idea with that of suffering, they came to despise all bodily comforts, and actually to court squalor, privation, and pain.

The Stoics held themselves superior to worldly enjoyments,

and were proud of poverty: they thought that it enabled them to devote their lives to the study of truth. The Cynics devoted their lives to illustrating their contempt for all kinds of pleasure, looking upon joy itself as a reproach and beneath their dignity. They were admired for this great force of character, and feared and respected for the fierce purity of their motives.

Opposed to the repulsive and mutilated morality of the Cynics we find the celebrated school of the Epicureans. The popular idea of this school is, that it was licentious and given up to the worship of pleasure. In fact, the word Epicurean has degenerated into signifying "a luxurious and dainty eater; a person given to luxury." If there is such a school in our day it can have but little resemblance to its prototype in ancient Greece.

Epicurus, the son of poor parents, was born in the 109th Olympiad (B.C. 342), at Samos, according to some; or, according to others, at Gargettus, a borough near Athens. He visited Athens at the age of eighteen. Xenocrates was then teaching in the Academy, while Aristotle was in Chalcis. After studying for a short time under Xenocrates he left Athens, and resided in different cities of Greece until the age of thirty-six. He then returned to Athens to teach his own philosophy, in a school over which he presided until his death.

Opportunities were not lacking at this time for study in Athens. The Platonists had their Academic Grove, the Aristotelians walked along the Lyceum, the Cynics growled in the Cynosarges, the Stoics occupied the Porch, and the Epicureans had their Garden.

"Here, in the tranquil Garden, in the society of his friends, Epicurus passed a peaceful life of speculation and enjoyment. The friendship which existed amongst them is well known. In a time of general scarcity and famine they contributed to each others' support, showing that the Pythagorean notion of community of goods was unnecessary amongst friends, who could confide in each other. At the entrance of the

Garden they placed this inscription: 'The hospitable keeper of this mansion, where you will find pleasure the highest good, will present you liberally with barley-cakes and water fresh from the spring. The gardens will not provoke your appetite by artificial dainties but satisfy it with natural supplies. Will you not be well entertained?'"

It is believed now that Epicurus was a man of pure life. who by his doctrines sought to inculcate moderation and abstemiousness. He differed from Plato and Aristotle in one essential point. He regarded philosophy as the Art of Life rather than the Art of Truth; declaring it to be an activity which, by means of ideas and arguments, procures the happiness of life. Epicurus did not seek the pleasure of the moment, but the uninterrupted course of happiness through life. This was to be obtained through the enjoyments of the mind, which are lasting, rather than through those of the senses, which are fleeting. He taught that virtue was inseparable from true pleasure; and though he did not exactly condemn all luxuries, he saw that a simple life was best, saving, "wealth consists not in having great possessions, but in having small wants." Thus, from the skepticism which the imperfect philosophy of the age inspired. Epicurus sought a refuge in morals, and endeavored to place them on a philosophic basis.

To Epicurus are attributed some of the most astute generalizations which are to be found in Greek thought. Ueberweg says: "Epicurus considers the dialectical method incorrect and misleading. ** Representations are remembered images of past perceptions. Beliefs are true or false, according as they are confirmed or refuted by perception. ** Animals and men are the products of the earth; the rise of man to the higher stages of culture has been gradual. Words were formed originally, not by an arbitrary but by a natural process, in correspondence with our sensations and ideas. ** Opinion or belief is due to the continued working of impressions on us. The will is excited, but not necessarily determined by ideas. Freedom

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of the will is contingency (independence of causes) in self-determination."

It would be hard to find, even among the most modern writers, a better statement of the fundamental facts of biology, psychology, and philology than these words of Epicurus.

The teachings of Socrates were said to have been a reaction against the skepticism of his time; and yet Pyrrho, whose career did not begin until after the death of Socrates, is regarded as the founder of skeptical philosophy. This apparent anachronism is to be explained by the fact that skepticism existed as a definite type of belief in Greece long before its organization into a school by Pyrrho. This school developed later on into the New Academy. Among its pupils we find the names of Horace and Cicero.

Of the doctrines of Pyrrho, but an outline has come down to us, so mixed are they with the teachings of his pupils. These doctrines centre, like all skepticism, in the tenet that there is no criterion of truth. Perhaps in the writings of Sextus Empiricus is found the most complete portrayal of the doctrines of skepticism.

The celebrity which the school of Pyrrho attained is due more to the prominence of the doctrines which it combated than to any originality in its own teachings. It is easy to criticise. Skepticism criticised the creations of Socrates, Plato and Aristotle, and well-nigh brought them to naught. It exposed the weak points in these systems, but it offered nothing worthy to take their place. Skepticism and Faith are opposite intellectual extremes, and an undue tendency toward either is enervating to the mind. Faith is trust in appearances, skepticism is distrust in appearances. Appearance and disappearance are our symbols for change. All knowledge springs from these changes: to alternately trust and distrust them, to experiment and verify, is the natural course of perception. It is not to be wondered at, therefore, that the actions and reactions which have gone to make up

^{1 &}quot;Hist. of Philosophy," vol. I., pp. 203, 205.

the growth of knowledge should have produced the greatest extravagances of belief and unbelief.

The extremes of faith and of skepticism are equally opposed to thought. Science has no fear of skepticism, for the element of doubt is never neglected in its conclusions. Scientific facts are frustrations of doubt: they rest upon the "Universal Postulate," the underlying principle of certitude, the inability to believe the negation of a proposition, which alone constitutes conviction. Skepticism is said not to be a belief, but an unbelief. This is a misaporehension, for it is a clearly-defined doctrine, resting upon evidences supposed to be axiomatic in their certainty. It has a well understood method, and it has even created elaborate dogmas. Its tendency is to depress conviction, not to destroy it. Its position with regard to belief is like that of the misanthrope who declared that he was most happy when utterly alone, but was obliged to confess that he needed some one to whom to communicate this happiness.

Let us examine some of the convictions of Skepticism. Skepticism affirms that there is no criterion of truth. The evidence it offers for this assertion is, that knowledge can be only a knowledge of phenomena, and phenomena are the appearances of things, not the things themselves. According to the Academicians, perceptions bore no conformity to the objects perceived, or, if they did bear any conformity to them, it could never be known. They assume that there is a reality deeper than phenomena, or change, which they call noumena. They mean, however, by phenomena, truth (facts), for they assert that there is no measure or criterion of truth; and as they cannot reach the noumena to compare or measure them, had they this criterion, they must regard phenomena as their organon of truth. Their assumptions, then, amount to this: We have no absolute standard of facts by which to measure the truth of facts; and if we had, it would be of no use, because there is a noumenon behind facts which is more true and more real than facts themselves. noumenon is an unchanging existence, whereas facts are

changing existences. Now, was there ever such a mass of contradictory statements as this?

Have we not already reached a point which enables us to say that existence cannot be other than changing existence, and that, therefore, unchanging existence is a contradiction in terms. May we not now call upon the skeptics to prove that there is such a thing as unchanging existence, before we can accept their statement that there is a noumenon, or a deeper source of truth than phenomena?

Their assertion that perceptions bear no conformity to the objects perceived, or, if they did, that it could never be known, really amounts to this: A lady viewing herself in a mirror is bound to *believe* that she is looking at some one else, or that she *is* some one else; or if she is not, it does not matter, as she cannot know who she is. And it is said that skeptics can believe nothing!

Of course Arcesilaus and Carneades would have thought this a frivolous way of meeting their profound arguments. But let us bear in mind that profundity is not necessarily proven by a confusion of ideas. Nor would we take advantage of the rich inheritance of our century in definite knowledge to make it appear that the acute intellects who puzzled the Greeks and confounded the Romans were stumbling over obvious errors. What we wish to prove is, that the Skeptics had beliefs as well as other people, but that these beliefs were divorced from facts by the tautologies and circumventions of reasoning from a false premise.

If belief is but a phase of knowledge, a natural movement of the mind which springs from the deeper impulses,—those dim, inarticulate perceptions which we call faith,—then is not Skepticism an artificial and unnatural belief, but none the less a belief?

An analysis of these beliefs brings us inevitably to those deep movements of consciousness, those simple and natural perceptions upon which rests the whole structure of certitude.

Arcesilaus was born at Pitane in the 116th Olympiad (B.c.,

316). He was the successor of Crates to the Academic chair, and is said to have filled it with great ability. The difference between the views entertained by the Academicians and those of the absolute Skeptics, we are told, is that the former declared that all things were incomprehensible, and that the latter did not affirm any thing, not even that all things were incomprehensible. As it would be difficult to criticise the views of the latter class, we may consider the Academicians the most pronounced Skeptics, for we are in no danger of being contradicted by the other branch of the sect.

Carneades, the most illustrious of the Academicians, was born in the I4Ist Olympiad (B.C. 213), at Cyrene in Africa. Diogenes, the Stoic, instructed him in the art of disputation. He was sent to Rome as ambassador, and astonished all who heard him in that city by the brilliancy of his eloquence. He was much praised for his celebrated discourse on Justice; but when trying to prove the uncertainty of all human knowledge, he spoke against justice as strongly as he had spoken for it; Cato, the Censor, startled by these sophistries hastened to have him dismissed from the city for fear that he would corrupt the Roman youth. One of the pupils of Carneades confessed that he could never discover what the real opinion of his master was, so skilled was he in the art of disputation.

Arcesilaus, while he admitted the arguments of Plato which destroyed the certainty of Opinion, also admitted those of Aristotle which destroyed the Ideal theory; thus he left himself nothing but absolute Skepticism. The chief problem which occupied the Academicians, briefly stated, is this: Does every modification of the mind exactly correspond with the external object which causes the modification; or, in other words, do we know things as they really are? The fact that all knowledge is derived through the senses made them doubt its accuracy. It is true that the senses are the outposts of the understanding, but what has that to do with what takes place within the citadel of thought?

Can the Skeptic say where sense leaves off and reason begins? He cannot. Then is it not safe to say that all reason has a sensuous aspect, and that all sense has a reasonable or logical aspect?

We know that such truth as we possess is the function of certain conditions: that these conditions are those of perception: that reason is one aspect of the mental procedure called perception, and that objective phenomena, or change, is the other. We know that phenomena and reason, therefore, are related to each other as cause and effect, and that cause and effect are simply two aspects of the same thing. When light awakens the phenomena of sight within us, and this, with the cooperation of other activities of our complex organism, is elaborated into an idea, or the phenomena of reason, we have but sequent groups of changes, natural chains of cause and effect, uniting and explaining observed phenomena, sensuous apprehension, and ideas. The greater the number of changes coordinated in the mind, made possible by accumulated modifications of the mental structure. the greater the extent of reason; the greater the command of facts, the wider and deeper the generalizations or the establishment of interdependencies among facts. To state, therefore, that things are not in reality what they seem, is an entirely gratuitous assertion. We know things as they affect, and to the extent that they affect, us. This effect is the function of a definite structure. As the modifications of the structure increase, this function or response becomes more extended. To know an object in the sense that the Skeptics imagined that we ought to know it (to have an absolute knowledge of it) could only be accomplished by changing identity with the object—by becoming the object; as then, and only then, the perception would be the function of its whole nature.

This is the way that God *knows* things, because God shares his existence with every thing. We, whether it be regarded as fortunate or unfortunate, enjoy some sort of in-

¹ This expression, it is understood, is purely symbolical.

dividuality, and our perceptions are never more and never less than the natural relationship or interaction between ourselves and the things perceived. In the silent contemplation of nature we come face to face with the deepest realities, but the moment we would translate these realities into the metaphor of language we are defeated on every hand. What is more real than action? What is more unreal than its portrayal in words? What is more certain than a feeling, a sentiment, or a thought? What is more impotent than the best attempt at its conversion into symbols? The incontrovertible part of life is its action, the delusive part is its speech; words are forever meaningless to those who have not actually experienced the thoughts which they express. The whole history of thought is a struggle with metaphors, an effort to express thought and then a confusion of the expression with the thing expressed. As language, the great medium of thought and feeling, enriches the lives of all who use it, so it is the source of endless confusion and error to those who have not actually lived up to its significance.

The issue we take with those who are willing to surrender the results of philosophy to the Skeptic is now apparent. Skepticism is only an involved and obscure philosophy, a system of ultimate beliefs. Contrary to its teachings, we hold that there *is* a successful philosophy, a successful metaphysics, and that the most absolute Skepticism which it is possible to state in terms is both a positive and a mistaken *belief*.

These arguments, which seek to disclose the Scope of Language, cannot be further produced without attempting a close study of the *Nature of Perception*, which follows in its allotted place. I am content for the present if I have helped to dispel that logical presumption which has hung for so many centuries like a dark cloud over the entire field

of thought.

CHAPTER V.

THE ALEXANDRIAN SCHOOL, SCHOLASTICISM, AND THE REVIVAL

Philo-Plotinus-Abelard-Bruno-Bacon.

THE fall of Greek independence and the advent of Skepticism dethroned philosophy in Greece, and the centre of speculative thought was transferred to Alexandria. Here, during the first centuries of our era, Greek thought and oriental mysticism combined in the formation of Christian theology. Alexandria, for three centuries previous to this time, had been the centre of vast commercial as well as literary enterprise. Its celebrated library, which contained inestimable treasures of Egyptian, Indian, and Greek literature, (destroyed by Christian fanatics under the archbishop Theophilus, in 391 A.D.) had been enriched and fostered by such men as Euclid, Conon, Theocritus, Callimachus, Apollonius Rhodius, and Hipparchus.

For three centuries the Alexandrian school of philosophy contended with Christianity for the intellectual and moral control of Europe. It was not a fight between religious faith and reason, as might be supposed,—for religious faith was the foundation of the Alexandrian philosophy; it was a struggle between the special beliefs of Christianity, which were formed by the early Christian fathers into a complete organon of faith, and the incomplete beliefs which philosophy at that time offered. This struggle still continues, with the difference that the completeness of philosophical beliefs now is far in advance of the Alexandrian school. The chief objection to resigning Christian faith for Philosophy is that something is given up with the former which is not replaced

by the latter, and the objection is valid; for until Philosophy can round out and organize its tenets so as to present a complete system of belief, with a definite creed, a moral law, a source of inspiration, a cosmology, a distinct theory of the origin and destiny of our race,—expressed of course in terms which comply with the laws of perception,—until then, revealed religion will have an advantage over philosophy which will decide the choice of the multitude in its favor. The question which presses upon us is whether it is not possible to make of philosophy a religion superior to any faith which the world has yet known.

The curious feature of the Alexandrian philosophy is, that it was founded on faith, not on reason. Reason had been defeated by Skepticism, and it was declared, by what was then an unanswerable argument, that it was not a criterion of truth. A philosophy of Skepticism sprang up which denied the validity of human reason and demanded another criterion of truth: for belief is ever active, it never tires of the effort to establish itself in fact. The philosophy of the Alexandrian school took the stand that Faith was the criterion of truth. It is interesting to know, therefore, that Christianity owes to philosophy its doctrine of faith, so predominant among its teachings. It is to the ingenuity of the teachers of philosophy, who, defeated by Skepticism, sought another explanation of the source of knowledge than reason, that religion owes this bulwark of its creeds, this unanswerable argument of Faith. It is certainly a most fortunate startingpoint for any special belief, for it was devised as a defence against the reasonings of Skeptics and has proved invulnerable to all kinds of reasoning, both true and false.

Philo, the Jew, the first of the Neo-Platonists, was born in Alexandria, shortly before the beginning of the Christian era. He had imbibed the doctrines of the New Academy, and therefore made no attempt to refute Skepticism; he merely tried to avoid it and to build a system of belief which would endure in spite of Skepticism, not in place of it. The manner in which he expressed his criterion of truth

is as follows: "The Senses may deceive, Reason may be powerless: but there is still a faculty in man—there is Faith. Real Science is the gift of God: its name is Faith: its origin is the goodness of God: its cause is Piety." That Hebrew anthropomorphism which regards the Universal Principle or Ultimate Generalization that the Greeks called God, or the One, as a person having human attributes, asserted itself in Philo's teachings. Again: Mysticism, that peculiar belief of oriental nations, far more ancient than any thing which has come to us from the Greeks, was also a factor in the doctrines of Philo: and from these various sources he framed a theology which is reproduced with wonderful faithfulness in the Christian system of belief. The most singular tenet of mysticism is that of a mediator between God and man, made necessary by the inaccessible nature of Deity. This mediator the Mystics called The Word.

The school of Alexandria was founded by Ammonius Saccas, toward the close of the second century of the Christian era, at a time when civilization was on the decline. This school gathered to itself many great and noble minds which gave it unwonted brilliancy and power, while its rivalry with Christianity spread its renown throughout the world. For three centuries, this school lasted, during which time Plotinus revived the doctrines of Plato; Porphyry and Iamblicus sought to make it rival Christianity; and Proclus tried to harmonize philosophy and religion. This grand intellectual centre to which the religious culture of our era can be so clearly traced was indeed cosmopolitan in its influences. Not far from the temple of Serapis, Greek Skepticism, Platonism, Judaism, and Christianity, were all interpreted.

Alexandrian Eclecticism, though based on the doctrines of Plato, had much that was original in it; but its composite

¹ Eclecticism is that method of philosophy which believes that by placing the better parts of all systems of thought in comparison the highest truth will make itself apparent. In modern philosophy, this method has been employed in France by Victor Cousin and his contemporaries.

character produced by degrees a mystic pantheism wholly foreign to Greek thought. If the method of the school was Platonic, its doctrine of the Trinity rendered it clearly mystic. What is generally understood by the term theology is a body of beliefs, largely originated by the teachers of philosophy known as the Neo-Platonists, concerning the attributes of God. These men, as above stated, were not only opposed to the special tenets of Christianity, but endeavored to found a religious organization in opposition to the Christian church. The Alexandrians exaggerated the vicious tendency so prevalent in most religions, to despise human nature. "Plotinus blushed because he had a body: contempt for human personality could go no further."

Plotinus was the chief author of the metaphysics of the Alexandrians, an exceedingly subtle and involved system, especially interesting because it is closely reproduced in modern German speculations. This system rests upon the identification of subject and object as the principle of human perception. If the explanation of perception which the Alexandrians offered were reduced to its simplest terms it would be correct; but it is so involved, so many repetitions in the use of ultimate terms occur, that it is impossible to give it any definite form. The object seems to be to prove that the varieties of the universe are but modes of God's existence. If God is viewed as the universal principle, the theory is essentially true, although unhappily expressed. The commanding generalization which it suggests is clouded by the fault of regarding God as a person, and the power which is represented by divine unity as an intelligence. This tendency to view human intelligence as universal degrades what would otherwise be a sublime philosophy into a pantheism, or the belief that the universe is God and that God is a personal intelligence. Thus Plotinus taught that "the Sensible world was but the appearance of the Ideal world, and that the Ideal world, in its turn, was but the modes of God's existence." The correct view of the nature of perception which we see struggling to the surface in the teachings of Plotinus is obscured by that mystic theory known as the "ecstatic vision of the Infinite" (or God). Nothing could be more destructive to a true philosophy than this superstitious notion of perception, which postulates that the knowledge of God is essentially a mystery. The fault of this theory will be fully exposed in our review of German thought; for in Germany the Alexandrian metaphysics have reached their farthest development. The origin of this theory of the ecstatic vision of God has already been indicated, as it is merely mysticism in a metaphysical form.

All Christian metaphysics sprang from the belief in mysteries. The mystery of the Incarnation, the Redemption, and the Holy Trinity, as they have been differently interpreted, have given rise to the great heresies, and all the subsequent Christian sects. Strange to say, modern philosophy also rests upon a fundamental mystery, which is called the Unknowable. No philosophy can succeed or become an adequate guide to life (a religion) which does not establish beyond all cavil the reality of human knowledge, the impossibility of a fundamental mystery in life or nature. Until philosophy can build its truths upon a firmer foundation than mystery, revealed religion will be its logical peer; for in fact there are few religions, taking them all in all, that are not better philosophies than Agnosticism.

The dispute as to the priority of the Alexandrian or the Christian doctrine of the Trinity is familiar to all students of theology. Both doctrines clearly point to beliefs of great antiquity. A brief description of them in the forms which they respectively assumed under Christian and anti-Christian philosophy, will suffice for our purpose. The doctrine of the Christian Trinity is the highest and most "mysterious" of Christian beliefs. The fullest statement of this mystery is to be found in the Athanasian creed: "That we worship one God in Trinity, and Trinity in Unity; neither confounding the persons nor dividing the substance; for there is one person of the Father, another of the Son, and another of the

¹ Arianism, Sabellianism, and Nestorianism.

Holy Ghost. But the Godhead of the Father, and of the Son, and of the Holy Ghost is all one; the glory equal; the majesty co-eternal." The most striking argument which is offered in support of this complex belief is, that the names applied to God in the Old Testament, such as Elohim. having a plural signification and being used in connection with a singular verb, suggest a combination of the ideas of unity and plurality in the Godhead. To any one not initiated into the mysteries of theology, the thought would occur that the use of a plural name for God by the ancient Hebrew tribes meant that they believed in more than one God: but the theologians tell us that, on the contrary, it meant that they believed in one God composed of three distinct persons. We have looked in vain among the traditions of Moses, however, for any of the scholarly subdivisions of deity in which the Alexandrian Iews so delighted. Nothing can more clearly exonerate Moses from any connection with the complicated idea of three gods in one, than the artless manner in which he is made to speak of Yahveh in the ancient Hebrew Scriptures.

Plotinus was more original in his explanation of the Trinity than the Christians: he does not consider Moses at all in this explanation, although he was literally surrounded by learned Jews; in fact he explains the Hypostases, or Substances, of deity with a provoking indifference to all our theories of Semitic monotheism. In speaking of the Alexandrian doctrine of the Trinity as compared with the Christian, Jules Simon says: "The unity of one God in three different persons or hypostases (substances), this is all the resemblance, up to the present time, that we have found between the trinity of Plotinus and the Christian Trinity. But each of the hypostases of the god of Plotinus differs radically from the corresponding divine persons of the Christian dogma; and the opposition is not less great when we consider not only the persons but their diverse relations. Thus, in the Christian doctrine, the Father, the Son, and the Holy Ghost, know and love one another. The Father loves the Son and

is beloved by him, the Holy Ghost knows the Father and the Son, and has of both an equally complete and direct knowledge. In Plotinus, on the contrary, each *hypostasis* knows and loves exclusively the preceding *hypostasis*, and remains a stranger to inferior *hypostases*. Unity, which has nothing above it, knows and loves nothing, and Plotinus only admits in trembling that it loves and knows but itself. He can say with Spinoza, 'No one can desire to be loved by God, for it would be to desire that God should cease to be perfect.'"

Is it not safe to say, upon a careful comparison of these two doctrines of the Trinity, that the Christian myth is the more sensuous, because in it the attributes and powers of each person of the Godhead are declared to be equal, which makes it impossible to regard the Christian theory of the Trinity as pointing to a universal principle through the subjective and objective aspects of life?

In passing from ancient to modern philosophy we must remember that Rome holds no important place in the annals of human thought. This great empire rose and fell without producing any perceptible movement in philosophy. Roman speculation, which was never more than a faint reflection of that of Greece, fed upon the Alexandrian culture during and long after the Augustan age; and the great Church of Rome established its faith and took up its chief theological positions under the guidance of this same culture. From the decline of philosophy in Alexandria to the revival of learning in Europe, all organized thought seems to have been enlisted in the service of the church. Christianity fostered the learning and logical skill which survived amid the decay of the Roman Empire and the crude political beginnings of the barbarian states: and thus the church was for centuries the custodian and promoter of the intellectual and moral order of Europe. But although Rome protected thought, she afterward enslaved it; and, when the mind of Christendom, encouraged by the growing liberties of our civilization,

^{1 &}quot;Histoire de l'École d'Alexandrie," vol. I., p. 332.

opposed these restraints, it found in the church, instead of a friendly protector, a powerful and determined enemy.

Scholasticism proper began with the schools (scholæ) opened by Charlemagne in the eighth century. schools were instituted in the episcopal sees, in the monasteries, convents, and cloisters of the new Germanic Empire. For centuries previous to this, Christian culture had shown itself chiefly in the writings of the Greek and Latin fathers of the church: but now the famous doctors of the Scholastic age arose. Joannes Scotus, the Irish erudite of the ninth century, began the movement, which was carried on by St. Anselm (1034), who is considered the reviver of metaphysics after the decline of the Roman Empire. The impetus given to thought by Charlemagne soon spread its results throughout Europe, and the writings of Albert the Great, St. Thomas Aguinas, and Duns Scotus, remind us of the vast proportions which the theological disputes of the Middle Ages assumed.

The most interesting character among the Scholastics, from a philosophic standpoint, is Abelard. This celebrated French logician, born near Nantes in 1079, manifested at an early age a genius for dialectics. This was before the revival of learning, but philosophy and theology were already beginning to take divergent paths. There is no evidence that Abelard was a great student or a profound thinker; but he must have had a ready insight into the inconsistencies of the current philosophy of his time. Becoming eager to exercise his natural faculty for metaphysical discussion, he went to Paris at the age of twenty and joined the school of William de Champeaux, a renowned teacher of the art of disputation. It was not long before Abelard challenged his teacher and defeated him in argument; then the character of his ambition became apparent. He was not primarily a lover of wisdom, but rather of the glories and triumphs of controversy. He looked upon the past as a repository of knowledge containing more truth than his age possessed, and throughout his teachings this attitude was maintained, which caused them to lack the inspiration of progress. In our age we are not discouraged by believing in the retrogression of knowledge; our studies are full of hope, we feel the possibility of increasing knowledge, of exalting human life. During the revival of learning in Europe, all study was a retrospect, and thought flowed down from the intellectual heights of ancient Greece to the lower levels of the later civilizations.

It is not to be wondered at, therefore, that Abelard contented himself with exhibiting to admiring crowds the treasures which he found in the literatures of the Greeks and the Romans, and that he felt the hopelessness of any endeavor to add to the achievements of the past.

We are reminded by his fate that the deepest reproach that can be made to a teacher, is that of unfaithfulness to his precepts.

He was a brilliant orator and a master of the art of disputation; but in teaching there is no power like that of example; and as he lacked those sterling virtues which alone could have made his life correspond with the ideals which he held up for others, his career challenged admiration but failed to command respect, or to exert any deep influence.

Abelard was a representative Scholastic. He has been called by different writers a nominalist, a realist, and a conceptualist. Others think that his doctrines contain all these kinds of thought in more or less definite proportions. For our purpose it will be well to avoid these fine distinctions, as they never mean any thing sufficiently definite to repay the trouble of analyzing the terms.

There is one broad distinction, however, running through all philosophic thought which can form the sufficient basis of our classification. This distinction begins in the difference between the teachings of Aristotle and those of Plato. Plato gave an objective existence to ideas; he believed that thoughts came nearer to the source of things than the things themselves; and as we can only recognize ideas by

names or words, he mistook symbols for realities, and believed that, by operating on these symbols, deeper truths could be reached than by studying nature directly. was the dialectics of Plato, and can be best described by the term Idealism. The antithesis of idealism is science.—the patient investigation of facts accompanied by verification. and the grouping or classification of these facts into more and more general ideas. The ideas of science are always subordinate to facts, because they are derived from them. This, in general terms, is Aristotle's theory, and is distinguished from Plato's in that Plato held ideas to be superior to facts. Of course there is a fundamental truth of which both these interpretations are more or less distinct expressions, but the difference between the theories is broad and clear; other and more minute distinctions are unnecessary for the understanding of the general history and principles of philosophy. For instance, Realism is a belief which supposes that certain kinds of ideas, known as general terms or abstract ideas, such as animal—man—truth, have an objective existence. Idealism maintains that all ideas have objective existences, such as both the idea of a given man, and the idea of man in general, or that of a given animal and the order animal. Nominalism is the ultra scientific position. It holds that names stand for relations which we perceive among facts, and that all relations are merely functions of their terms or conditions: that a general name, such as circle, simply stands for the relation of a circumference to its centre; that this relation can be generalized by applying it to many simpler groups of facts; but in each case it is strictly the function of these facts and has no separate existence.

Realism, on the contrary, holds that the name *circle* stands for a type of existence independent of all conditions. It is a modified form of that rank Idealism of Plato which believed in divine archetypes from which all concrete embodiments were derived; that an attribute or quality was not simply the expression of certain conditions, but was a

mystic genus or supernatural order of being, a mysterious something more real than the conditions expressing it. This Idealism has fallen into such disrepute that the word real has come to signify the exact logical opposite of it. Real, to us, means rational, sensible, true, the antithesis of ideal, fanciful, unreal. Is it surprising, therefore, that common-sense people should be puzzled when they are told that Realism is a species of Idealism, and that it is the theory that general names, such as circle—beauty—right, have a separate existence from round things—beautiful objects—right actions; that, in a word, Idealism believes that all reality is in the mind; Realism, that about seven-eighths of all reality is in the mind: whereas Nominalism leaves things as they are, and claims for the mind no monopoly of reality? But the confusion becomes doubly confounded when we find the Scholastics declaring that Aristotle, who is supposed to stand for the rational or scientific order of perception, was a Realist or a semi-Idealist. Aristotle, who honestly endeavored to oppose the Idealism of Plato, became so entangled in its mystical phraseology that his works were interpreted in the Middle Ages as Scholastic Realism, and were identified with religious orthodoxy.

The broad distinction which exists between Idealism and Science is the only safe one to use in philosophic classification. This distinction, as we have before said, can be traced to the difference between Aristotle and Plato; but as both these great masters were monopolized by the church for many centuries, the interpretations put upon their works are more than confusing. Hence we shall not be surprised to find a long line of logical reformers from Abelard even to Francis Bacon denouncing the teachings of Aristotle as a means of opposing Idealism.

Abelard was a strange mixture of Idealism and Nominalism. An analysis of his thought in this regard would be as tedious as profitless, for it suggests nothing original and gives no indications of a direct study of nature. His career was neither scientific nor, in the best sense, philosophic.

We must not forget, however, that he contended long and earnestly for freedom of thought, and practically began the movement which resulted in the separation of philosophy and theology, the severing of that union which had been effected by the Alexandrian school.

To glance at another civilization, the Mohammedan culture is not without its position in the history of thought. The Arabians were diligent students of Greek philosophy. and had translated a number of Aristotle's works into their language long before the revival of learning among the Christian nations. An Arabian philosophy grew up which was a combination of Mohammedanism and Greek thought, as Scholasticism was a combination of Greek thought and Christianity. The chief feature of this philosophy was mysticism. All Eastern thought has a tinge of mysticism that strange faith which has the doctrine of total depravity for one support, and the principle of ecstatic communication with God for the other. The Mystics had a contempt for human energy. One of their orders symbolized this idea by planting a stick in the desert and carrying water hundreds of miles across the burning sands to water it. They believed that the highest possible existence is absolute inaction, in order to superinduce a reverie, or ecstasy, which is the condition necessary to have perfect communion with God. This idea is distinctly visible in Plato's teachings, and it lingers in modern philosophy in the greatly modified form of a belief in a priori ideas. Such an advanced work, even, as Spencer's "Psychology" has a faint trace of it in the notion of irreducible intuitions.

We find nothing in the system of Algazzali, the greatest of Arabian philosophers (born in the city of Tours, 1508 A.D.), which is sufficiently distinct from the thought already reviewed to merit notice, unless it be this element of mysticism which pervades the school, and which is abundantly represented in Christian culture.

Philosophy as well as religion has had its martyrs. In A.D. 1600 Giordano Bruno was burned at the stake in Rome by

the Holy Inquisition for teaching independence of thought. It is true that he attacked religious beliefs with great force. but he did it through philosophic writings and lectures. An Italian of great learning, he conceived an intense feeling of rebellion against the narrowness and superstition of his time, and devoted his life to advocating principles of intellectual reform. At that time the works of Aristotle were regarded by the learned world with the same superstitious reverence as that in which the Bible is now held; and as almost all learning was then confined to the church, there was a strange combination of Aristotle's logic and physics, the Ptolemaic system of astronomy, and the Christian dogmas forming the accepted faith of the church. All those who opposed any part of these beliefs were persecuted as enemies of the Christian religion. The hold which this combination of imperfect science and blind religious belief had upon the public mind, is scarcely conceivable to us. "In 1624—a quarter of a century after Bruno's martyrdom —the Parliament of Paris issued a decree banishing all who publicly maintained theses against Aristotle; and in 1620, at the urgent remonstrance of the Sorbonne, decreed that to contradict the principles of Aristotle was to contradict the Church! There is an anecdote recorded somewhere of a student, who, having detected spots in the sun, communicated his discovery to a worthy priest. 'My son,' replied the priest, 'I have read Aristotle many times, and I assure you there is nothing of the kind mentioned by him. Go, rest in peace; and be certain that the spots which you have seen are in your eyes, and not in the sun."

For ten years previous to Bruno's imprisonment at Venice, where he languished without books or writing materials for six years, he had wandered over the Continent and into England. He was encouraged by Queen Elizabeth, and through her influence lectured at Oxford. Before this he lectured at the Sorbonne in Paris, where he attracted great attention and became very popular. After leaving England he visited Marburg, Würtemburg, and Prague. In almost

every place his aggressive nature and principles brought him in conflict with the superior powers, and his visits to the seats of learning were short and stormy. At last, returning to Italy, whence he had fled, he was apprehended, suffered his long imprisonment, and was put to death.

Together with the prevailing religious beliefs, Bruno bitterly and persistently attacked Aristotle and Ptolemy, and in the more hospitable universities, debates of great pomp and ceremony were organized to oppose his teachings. It is to be remembered that these tournaments of learning were a feature of the age. Bruno was a constant satirist of the pedant, whom he held responsible for a great deal of the narrowness of the times, and lost no opportunity to bring him into ridicule. Speaking of him, he says: "If he laughs, he calls himself Democritus; if he weeps, it is with Heraclitus; when he argues, he is Aristotle; when he combines chimeras, he is Plato; when he stutters, he is Demosthenes."

Bruno was not a scientist, but he had the scientific spirit: he advocated the study of nature, instead of that unscientific introspection which was the habit of his time. It may seem strange that he was so opposed to Aristotle, and still so thoroughly in sympathy with the Aristotelian method; this can only be explained by the narrow way in which the writings of the great Stagirite were interpreted by the church. Bruno never could have come into contact with the broad spirit of the Aristotelian method, or he would have recognized in it the same hopes and ambitions which he entertained himself. Bruno's philosophy had not become emancipated from Scholasticism, as indeed but few modern philosophies have. The highest generalization of the ancients, to which they gave the name of God, or Divine Unity, had become substantialized by constant use in religious thought until its meaning was degraded by undue limitations.

This substantialization of the Universal Principle, or the idea of deity, is the great obstacle to an understanding be-

tween philosophy and religion. These two contrasted interpretations of deity employ the same terms but give to them different meanings; and so deeply rooted has this misunderstanding become, that it is virtually beyond correction. New generations must grow up with a common knowledge of the meaning of these most important of all words, before a reconciliation can be effected.

After the time of the Neo-Platonists and the Alexandrian school, philosophy for fifteen centuries remained subservient to religion and degenerated into a mystic theology. Such men as Bruno rebelled against this low order of thought, and struggled to throw off the concrete meanings imposed upon ultimate terms: they were only partially successful, and passed away leaving their work incomplete. But from the turmoil of mixed theological and philosophic debate, called Scholasticism, the science of Metaphysics again springs into existence, and the word God becoming purer and purer in its meaning, at last assumes the form of the Ultimate Reality, or Universal Principle-Motion,-the objective and subjective aspects of which are Space and Time. Thus Science and Theology unite in the Synthesis of Knowledge, giving us at once the only true philosophy, the only pure religion.

Francis Bacon, about the merit of whose works there has been so much dispute in England, especially during the present century, was born in 1561. He studied at Cambridge, and afterward took up the profession of law, in which he became eminent. Under the reign of James the First his fortune advanced rapidly. In 1616 he was sworn a member of the Privy Council, and in the following year was appointed Keeper of the Great Seal, then created Baron of Verulam, and Viscount of St. Albans. Macaulay says: "The moral qualities of Bacon were not of a high order. We do not say that he was a bad man. He was not inhuman or tyrannical. He bore with meekness his high civil honors, and the far higher honors gained by his intellect. He was very seldom, if ever, provoked into treating any person with malignity

and insolence. * * * No man was more expert at the soft answer which turneth away wrath. He was never accused of intemperance in his pleasures. His even temper. his flowing courtesy, the general respectability of his demeanor, made a favorable impression on those who saw him in situations which do not severely try the principles. His faults were—we write it with pain—coldness of heart and meanness of spirit. He seems to have been incapable of feeling strong affection, of facing great dangers, of making great sacrifices. His desires were set on things below."1 In the zenith of his prosperity a sudden reverse was at hand. Notwithstanding his large income, his habits of extravagance tempted him to accept bribes. He was charged with corruption, and, after an attempt at defence, publicly acknowledged his guilt. The sentence was severe: he was condemned to imprisonment during the King's pleasure, and fined forty thousand pounds: he was declared incapable of holding any office in the State or of sitting in Parliament, and was also banished from Court. This sentence was scarcely pronounced when it was mitigated, for he passed only two days in the Tower, when he was liberated. Retiring to Gorhambury, he devoted himself to literature during the remainder of his life. When the rest of the sentence was finally remitted, and he could have resumed his seat in the House of Lords, he did not do so, shame, perhaps, preventing him. On his death-bed, knowing that if he had thought profoundly, he had nevertheless acted most unworthily, he said: "For my name and memory, I leave it to men's charitable speeches, and to foreign nations, and to the next age." His confidence was not misplaced; men have dealt leniently with him, for "turn where we will, the trophies of that mighty intellect are full in view."

Bacon is accredited with the honor of establishing the modern scientific method. Although it would be difficult to find an age, since history began, completely without a scientific method, a glance at the situation in the time of Bacon

¹ Macaulay's "Miscellanies," p. 255.

will convince us that much of our scientific advancement and educational reform are to be traced to his influence. Bacon lived in a time of marked theological and metaphysical activity. The great work of Copernicus had just begun to unsettle the Christian beliefs, and Galileo was in the midst of his controversy with Rome. The paths of science and religion were beginning that redivergence which has since brought these two branches of knowledge into such antagonism. Lessing's "Fragments" and the acrimonious wars which they engendered were vet unheard of, but theological debates filled the air, and there was a certain freshness and earnestness about these collisions which they are without today. Science was so feeble and had so few friends, religion was so generally held as the arbiter of all questions of the understanding, that Bacon's unflinching devotion to the scientific method, his supreme indifference to the war of words around him, showed a deep appreciation of the real needs of his time.

Bacon is often called the father of experimental philosophy, but his works attempt no solution of the metaphysical problem; he carefully avoids throughout the use of ultimate terms. His idea of the nature of perception constitutes the great force of his system. He saw clearly that human knowledge is but an aspect of life, and that it springs from a fact which is more than human and deeper than personality. He saw the futility of trying to express this fact in terms either of human or divine personality, and therefore declared that all knowledge was subordinate to or expressed by facts. Generalizations, he reasoned, are only broad classifications of facts. He overlooked, however, the great truth that all facts must take some part in human life in order to be classified, and that the constant human or subjective term in every perception can be made to disclose a constant objective term; that in the multiplicity of facts a unity can be discerned, a principle which accounts for universal as well as individual life.

One of Bacon's celebrated aphorisms is: "Man, the min-

ister and interpreter of Nature, can act and understand in as far as he has, either in fact or in thought, observed the order of Nature: more he can neither know nor do." In other words, to understand any thing perfectly, that thing must harmonize with our experiences. If our experiences are not sufficiently extended to receive great truths, we must extend them by the accumulation of more facts, as the only means of increasing knowledge, or, what is the same thing, of enlarging life. If we were to reduce Bacon's method to a single sentence, we would say: do not jump at conclusions! His power and originality centre in the "systematization of graduated verification as the sole method of research."

He shows a great contempt for the conventional metaphysical method of forming generalizations from insufficient facts.

"There are two ways," he says, "of searching after and discovering truth; the one, from sense and particulars, rises directly to the most general axioms, and resting upon these principles and their unshaken truth, finds out intermediate axioms, and this is the method in use; but the other raises axioms from sense and particulars by a continued and gradual ascent, till at last it arrives at the most general axioms, which is the true way, but hitherto untried.

"The understanding, when left to itself, takes the first of these ways; for the mind delights in springing up to the most general axioms, that it may find rest; but after a short stay there it disdains experience, and these mischiefs are at length increased by logic for the ostentation of disputes.

"The natural human reasoning we, for the sake of clearness, call the anticipation of nature, as being a rash and hasty thing; and the reason only exercised upon objects, we call the interpretation of nature."

To interpret nature, therefore, was Bacon's only way to learn. As Bacon paid little or no attention to an ultimate analysis, he never seemed to realize that the greatest need of the race is a point of beginning for perception, so that all the "graduated verifications," upon which he so earnestly

insisted, should invariably lead us back to one incontrovertible principle. That he nevertheless, felt the possibility of such an analysis is manifest from the following passage in his "Novum Organum": "But let none expect any great promotion of the sciences, especially in their effective part. unless natural philosophy be drawn out to particular sciences: and, again, unless these particular sciences be brought back again to natural philosophy. From this defect it is that astronomy, optics, music, many mechanical arts, and what seems stranger, even moral and civil philosophy and logic, rise but little above their foundations, and only skim over the varieties and surfaces of things, viz.: because after these particular sciences are formed and divided off, they are no longer nourished by natural philosophy, which might give them strength and increase; and therefore no wonder if the sciences thrive not, when separated from their roots."

The roots of all science he thus conceived to be *moral* or *natural* laws. To reduce these natural laws or experiences to a single principle never seemed to occur to him as feasible.

Bacon said that Aristotle corrupted natural philosophy with logic, which simply means that he reasoned beyond his depth.

Aristotle for centuries was regarded as the originator of the inductive method, because he was a scientist and studied nature, carefully accumulating facts and drawing from them general laws. He classified facts through resemblances of different kinds, and gave to these resemblances names. His attention was largely devoted to the study of comparative anatomy, the resemblances in the structure of animals. These classifications have led to our present division of the whole animal kingdom into five sub-kingdoms, each of these sub-kingdoms again divisible into provinces, each province into classes, and the classes into successively smaller groups, orders, families, genera, species. Surely thus far Aristotle did not corrupt natural philosophy. But

^{1 &}quot; Novum Organum," I., Aph. 79, 80.

he did strive to reach an ultimate analysis, and to this end he framed his ten categories of thought. He also indulged in a great deal of metaphysical speculation, which Bacon regarded as a sheer waste of time. It is an interesting fact that Bacon should have differed so much from Aristotle and still have inherited from him his own chief distinction for Bacon is now widely known as the apostle of the inductive method of philosophy. This method is supposed by some to constitute a kind of reasoning distinct from that employed in the deductive method; whereas all that is really meant by the terms induction and deduction is a different manner of investigating facts, the process of reasoning being constant in all methods. Before Aristotle's time the animal kingdom was regarded as a great mass of unrelated phenomena. Biology was unknown, and anatomy and physiology were confined to such rude results as could be obtained by untrained observation. The result was that the knowledge of animal life was chaotic. As we have seen, Aristotle studied animal structures, and from comparisons built up classes of resemblances. This is the inductive method of research, because it is said to proceed from particulars to generals. It is contrasted with the deductive method, or the procedure from generals to particulars.

The fault which Bacon finds with Aristotle, then, is simply that he did not proceed to the farthest lengths of reasoning, that he did not define the contrasted nature of individual and general existence, without breaking loose from his careful synthesis of organic life. This objection of Bacon's is well taken; but it must be remembered that Aristotle was far less fully equipped for such an undertaking than Bacon might well have been, and that the latter lacked the ambition and courage for the attempt.

CHAPTER VI.

MODERN PHILOSOPHY.

Descartes-Spinoza-Hobbes-Locke-Hartley-Leibnitz-Berkeley-Hume.

If it is to England that we owe the inauguration, through Francis Bacon, of experimental science, it is to France that we are indebted for the firm establishment of Modern Philosophy. The writings of René Descartes Duperron mark the transition from mediæval to modern thought. To be a great thinker is a higher distinction in France than in any other country. Not that there are as many scholars in France as there are in Germany, or that the logical achievements of England suffer by comparison with those of the continent; but the French language affords the least opportunity of all tongues for vagueness of expression, and hence a system of philosophy, to command lasting respect in France, must be distinguished for clearness, definiteness, and good sense. Such, allowing for the time in which it was written, is the system of Descartes.

Born in 1596, Descartes was contemporaneous with Galileo, and suffered not a little from the spirit of religious intolerance which pervaded Europe at that time. Educated by the Jesuits, he had no sooner mastered the religious and philosophic thought of his time than he announced his dissatisfaction with it. He declared that the only result of his studies had been to enable him to discern his utter ignorance. At the age of twenty-three he conceived the project of reorganizing the philosophic knowledge of the world, and began a series of travels principally in his own country, for the purpose of studying life. These travels, which lasted about ten years, included various periods of service in the army. The

garrison life afforded him opportunities of study, and brought him in contact with many scholars of note. Mathematics was the favorite study of Descartes, and it was not long before he achieved a European reputation in this science. The faculty which he acquired for solving problems was marvel-The discovery of the application of algebra to geometry, his chief scientific merit, was a crisis in his career. The manner in which he approached this discovery he thus describes: "The long chains of simple and easy reasons which geometers employ in arriving at their most difficult demonstrations made me fancy that all things which are the objects of human knowledge are similarly interdependent: and that, provided we abstain from assuming any thing false. and observe the correct order in deducing things one from another, there are none so remote that we cannot reach, and so hidden that we cannot discover them. I was at no trouble in finding out where to begin: for, considering that the mathematicians only had attained to some certainty, and this because they occupied themselves about the easiest subject of all, I thought I should examine this first. And then, considering that to know the mathematical sciences, I should sometimes require to consider them each in detail. and sometimes only to retain or understand several of them conjointly, I thought that to consider them better in particular I must consider them in lines, because I could find nothing simpler, or more distinctly representable to my imagination and senses; but to retain them, or to consider several of them together, it was necessary to explain them by the briefest possible symbols, and thus I should borrow all that was best from geometrical analysis and from algebra and correct the defects of each by the other."

This puissant method opened up new fields of discovery to Descartes. Not content with applying it to mathematics, he saw its bearing upon the physical sciences, and even entertained a vague hope of applying it in some form to the study of mind. "Not that I ventured to examine forthwith all manner of problems, which would have been a vio-

lation of my rules; but, knowing that their principles must all be derived from [first] philosophy, in which I could, as yet, find none that were certain, I thought that here, above all, I ought to establish them." Thus we see that the exact deductions of mathematics had a charm for Descartes, and supplied him with a method to which he always afterward adhered. During these ten years of wandering, Descartes resided at times in Paris, where he had the advantage of scientific friends—as well as the distraction of Court life into which his good social position introduced him. This scientific association gave him ample exercise in mathematics and developed in him a taste for other investigations, among which is prominently mentioned practical optics; but he longed for more abstract studies and the retirement which makes them possible.

At the age of thirty we find him secluding himself in Holland and beginning the work which resulted, eight years afterward, in the publication of the "Discourse on Method," and the celebrated "Meditations." The appearance of these works interested at once the learned world, and their author was almost immediately recognized as an original and powerful thinker. Charles the First of England and Christina of Sweden urged him to come to their respective Courts. The civil war in England decided his choice in favor of Stockholm, where he became interested with Christina in the establishment of an academy of sciences. Descartes' delicate health, however, soon succumbed to the rigor of the northern climate. With Scandinavian indifference to comfort, Christina insisted upon taking her lessons in philosophy at five o'clock in the morning of an Arctic winter. Descartes was too chivalrous to demur; and scarcely had he begun to teach his royal friend the principles of his philosophy, when he was taken with the illness which in a few days caused his death.

In the development of the mind of Descartes we find mirrored the dawn of modern philosophy in Europe. His appreciation of the advantages of a broad culture can be judged

of from the famous autobiographical passage in the opening of the "Discourse on Method": "I know that the languages I then learned were necessary for the understanding of ancient authors: that the grace of myths stimulates the mind: that the memorable deeds in histories exalt it, and, being read with discretion, and in forming the judgment, that the reading of all good books is like a conversation with the best people of past centuries who have written them, nav. even a studied conversation, in which they disclose to us only their best thoughts: that eloquence has incomparable strength and beauty; that poetry has enchanting delicacy and sweetness. * * * But I came to think that I had spent enough time at languages, and even in the reading of ancient books and their histories and fables: for it is almost the same thing to converse with men of other ages as it is to travel: but if one travel too long, one becomes a stranger to one's own home. * * * I highly esteemed eloquence and loved poetry; but I thought that both one and the other were mental endowments rather than the fruits of study. Those who have the strongest reasoning faculty and digest their ideas most thoroughly, so as to make them clear and intelligible, are always best able to persuade men of what they propose even though they talk bas Breton and have never learned rhetoric; and those who have the most pleasing fancies, and can express them with best adornment and most sweetness, will still be the best poets, even should the art of poetry be unknown to them."

Passing from this delineation of culture to his philosophic position, we find that Descartes perceived that a vacuum, or absolutely empty space, was an impossibility. He said that the essence, or first principle of matter, or substance, is extension, and that wherever there is extension there is matter; or, which is the same thing, he identifies Matter with Space. "The substance which fills all space must be assumed as divided into equal angular parts. Why must this be assumed? Because it is the most simple, therefore the most natural supposition. This substance being set in

motion, the parts are ground into a spherical form, and the corners thus rubbed off, like filings or sawdust, form a second or more subtle kind of substance. There is, besides, a kind of substance, coarser and less fitted for motion. The first kind makes luminous bodies, such as the sun and fixed stars: the second makes the transparent substance of the skies: the third kind is the material of opaque bodies, such as earth. planets, etc. We may also assume that the motions of these parts take the form of revolving circular currents, or *vortices*. By this means the matter will be collected to the centre of each vortex, while the second or subtle matter surrounds it. and by its centrifugal effort constitutes light. The planets are carried round the sun by the motion of this vortex, each planet being at such a distance from the sun as to be in a part of the vortex suitable to its solidity and mobility. The motions are prevented from being exactly circular and regular by various causes. For instance, a vortex may be pressed into an oval shape by contiguous vortices." 1

With these rather fanciful theories of physics.—fanciful from our point of view, but exceedingly penetrating when we consider the state of science in the beginning of the seventeenth century.—Descartes makes the most important assertion in the whole range of physical truth, but he seems to have little conception of its vast logical importance. This assertion was the identification of Matter and Space, as convertible terms, representing the ultimate statical generalization. The ultimate fact with Descartes was personal existence, or consciousness. From this he deduced the fact of general existence, or God. His famous dictum, "I think therefore I am," is really an identical proposition; for the kind of existence postulated is Consciousness, or the act of thought. His proposition simply means, Existence being thought, I think therefore I exist, or, I think therefore I think. The method of Descartes is a faithful elaboration of his fundamental tenet of consciousness. His capital axiom is, "All clear and distinct ideas are true": which means

¹ Whewell: "Hist. of the Inductive Sciences," vol. II., p. 134.

that thought justifies itself. This rule, although true in the sense that all facts justify or express themselves, is merely an argument against a superstitious belief in causes. It advocates a careful scrutiny of the relations between cause and effect.

The assertion that all clear and distinct ideas are true, does not disclose the *nature of perception*; nor does the dictum "I think therefore I am" throw any light upon the purely relative nature of the fact of individuality, or personal existence. Descartes, in deducing the existence of God from personal existence, clearly reversed the order of perception; for God is the Ultimate Reality, the chief fact from which all individual facts are but derivations.

In perception, the individual responds to the universe; and as the individual is but a part of the universe, the fact of personal existence is subordinate to that of general existence, or God.¹ God cannot, therefore, be deduced from consciousness, but consciousness may be deduced from God. The conception of Deity is an ultimate analysis. Every conception, however humble, employs this fact as an integral part.

To reduce the above argument to metaphysical terms, God is Motion—thoughts, or individual perceptions, are motions. Here we have Divine Unity contrasted with the variety which is expressed in personal life.

With Descartes, who read and admired Bacon, and utilized many of his valuable suggestions, the beginning of modern science was fairly inaugurated. In the metaphysical reasonings of Descartes I am unable to see more profundity or originality than can be found among the ancient Greek and Alexandrian authors. The dissatisfaction with the ancients, so commonly felt at the time, was more with their science than with their philosophy, more with the paucity of their facts than with the use made of them.

¹ This interpretation of consciousness is fully explained in the review of the systems of Herbert Spencer and G. H. Lewes, Part II., where the mind is studied as the activity of an organism.

A full appreciation of the greatness of Descartes can be had only by viewing him in the scientific plane of his age. His ideas on physics were elaborated before the other parts of his system, although the fear which the persecution of Galileo inspired delayed for a long time their publication. Descartes saw that it was impossible to write upon philosophy without ultimately declaring himself upon these questions, and therefore his true originality was hidden for a time through fear of a conflict with the church. Had he announced his discoveries concerning the operations of nature as they occurred to his mind, he would have destroyed his influence and imperiled his liberty. His first philosophic production was an elaborate exposition of the true method of investigation. Its title was, "Discourse on the-Method of Properly Guiding the Reason in the Research of Truth in the Sciences: also the Dioptric, the Meteors, and the Geometry, which are Essays in this Method." It is seen that, in this work, an effort was made to avoid religious controversy. It was distinctly scientific. Of course, in studying the nature of thought, it is necessary to become metaphysical: but where this occurs, the argument is couched in conciliatory and devout language, with the manifest object of escaping the direct charge of infidelity.

In the fourth division of the "Discourse on Method" the nature of God and of the human soul is discussed. By a course of reasoning which ignores one difficulty after another, the author arrives at the conclusion that the human soul is absolutely distinct from the body; that this soul is put into the body by a divine being infinitely perfect, whose existence is proved by the ideas we have of his perfection. These ideas disclose to us our imperfection, as the positive discloses the negative, or as being discloses non-being.²

No one can read the fourth division of the "Discourse on Method" without seeing in it the identical metaphysical reasonings which are most popular with the orthodox writers

^{1 &}quot;Discours de la Méthode," vol. I., pp. 158, 159.

² Ibid., vol. I., p. 60.

of the present day. The popularity of these metaphysics is due to the fact that they are just enough involved to escape the plain statement that God is not a spirit, but the ultimate reality or fact of the universe.

The theologians of the seventeenth century, however, were by no means satisfied with these guarded statements; and although Descartes declared himself a conservative in faith, although he was a "pet pupil of the Jesuits," and strove earnestly to discuss philosophy apart from religion, and to uphold the moral teachings of the church, the appearance of his argument on Method was the occasion of a tempest of controversy, in which he was bitterly assailed by the leading theologians of the Universities of northern Europe, both Catholic and Calvinistic. These attacks were made by theological theses against Descartes, in some of which the printed comments were so offensive that they were struck out by order of the magistrates of Utrecht.

About four years after the appearance of the "Discourse on Method," the "Meditations" made their appearance. These were more religious in tone, and consequently more metaphysical. Unlike his first work, they were written in Latin, and constitute a labored argument about first principles. Although they are considered by many to be the greatest achievement of Descartes, they are in reality the least valuable of his writings. The "Meditations" was printed in Paris in 1641, with the King's privilege and the approbation of the Doctors of the Sorbonne. The full title was "Meditations concerning the First Philosophy, in which are demonstrated the Existence of God and the Immortality of the Soul." The official sanctions under which this work was published were obtained by the direct prayer of Descartes, who felt keenly the attacks made upon his first work. He also took the precaution of having a dozen copies of the "Meditations" submitted to the ablest theologians of the time, so that the criticisms might be obtained and published with the author's replies to them, thus establishing the work in a controversial light from the beginning. One of the chief

results of these criticisms, which came from such distinguished men as Arnauld, Gassendi, and Hobbes, was to change the discussion of the *immortality* to the *immateriality* of the soul, which latter title was more in accordance with the manner in which Descartes treated the subject.

The scientific writings, which form the most interesting part of the "Method," were omitted in the "Meditations," which reduce it to a mere enlargement of the metaphysical argument of the first publication. This argument concerning the relative importance of the facts of general and personal existence, or of God and the human soul, has been fully dealt with above. The question of the principles of certitude, or the measure of doubt, also receives much attention in the "Meditations." As has already been explained in a previous chapter, this question belongs to the nature of perception, or the study of mind as the function of the organism, and cannot be successfully discussed in the absence of an ultimate physical analysis, or without full understanding of the relation of body and mind. What concerns us most is, not the logical position of the "Meditations," for this position has been superseded long ago, but the effect which the work wrought upon the world and the life of the author.

In the preface to the "Meditations," Descartes, not feeling quite satisfied with his proof of the immortality of the soul, says, that a strict proof of this theory would require a complete development of his whole system of physics. He suggests that the first requisite is to form a "clear and distinct" conception of the soul as distinct from the body, because substances thus clearly conceived to be distinct must really be so; which is in effect "taking firm hold of one's own sleeve in order to jump over the river." In reply to the objection that Hobbes made to this argument, Descartes admits that we only infer the difference between mind and body from the difference in their qualities, or activities, which as above said, at once remands the whole

¹ See Part II., chap. i.

question to the study of mind as the function of an organism, or modern psychology.

The Protestant theologians of Utrecht and Leyden, irritated by the imprudent enthusiasm of one of Descartes' disciples. Le Roy (Regius), began a systematic opposition to the Cartesian philosophy. This movement developed into a persecution which proved a grievous trial to Descartes. It began with disputations by theses in the Universities. which were followed by the public with intense interest. These disputes were confined for some time to general principles, but Le Roy, wishing to force a logical issue with his adversaries, boldly announced the principle, under the authority of Descartes, that man was a being composed of the two elements of mind and extension: that he was not a substance per se, but a substance per accidens, which means, that human existence is not an unconditioned fact, but that man is a natural phenomenon, and is therefore the function of his conditions. This announcement was a direct challenge to the powerful orthodox party. The Protestants. represented by Voët and Arnauld, the rectors of the Universities of Utrecht and Levden, immediately resented it. The acumen of these theologians can be judged of from the fact that they were Aristotelian in their faith, bitterly opposing the theory of the earth's motion round the sun. which theory they identified with the philosophy of Descartes. From our point of view, it would seem as though all the best thought and intelligence of the seventeenth century were arrayed against Christian orthodoxy, but this is hardly fair either to the early Protestants or the Catholics; for religion does not oppose science because it is science, but because new theories of life and mind disturb the authority and dignity of the church. As long as religion attaches her faith to persons instead of to principles, to fixed creeds having the authority of mysterious books instead of to the great principles of human progress, so long will those discoveries which are the natural movement of life disturb her peace. A religion on the contrary which identifies God with the Universal Principle will employ science as a great moral power, enlisting in its services the best efforts of the mind.

The Calvinist theologians, headed by Voët, were so bitter in their attacks on Descartes, that an appeal to the Prince of Orange was necessary to put a stop to the persecution. The authority of this prince alone saved the theories of Descartes from being formally expelled from the University teachings, and his books from being publicly burned by the hangman of Utrecht. The right of private judgment, which was the fundamental principle of the Cartesian philosophy, first excited the opposition of the church, both Protestant and Catholic; for Christianity rests its judgments or perceptions upon the theory of faith originated by the Alexandrian mystics.

The enduring part of Descartes' system, that which has fairly won for him the name of a great thinker, was his original investigations of natural phenomena and his able criticisms of the sciences. His metaphysics, his reasonings concerning existence, as above indicated, were not in advance of the best Greek thought. Epicurus made a more perfect synthesis of life, Anaximander a far keener analysis of first principles; but Descartes gathered together the learning of his age, enriched it with new investigations, and co-ordinated it into a system of knowledge which will ever bear his name and mark an epoch in human history.

The science of mathematics is purely a study of motion and its aspects; that is to say, it expresses all its results in terms of time and space, or of number and quantity, which are but the aspects of motion.

Descartes felt that all phenomena could be reduced to terms of time and space, and thus "insisted upon the only true path ever followed by physical science—its reduction to the mathematical laws of figure and of motion.

"Having first shown," says Prof. Mahaffy, "that by the earliest of his discoveries all problems in figure could be reduced to arithmetical formulæ, and that these could be generalized by the use of algebraic symbols, he insisted that

nothing should be assumed in explaining the laws of nature but the laws of figure and motion. He cast to the winds the whole apparatus of occult qualities, intuitional species, and other assumed secrets by which the scholastic Peripatetics endeavored to explain, and by which they succeeded in obscuring and confusing, nature."

The boldness and novelty of this position of Descartes' can only be appreciated by looking at his scientific surroundings. In our day, we are so accustomed to the assertion that all phenomena can be expressed in terms of motion, that the importance of this great truth escapes us. How few among those to whom this proposition is familiar are willing to admit its full significance,—that all phenomena means all life, and that the term life includes mind. Descartes, even, failed to rigorously follow out the meaning of his own induction. He states that all phenomena can be expressed in terms of motion, which distinctly means that motion is the ultimate fact of life; and yet the fundamental principle of his metaphysics, or his analysis of knowledge, is, that consciousness, or mind, is the ultimate fact of life.

His application of algebra to geometry, or his expression of space relationships in algebraic symbols, led to the development of the fluctional calculus elaborated by Newton and Leibnitz, which constitutes the most exact portrayal science affords of infinitesimal measurements or motions. This discovery of Descartes' raised the science of geometry from a mass of isolated demonstrations of figure and measurement, as it came to us from the ancients, to a system of abstract calculations, in which given powers of co-efficients are made to represent constant space relationships. Thus Descartes introduced his philosophy with brilliant discourses in mathematics and physics, which at once commanded the attention of scholars, and gave to his more abstract reasonings a reputation which they could not have achieved of themselves.

"The Principles of Philosophy," the first planned and last published of his capital works, was the most thorough of them all; and yet the author admits that this great treatise on physics was incomplete, inasmuch as it was not extended to the treatment of plants, animals, and lastly of man; so that what is generally supposed to be the greatest logical feat of Descartes—his postulate that consciousness is the ultimate fact of the universe—is seen to be a direct contradiction of his best and most original teachings, which tended to subordinate individual to general existence, or consciousness to the more general fact of Motion, or God.

Benedict Spinoza was born in Amsterdam, in 1632, of a Hebrew family that had moved from Portugal to escape persecution. He studied under the auspices of the Jewish church of his native city; but his mind soon rebelled against the limits of this religion, and the Rabbins, finding it impossible to change his course, visited upon him the then terrible penalty of excommunication.

Among the ancients, the word *piety* seems to have been employed in the sense which we give to the word *humanity*. It had less to do with formal beliefs and more with character. A man who sought universal truth, for its own sake, was considered pious.

The Greeks knew less of the importance of religious discipline than we do; being without the past two thousand years of human experience, they were unable to distinguish between intellectual and moral exercise as factors in social advancement. Again: the intellectuality of the Greeks was less taught, more spontaneous, than ours. The great fact that thought purifies was constantly before them. A man, to be a great thinker in Greece, had to do, for the most part, his own thinking. He had not our facilities for imbibing thought ready-made from others. Those wide sympathies which are the necessary accompaniment of a deep understanding of life, presuppose a certain moral advancement. To discourse of God, or the Universal Principle, in Greece, was not that semi-mechanical operation which we so often see among religious teachers of more recent times. It was an enthusiasm for the higher or most general truths, at once elevating and purifying to the whole life. This thoughtful and devotional cast of mind the ancients called piety. It demanded a certain capacity, an earnest and sustained effort to bring the mind into harmony with its farthest surroundings; an effort which is sure in time to compel moral development.

It was this kind of piety that was the inspiration of Spinoza's life; and so completely did it possess him, that the sentence of excommunication with its terrible consequences did not even seem to depress him. His life is a singular instance of the resources which we possess in the higher sentiments.

It was not considered enough for the ancient Jewish doctors to be scholars; they were required also to learn some mechanical art by which to support themselves. Spinoza learned the art of polishing glasses for optical instruments, in which he attained great proficiency. To escape persecution, he retired to Leyden or Rynsberg, where he passed the life of a recluse, devoting himself to study.

A heroic firmness that is truly invigorating to contemplate shines throughout the life of this man. Our deepest admiration is aroused by his independence of spirit, his cheerful nature, his moderate wants and indefatigable industry.

In the doctrines of Spinoza we have a worthy study. Many have complained of the abstruseness of his writings, but this is largely due to his persistent effort to reduce all his generalizations to mathematical forms of expression. The language of numbers and quantities is too cold and inflexible to serve as a medium of philosophic thought.

To give an idea of the rigidity of Spinoza's style, we cite a few of his celebrated definitions, and place opposite to them the interpretation which the reduction of the categories of thought to a single principle enables one to make.

"DEFINITION III.—By Substance I understand that which exists in itself, and is conceived perse; in other words, the conception of which does not re-

Existence is the ultimate reality, or Motion. Substance, of course, has a place in the conception of Motion. For if matter and space are the same quire the conception of any thing else antecedent to it,"

se thing, and space is merely an aspect of Motion, our conception of Substance is a part of that of Motion.

"DEF. VI.—By God I understand the Being absolutely infinite, i. e., the Substance consisting of infinite Attributes, each of which expresses an infinite and eternal essence.

"Explanation.—I say absolutely infinite, but not infinite suo genere; for to whatever is infinite only suo genere we can deny infinite Attributes; but that which is absolutely infinite includes in its essence every thing which implies essence and involves no negation."

"DEF. VIII.—By Eternity I understand Existence itself, in as far as it is conceived necessarily to follow from the sole definition of an eternal thing." If absolute means time, and infinite means space, God, or the ultimate generalization or reality, and Motion, are convertible terms; they mean the same thing, for the aspects of Motion being space and time, and the attributes of God the infinite and the absolute, they are convertible terms, and must point to the same fact.

The "Explanation" of the definition I consider more involved than the definition itself, and therefore not, properly speaking, an explanation.

There is but one clear meaning to the word Eternity, and that is Time. Time is an aspect of Motion, and is therefore an aspect of Existence. In No. III. Spinoza says that Substance is Existence itself, and in No. VIII., that eternity is Existence itself. In one case he means Space and in the other Time, and in *both* his words express the conception of Motion, which includes Space and Time.

At the risk of being tedious, we select the seventh and eighth of Spinoza's Propositions with the *Scholium* attached, in order to show how necessary it is to be definite and clear with regard to the meaning of ultimate terms in forming a final generalization, and also what store Spinoza placed by his ultimate generalization, which he called *Substance*.

[&]quot;Proposition VII.-It pertains to the nature of Substance to exist.

[&]quot;Demonstration.—Substance cannot be created by any thing else, and is, therefore, the cause of itself; its essence necessarily involves existence; or it pertains to the nature of Substance to exist."

[&]quot;PROP. VIII.—All Substance is necessarily infinite.

[&]quot;Dem.—There exists but one Substance of the same Attribute; and it must either exist as infinite or as finite. But not as finite, for as finite it must be

limited by another Substance of the same nature, and in that case there would be two Substances of the same Attribute, which is absurd. Substance, therefore, is infinite."

"Scholium.—I do not doubt that to all who judge confusedly of things, and are not wont to inquire into first causes, it will be difficult to understand the demonstration of Prop. VII., because they do not sufficiently distinguish between the modifications of Substance and Substance itself, and are ignorant of the manner in which things are produced. Here it follows, that seeing natural things have a commencement, they attribute a commencement to Substances; for he who knows not the true causes of things confounds all things, and sees no reason why trees should not talk like men, or why men should not be formed from stones as well as from seeds, or why all forms cannot be changed into all other forms. So, also, those who confound the divine nature with the human naturally attribute human affections to God, especially as they are ignorant how these affections are produced in the mind. But if men attended to the nature of Substance, they would not in the least doubt the truth of Prop. VII.; nay, this proposition would be an axiom to all, and would be numbered among the common notions."

This effort of Spinoza at mathematical exactness in thought serves to bring out boldly the nature of the final problem of philosophy. It demonstrates also the impossibility of using more than one term to denote the Ultimate Reality, unless the equivalence of meaning between the terms is distinctly laid down. It also shows how necessary it is to determine the exact relationship existing between all the categories, such as time, space, matter or Substance, force, the infinite, the absolute, etc.

Time and Eternity are used by Spinoza without any acknowledgment that they mean the same thing. Again: space, matter, extension, infinite, follow in close succession without any effort being made to harmonize or compare their meanings; whereas in their widest sense they mean precisely the same thing. This important fact is brought out indirectly by Spinoza's own arguments; for a careful examination of the exhaustive definitions of Substance which he offers shows that it is impossible to establish any ultimate difference between the meaning of the terms he employs to denote space or extension. Again: the words essence, substance, God, and existence, are used repeatedly in a similar sense, and yet no distinct declaration is made of

their equivalence of meaning. Is it any wonder that metaphysics should have been declared a failure by the ancient skeptics, and an effete science by modern agnostics? And yet how remarkable it is to see throughout the writings of these schools an ever-renewed effort to solve the metaphysical problem!

It is impossible to discuss philosophy in any of its phases without including, directly or indirectly, this problem. Indeed, so fundamental is this great question of the meaning of ultimate terms, that scarcely a thought or feeling can be imagined that is not, in some degree, influenced by it; and the science of metaphysics, instead of being the farthest removed from practical life, is really the mainspring of all human action, for it identifies and correlates the energies of the mind with those of the universe.

When this simple solution of the metaphysical problem shall have become the property of the thinking world, the illogical misgivings which we call skepticism, or agnosticism, will disappear, with all those lower forms of belief in mystery known as *superstition*, and it will be no longer necessary for the mind to become shipwrecked among the meanings of ultimate terms in the outset of the study of human progress.

Spinoza was the opposite of a skeptic. Although it has by no means been acknowledged that his system successfully refutes the doctrines of skepticism, it opposes these doctrines consistently throughout. Here the difference between Spinoza and Lewes appears.

Spinoza declares that our knowledge is real, that our impressions of things disclose their real nature. Lewes says that our knowledge is only knowledge of phenomena, and therefore does not disclose the actual nature of things; which is a gratuitous assertion that the *actual* is a mystery, or something that cannot be understood.

There is perhaps no more direct way of explaining the philosophy of Spinoza than by quoting his argument against the teleological interpretation of nature: this argument 122

occurs in the form of an Appendix to the book "De Deo": "Men do all things for the sake of an end, namely, the good, or useful, which they desire. Hence it comes that they always seek to know only the final causes of things which have taken place, and when they have heard these they are satisfied, not having within themselves any cause for further doubt. But if they are unable to learn these final causes from some one else, nothing remains to them but to turn in upon themselves, and to reflect upon the ends by which they are themselves wont to be determined to similar actions; and thus they necessarily judge of the mind of another by their own. Further: as within themselves and out of themselves they discover many means which are highly conducive to the pursuit of their own advantage,—for example, eyes to see with, teeth to masticate with, vegetables and animals for food, the sun to give them light, the sea to nourish fish, etc.,—so they come to consider all natural things as means for their benefit; and because they are aware that these things have been found, and were not prepared by them, they have been led to believe that some one else has adapted these means to their use. For after considering things in the light of means, they could not believe these things to have made themselves, but arguing from their own practice of preparing means for their use, they must conclude that there is some ruler or rulers of nature endowed with human freedom, who have provided all these things for them, and have made them all for the use of men. Moreover, since they have never heard any thing of the mind of those rulers, they must necessarily judge of this mind also by their own; and hence they have argued that the Gods direct all things for the advantage of man, in order that they may subdue him to themselves, and be held in the highest honor by him. Hence each has devised, according to his character, a different mode of worshipping God, in order that God might love him more than others, and might direct all nature to the advantage of his blind cupidity and insatiable avarice. Thus this preju-

dice has converted itself into superstition, and has struck deep root into men's minds; and this has been the cause why men in general have eagerly striven to explain the final causes of all things. But while they have sought to show that Nature does nothing in vain (i. e. which is not fit for the use of men.) they seem to me to have shown nothing else than that Nature and the Gods are as foolish as men. And observe, I pray you, to what a point this opinion has brought them. Together with the many useful things in Nature, they necessarily found not a few injurious things, namely, tempests, earthquakes, diseases, etc.: these. they supposed, happened because the Gods were angry on account of offences committed against them by men, or because of faults incurred in their worship; and although experience every day protests, and shows by infinite examples, that benefits and injuries happen indifferently to pious and ungodly persons, they do not therefore renounce their inveterate prejudice."

This simple and commanding argument remands humanity to its due place in the universe, and rebukes that inordinate conceit which is known in metaphysics as Idealism. and in general philosophy as Anthropomorphism. former appropriates all reality to the mind, and the latter all nature to the purposes of man. The charge of atheism which was so generally brought against Spinoza rests chiefly upon his unfortunate selection of the term Substance to designate the Ultimate Reality; for it naturally shocks the understanding to designate God by that single aspect of the Universal Principle which we call Substance, Infinity, or Space. In using the word Substance in this widest of its applications, Spinoza meant the substance of existence, or life, the ultimate fact, rather than the statical aspect of the universe which we call Matter or Space. justice of the claim for Spinoza that he distinctly appreciated the divine unity of nature, and rose above the level of idealism, and all other teleological interpretations of life, none who carefully follow his thought will dispute. The most condensed description of his philosophy, and one on the main points of which all the best authorities agree, is given by Lewes. "There is but one infinite Substance, and that is God. Whatever is, is in God: and without Him, nothing can be conceived. He is the universal Being of which all things are the manifestations. He is the sole Substance: every thing else is a mode: vet, without Substance, Mode cannot exist. God, viewed under the attributes of Infinite Substance, is the *natura naturans*,—viewed as a manifestation, as the Modes under which his attributes appear, he is the natura naturata. He is the cause of all things, and that immanently, but not transiently. He has two infinite attributes-Extension and Thought. Extension is visible Thought, and Thought is invisible Extension: they are the Objective and Subjective of which God is the Identity. Every thing is a mode of God's attribute of Extension; every thought, wish, or feeling, a mode of his attribute of Thought. * * * Substance is uncreated, but creates by the internal necessity of its nature. There may be many existing things. but only one existence; many forms, but only one Substance. God is the idea immanens—the One and All."

The obvious fault in this analysis of existence, or life, is that thought is regarded as an ultimate fact,—a fact as simple and general as space or extension—an attribute or aspect of God; whereas thought is a very complex phenomenon requiring a vast plexus of conditions. It presupposes the facts of sentiency, of organic life, of individuality, and is therefore far removed in the scale of generality from the subjective aspect or attribute of God, which is the meaning that Spinoza applies to it. Again: Extension is said to be the opposite aspect of God, the antithesis of thought; while thought, again, is said to be invisible extension. Confusions here are multiplied, for matter is the name commonly given to that space or extension which is sufficiently tangible to be called visible; and although thought, viewed as the activity of an organism, has a distinct statical aspect, there is surely no necessity for confusing the ideas of thought and matter. This is where Spinoza has laid himself open to the charge of Pantheism,—that theory which invests all nature, animate and inanimate, with an inherent faculty of thought, and confusing again the ideas of thought and God, disseminates, as it were, a thinking *spirit* of God throughout the universe,—a sort of magnificent fetichism, filling all things with an omnipotent mystery. How different from that simple and pure conception of Deity which demarcates thought as simply an aspect of individuality, recognising in God, or general existence, the divine principle of Life, having eternity and infinity respectively for its subjective and objective aspects.

Spinoza did not carry his impeachment of the teleological interpretation of nature far enough; for, although he exposed the presumption of the belief that nature moves for the benefit of man, he confused that attribute of man which we call thought with the subjective aspect of God. This confusion was a natural consequence of the Cartesian dualism (in which philosophy Spinoza had thoroughly grounded himself), and also furnished an excuse for the extravagances of German idealism which were soon to follow.

Spinoza's greatest work is "Ethics Demonstrated by a Geometrical Method," from which most of the foregoing quotations are given. It is generally admitted that this work is a masterpiece of metaphysical reasoning, and many writers say that it has never been successfully attacked, such is the rigor and precision of its deductions.

Spinoza lived a life of retirement and privation, principally in Holland, where he was, in a measure, protected from the fierce religious persecution of the seventeenth century. For more than a hundred years after his death he was generally stigmatized as an atheist and a monster. The German scholars of Goethe's time, notwithstanding these epithets, promptly recognized his great genius and the touching sublimity of his life and character. Goethe says of him, the man was represented an "Atheist, and his opinions as most abominable; but immediately after, it is admitted

that he was a calm, reflective, diligent scholar, a good citizen, a sympathizing neighbor, and a peaceable domestic man."

Just at the close of Descartes' career, and before the great unity of Spinoza's thought had been given to the world, a mind of singular power and clearness made its appearance in England. Thomas Hobbes, like most of the scientific men of his time, was an eminent mathematician. He studied at Oxford, where the Ptolemaic system of astronomy was still taught, and where the philosophic lectures were chiefly confined to scholastic metaphysics. This was before the law of gravitation or the fluctional calculus had been discovered, as Newton and Leibnitz were in their boyhood. The circulation of the blood, which had been known to the Chinese five hundred years before, had just been announced in England by Harvey. The conservation and equivalence of the physical forces was a fact hardly as vet suspected. Galileo had discovered the spots on the sun, the satellites of Jupiter, and Saturn's rings, and was discussing other questions of astronomy with the monks of the Holy Inquisition. Kepler was engaged in working out his laws of the planetary motions. Milton, who had been carefully taught at Christ's College, Cambridge, that the sun turned round the earth, was planning the scene of his great drama of Heaven. The genius of Shakespeare, thirty vears after the great poet's death, was not yet recognized. The language of France was just attaining its present state of perfection under the magic sentences of Molière; and, as above indicated. Descartes, the first modern who applied to philosophy the rule of scientific investigation, had but a few years before published his "Meditations." It was with these surroundings that Hobbes, by a masterly analysis of the facts of consciousness, laid the foundations of the science of psychology, which has since attained to such development in England. Bacon before him had insisted that facts could alone be the foundation of knowledge; that theories, or

And to at least one Italian physiologist.

ideas, must always be subservient to facts. Proceeding uponthis slow but sure method, Hobbes, in a style that is simple, powerful, and clear, analyzed consciousness and thereby indicated the solution of the great problems of the scope of language and the nature of perception, which can alone afford an understanding of the relations of life and mind. It is also interesting to note that at this time the world had not yet heard of the adventures of German thought, as Germany was lying prostrate under the terrible effects of the Thirty Years' War, which had virtually destroyed her civilization. Her great intellectual life had not as yet begun. Hence, Hobbes had no bad examples of modern idealism to influence him (Berkeley and Kant were yet unborn); nor do his writings show that he troubled himself much about the dialectics of Plato, or the logical difficulties of the Skeptics.

The insight which Hobbes had of the all-important question of the scope of language is intimated by his famous aphorism: "Words are wise men's counters: they do but reckon by them; but they are the money of fools." This shows that he had studied out the great truth that language springs from action, and that thought is a part of action inseparable in nature from the simplest organic and even inorganic activities. Instead of this being materialism, it is the most exalted view of the mind, for it identifies mind with life,explaining the presence of the infinite and the absolute in our conceptions as the obverse aspects of the Universal Principle of life, or Motion. But it must not be assumed that Hobbes made a perfect analysis of the mind,—that would have been impossible with the limited scientific advantages of his time; but his conclusions, as far as they went, are the result of a careful study of facts, and are therefore valuable: he did not attempt those purely theoretical constructions which have since taken up so much room in philosophy.

The connection between thought and sensation is described by Hobbes with a candor and simplicity which is refreshing, after reading the tortuous theories of the metaphysicians. It is now a well-established fact that sensation

and thought are but different phases of the activity of a sentient organism. Thoughts are those vastly more complex co-ordinations of impressions which the highly-structured nervous organism, through the condensing process of language, accomplishes within us: while sensation is the comparatively simple external view of isolated impressions. But as there is no absolute dividing line between the muscle and the nerve, or between motorial and psychical phenomena, sensation insensibly becomes thought, and thought again sensation. These facts of psychology will be fully explained in the review of Lewes' works on the subject, which occurs under the study of the nature of perception, in Part II. The object in thus mentioning them in advance is to show how clearly Hobbes perceived the true relations between body and mind. Thus, in speaking of the origin of ideas, he says: "When a body is once in motion it moveth. unless something hinder it, eternally; and whatsoever hindereth it, cannot in an instant, but in time and by degrees, quite extinguish it; and as we see in the water, though the wind cease, the waves give not over rolling for a long time after: so also it happeneth in that motion which is made in the internal parts of man. * * * For after the object is removed, or the eye shut, we still retain an image of the thing seen, though more obscure than when we see it. * * * The decay [subsiding] of sense in men waking is not the decay of the motion made in sense, but an obscuring of it, in such manner as the light of the sun obscureth the light of the stars: which stars do no less exercise their virtue, by which they are visible, in the day than in the night. because amongst many strokes which our eyes, ears, and other organs, receive from external bodies, the predominant only is sensible; therefore the light of the sun being predominant, we are not affected with the action of the stars." The fault of Hobbes' analysis is not its incorrectness, but its incompleteness. As far as he goes, he has contributed to the science of psychology. It is true that his works lay neglected until James Mill discerned their merits; that Parliament passed censure upon them on account of the opposition they excited from the church; but this is due more to the ethical and sociological development of Hobbes' thought than to any thing repulsive in his analysis of mind.

The ethics of Hobbes are any thing but attractive, and his ideas of social development were as faulty as the exceeding complexity and difficulty of the subject, and the fact that it had hardly been touched upon before him, excepting in a purely theoretical manner, would lead us to expect.

Auguste Comte, who was practically the originator of sociological science, belongs to two centuries later. Such writings as the "Republic" of Plato can hardly be said to belong to a methodical study of the great problems of social life. Hence, when we read of "Hobbes' Theory of Government," and the "Social Contract," we expect little that is instructive, and we are not disappointed.

Hobbes teaches that the natural state of man is war, or mutual opposition, and that society consists in the establishment of an authority over him sufficient to overcome this opposition. The end of society, therefore, is to suppress the natural propensities of man,—not as *we* understand it, to develop his better nature. The absurd part of Hobbes' doctrine is the theory that the cause of the formation of society is the "misery of the natural state of war," and whether the authority exerted to suppress this natural state be founded upon the right of superior strength or cunning, or upon justice, matters not, providing it be strong enough to suppress the state of war.

- According to Hobbes, the justification of a government is in its strength, and therefore an absolute monarchy is the best form of government, because the strongest. It is easy to understand how his philosophy, loaded down as it was with these imperfect theories, was neglected for two centuries, and is even yet regarded with enmity by many. Not until the elder Mill discriminated Hobbes' valuable analysis of mind from his ethical and sociological theories, was this great English thinker appreciated even by his own countrymen.

While Spinoza was quietly elaborating his system of philosophy in Holland, and Newton and Leibnitz were unconsciously vying with each other in the higher mathematics, the study of mind, as the function of an organism, was taken up where Hobbes had left it and further developed by John Locke (1632-1704). He, too, studied at Oxford and became a mathematician, but principally devoted himself to medicine, in which science he attained marked proficiency. His life was cast in those troublous times in England when the principle of the "Divine Right of Kings," which James the First had introduced from Scotland, was being tested by the contending political and religious parties over which his son Charles the First tried to reign.

The Scotch Covenanters, so terribly in earnest in resisting that ritual in which they saw but a return to the despotism of Rome; the discontented Romanists, representing a large part of the culture and rank of the nation; the English Puritans, who opposed and mistrusted them; that large class of dissolute nobles, the immoral élite of England, too selfish to espouse any religion for its own sake, too unintelligent to adopt any broad national policy, supporting Royalty but for its emoluments and license, and laying up by their vices and crimes that reaction which Cromwell rose to control:—among these circumstances it was that England exhausted, at least for herself, the question of the divine right of kings. And this was the political, social, and moral atmosphere in which the ideas of Locke were formulated and promulgated. Toleration was a word of vast importance in those days; hence the conciliatory tone of Locke's writings. Many have mistaken his disposition to avoid too pronounced assertions on ultimate questions for logical weakness or mediocrity: thus Leibnitz calls Locke poor in thought, "paupertina philosophia." This view has been taken up by so many critics, that one who approaches Locke through his general reputation is surprised to find throughout his writings so much vigor and firmness of thought. His aim seems to have been to create a feeling against Scholasticism, or purely theoretical philosophy and its interminable disputes, and to study the workings of the mind with a view to discovering what it could do and what it could not do. His philosophy, therefore, was that of experience; for he examined into what the human mind did after it became a mind more than into the genesis of consciousness.

In modern philosophic writings the popular term for that branch of inquiry which begins with the fact of mind, and proceeds to study its assimilation of ideas, is a posteriori (or that which comes after the fact of mind). The term which denotes an inquiry into those principles which are anterior to the fact of mind is a priori.

It has been the habit of that school of writers in which Kant is pre-eminent to fix upon arbitrary categories or forms of thought and call them a priori ideas, for naturally enough they could not explain the existence of the mind from purely mental experiences. Without any attempt to explain the genesis of these a priori ideas, however, they proceed to build up vast theoretical systems in which the mind is the central mystery, to which all the other mysteries of their theories are made to point. To these a priori philosophers, or modern idealists, who have prospered most in the intellectual climate of Germany, we will give attention in the following chapter.

Locke, as the successor of Bacon and Hobbes, occupied a hostile position toward this school, which was the beginning of that broad divergence so plainly seen to-day between theoretical and practical philosophy, or the German idealists and the English psychologists.

Locke's principal philosophical work was written as early as 1671, although it was not published until 1690. The cause of this long delay was not improbably a very natural reluctance to augment by any possible means the fierce religious disputes which were raging in England, and indeed throughout Europe, during his entire life. This theory becomes all the more probable when we compare his utterances on religious subjects with the general clearness and

depth of his thought. In this regard let us first consider his ethical theories.

Although Locke taught a belief in a personal God, whose will was the source of all morality in man, he made the scope of moral conceptions purely human, or organic, by resolving the meaning of good and evil into that of pleasure and pain, making the ultimate test of virtue the degree in which it promotes pleasure and averts pain.

This is a logical necessity, to which all writers upon ethics are eventually brought; for the fundamental fact of individual or organic life is personal existence, and pleasure or happiness, used in its broadest sense, means successful existence, or life; and pain, used in its broadest sense, means the opposite of this, or death.

The question of conduct, therefore, in its simplest form. is a question of life and death; in its developed form it becomes a study of the most successful or highest life. Although Locke says that he believes morality can be reduced to a science, which means that conduct can be reasoned from its origin in the principle of life to all its applications in the details of our existence, he nevertheless makes use of much conventional and theological phraseology which deprives his system of the purity, breadth, and consistency which is demanded of such writings in our time. For instance, after reasoning against the existence of any innate moral rule or idea, he says: "The true ground of morality can only be the will and law of God, who sees in the dark, has in his hands rewards and punishments, and power enough to call to account the proudest of offenders; for God having by an inseparable connection joined virtue and public happiness together, it is no wonder that every one should not only allow, but recommend and magnify, those rules to others, from whose observance of them he is seen to reap advantage himself. The conveniences of this life make men own an outward profession and approbation of them, whose actions sufficiently prove that they but little consider the lawgiver that prescribed these rules, or the hell

he has ordained for the punishment of those that transgress them." 1

Thus we see that, although Locke rebelled against the theory of innate or supernatural ideas, he had a very mechanical way of looking upon the relations between the divine and the human. He seemed to think that the divine meant a God fashioned after man, dealing out rewards and punishments in a distinctively human manner, and even employing a mechanical hell to enforce his will. All this seems unworthy of the breadth of Locke's mind; but we must remember the times in which he lived and the condition of religious knowledge in England during the seventeenth century. After the above quotation, however, it is not without wonder that we read the following ethical comparisons: "Yet, if we ask a Christian who has the views of happiness and misery in another life, why a man must keep his word, he will give this as a reason: Because God, who has the power of eternal life and death, requires it of us. But if a *Hobbist* be asked why, he will answer: Because the public requires it, and the Leviathan will punish you if you do not. And if one of the old philosophers had been asked, he would have answered: Because it was dishonest. below the dignity of a man, and opposite to virtue, the highest perfection of human nature, to do otherwise." 2

This shows a complete independence of superstition; and we are compelled to believe that Locke, like Descartes, knew better than he thought it advisable to write on religious matters; or else, that he had not harmonized his thoughts on the existence and nature of God with the results of his other investigations. This opinion is confirmed by such passages as the following, which, although they do not deny, are surely intended to undermine the belief in a supernatural revelation. "So God might by revelation discover the truth of any proposition in Euclid, as well as men by the natural use of their faculties come to make the discovery themselves. In all things of this kind there is

[&]quot;Essay Concerning Human Understanding," vol. I., p. 62. Ibid., p. 61.

little need or use of revelation, God having furnished us with natural and surer means to arrive at the knowledge of them. For whatsoever truth we come to the clear discovery of, from the knowledge and contemplation of our own ideas. will always be certainer to us than those which are conveved to us by traditional revelation. For the knowledge we have that this revelation came at first from God can never be so sure as the knowledge we have from the clear and distinct perception of the agreement or disagreement of our own ideas. * * * The history of the deluge is conveyed to us by writings which had their original from revelation; and yet nobody. I think, will say he has as certain and clear a knowledge of the flood as Noah, that saw it; or that he himself would have had, had he then been alive and seen it. For he has no greater assurance than that of his senses that it is writ in the book supposed writ by Moses inspired: but he has not so great an assurance that Moses writ that book as if he had seen Moses write it."1

The extreme timidity of this criticism of the authorship of the Pentateuch is to be contrasted with the confidence with which Professor Max Müller now speaks upon the subject to the English public; but it should be remembered that Mr. Müller now places the latest known revelation of God to man as far back as Abraham, which renders all the historical surroundings of Moses perfectly natural.

The task which Locke set himself in writing the "Essay on Human Understanding" was, "to inquire into the original certainty and extent of human knowledge, together with the grounds and degrees of belief, opinion and assent"; or, as we would express it to-day, to examine into the objects of perception, and the principles of certitude, as distinguished from the nature of perception. Thus he confined

^{1&}quot; Works of John Locke," vol. III., pp. 140, 141.

² "And if we are asked how this one Abraham possessed not only the primitive intuition of God as He had revealed Himself to all mankind, but passed through the denial of all other gods to the knowledge of the one God, we are content to answer that it was by a special Divine Revelation."—Max Müller, "Chips from a German Workshop," vol. I., p. 367.

himself to that branch of psychology which begins with the fact of mind.

Locke, employing the ancient simile, viewed the mind as a tablet upon which experience records its impressions; a very inadequate way of looking upon mental phenomena, as it leaves out of view many prominent conditions. What resemblance is there, for instance, between a white tablet, which certainly has no reactionary power of its own, and a complex organism of definite structure, and therefore predetermined functions or activities, existing in a medium of language or intelligence which also has a definite structure, and hence the power of reacting in a predetermined manner?

The study of language as the social factor in mental phenomena, by such men as Comte, Spencer, and Lewes, has vielded rich results for psychology; but this view of language was scarcely entertained in the time of Locke. The nearest approach to this great subject which he made was his dim foreshadowing of the "association of ideas," afterward developed by Hartley and Mill. But Locke had enough to do to combat the doctrine of innate ideas, which was so generally accepted in his time. It was acknowledged that there are predispositions of the mind which give to individuals, through the accumulated modifications of heredity, understandings of things, or conceptions, which are practically before experience; but these inherited mental tendencies were regarded as ultimate psychological facts defying analysis, and taking the form of arbitrary, irreducible categories of thought. This is the theory which Locke opposed, and well he might, for its influence has been so persistent as to have governed the metaphysical opinions of even such recent thinkers as Mill and Spencer, both of whom, as will be abundantly shown hereafter, devoutly believe in a priori, unknowable conceptions which they postulate as irreducible and mysterious figments of the mind, whence all thought springs.

The strange part of this modern a priori philosophy is that

its advocates include among the mental mysteries the fact of Consciousness itself, which really throws all these speculations about the ultimate principles of mind into hopeless confusion.

Locke taught that the source of all our ideas is sensation; and that thought, or reflection, is the apprehension and generalization of facts. This is strictly in accordance with the best conceptions of modern psychology, if the consideration be not omitted that the organ of thought, which is now called the sensorium, is only *developed* by experience, and, therefore, that its structures contain a potentiality which is a factor in the formation of ideas; in a word, without this definite structure ideas would be impossible, and experience, as an educator of ideas, would be in vain.

It is interesting to see how Locke approaches the problem of the categories of thought. Our idea of Space, he says, is derived from sight and touch. These experiences are co-ordinated and generalized until we form a symbol or general idea of all externals, co-existences, or Space. This idea of Locke shows how much deeper down in the scale of reality is Motion than its aspects, Space and Time; for what myriads of motions, both subjective and objective, are implied in the phenomena of sight and touch, and the co-ordinations of their results in thought!

In the review of Herbert Spencer's works, this theory, that the origin of our conception of Space is the "sense of resistance," will be found clearly and fully developed, giving us one of many points of resemblance between the writings of Locke and Spencer.

To those who have made themselves conversant with modern philosophy, the writings of Locke are an unfailing source of interest, as they show that the psychology for which England has become so famous is but a generic development of his thought.

Improving upon the psychology of Locke, David Hartley (1705–1757), an eminent English physician, propounded the

¹ See Spencer's "First Principles," and Mill's "Logic."

"vibration theory" as an explanation of the association of ideas. In his celebrated work, "Observations on Man," upon which he labored from 1730 to 1746 (first published in 1749), he tells us that his idea of a physical basis to mind,—or that there is a physical explanation possible of sensation and thought connecting the two as muscular action and sensation,—was first suggested to him by the *Principia* of Newton.

The theory of "the association of ideas" can, in a simpler form, be traced as far back as Aristotle. Hobbes noticed the principle under the name of "mental discourse," but Locke gave it its present familiar name.

Hartley acknowledges his obligation to a dissertation by the Rev. Mr. Gay prefixed to the translation of Archbishop King's "Origin of Evil," in which the principle of "the association of ideas" is applied to moral phenomena; but Hartley was the first to definitely formulate this principle, which is now "applied to the different practical fields of language, law, morals, politics, education, religion, and sociology," into a philosophic system, and to make its enunciation the study of a lifetime. It is to be seen from the fact that this principle was first advocated by men of acknowledged religious spirit, that the ideas of evolution are the natural fruit of the most devout minds.

Hartley endeavored to prove that the primal fact of consciousness had its physical expression in changes in the nerve centres of the thinking being, and that the structures of the nervous system centring in the brain were the physical counterpart of all mental phenomena; "that our ideas spring up, or exist, in the order in which the sensations existed of which they are copies." The order of occurrence of ideas, therefore, is determined by the past activities of the mind as we find them registered in the structures of the brain. The happiness of this thought is manifest to those who have traced its development in the psychological studies of Herbert Spencer and George H. Lewes, where the interactions of function and structure explain all organic life.

See "David Hartley and James Mill," by G. S. Bower.

The particular development which Hartley gave the vibration theory is known as his theory of "neural tremors," which, it must be admitted, has many special features that the advance of Science has proved incorrect. Newton's hints as to the relation between sensation and motion contributed to the neural hypothesis. The difficulty of the subject Hartley describes as follows: "If that species of motion which we term vibrations can be shown by probable arguments to attend on all sensations, ideas, and motions. and to be proportioned to them, then we are at liberty either to make vibrations the exponent of sensations, ideas, and motions, or these the exponents of vibrations, as best suits the inquiry, however impossible it may be to discover in what way vibrations cause, or are connected with, sensations or ideas." As the term vibration is so indefinite as to mean much the same thing as motion—the ultimate fact in all phenomena of mind as well as of body.—in tracing consciousness to neural tremors or vibrations we have reached the theoretical end of the analysis of mind. To state these neural tremors in terms of time and space, or numbers and quantities, is the task of the psychology of the future, but it cannot afford us a deeper or more general principle than we have already discovered in that of Motion employed as an explanation of mind.

Gottfried Wilhelm von Leibnitz (1646–1716) was a German mathematician and philosopher of great merit. He was the Newton of Germany; but, unlike Newton, he indulged in metaphysics, and has therefore been considered more of a philosopher than his great English contemporary, whose theory of universal gravitation still holds the highest place among our generalizations of motion. At the age of twenty Leibnitz endeavored to harmonize the systems of Plato and Aristotle, and produced a treatise on the "Combinations of Numbers and Ideas." At twenty-three he accepted the office of Councillor of State at Frankfort, and in the year following, 1668, published his "New Method of

^{1 &}quot;Observ. on Man," vol. I., p. 32.

Learning and Teaching Jurisprudence." In 1670 he advanced new and bold theories of Motion ("Theory of Concrete Motion" and "Theory of Abstract Motion"), which, when compared with the great discovery of Newton in the same direction, show how inevitably the mind reverts, in science as well as in religion, to the problem of the Universal Principle. About this time Leibnitz visited Paris, where he met Cassini and Huyghens, and soon after made the acquaintance of Newton and Boyle in London. Here he was made a member of the Royal Academy, and announced his discovery of the Infinitesimal Calculus, nearly identical with Newton's Method of Fluctions.

The ambitions of Leibnitz were not satisfied with the vast command of the physical sciences which he enjoyed, and which made him famous throughout France, England, and Germany, for in the prime of his life he interested himself in a beneficent effort to harmonize the Protestant and the Catholic churches. Toward the end of his career (1710) he produced his great work entitled "Essay of Theodicea, on the Goodness of God, the Liberty of Man, and the Origin of Evil"; in which he advanced the celebrated theory of Optimism.

Leibnitz confined himself in writing almost entirely to French and Latin; for at his time, as will afterward appear, there was comparatively little culture in Germany, and the Greek language was employed scarcely at all in science or philosophy; his audience, therefore, was principally in France and in England; for it was only toward the close of his life that Germany began to show signs of the marvellous intellectual development which she has since achieved.

Among the philosophical writings of Leibnitz his criticisms of Locke are the most interesting, as Leibnitz was a Cartesian, believing in a dual principle in nature, or an absolute difference between body and mind. His opinions are clearly based upon the teachings of Plato and Democritus; and it is a fact of no small interest that as Bacon, Hobbes, and Locke laid the foundations of English thought,

Leibnitz gave the first impetus to the Idealism of Germany. The difference between Leibnitz and Locke is thus stated by the former: "The question between us is whether the soul in itself is entirely empty, like tablets upon which nothing has been written (tabula rasa), according to Aristotle and the author of the 'Essay,' and whether all that is there traced comes wholly from the senses and experience; or whether the soul originally contains the principles of several notions and doctrines, which the external objects only awaken on occasions, as I believe with Plato," Leibnitz here attempts to prove the existence of innate ideas in order to oppose the theory that knowledge springs wholly from the exercise of the senses and reflection. The factor of reflection, however, which was insisted upon by Locke, is so suggestive as to discover to the close observer a remote agreement between the two great schools of thought which Leibnitz and Locke respectively represented.

It is to a clear knowledge of the nature of perception that we must look for a reconciliation of these conflicting theories.

Bishop Berkeley (1684–1753) and Hume (1711–1776) were the historical successors of Hobbes, Locke, and Hartley as English writers on philosophy; but as they respectively reproduced those eccentricities of Greek thought known as Idealism and Skepticism, they retarded, if any thing, the scientific study of mind which their immediate predecessors had inaugurated. They were both erudites learned in Aristotle, Plato, and the Greek Skeptics. But these ancient theories, deeply interesting as they are when studied as parts of the civilization which produced them, appear very faded when compared with modern thought. Hence we find the metaphysical speculations of Berkeley and Hume tame and uninstructive.

George Berkeley was born and educated in Ireland, and was always distinguished for the best qualities of his race—generosity, morality, and religious fervor; in fact, the satirist Pope expresses the common verdict of his time in ascribing "To Berkeley every virtue under heaven." He

published, in 1700, "An Essay Toward a New Theory of Vision," and in the year following, "The Principles of Human Knowledge," in which he advanced his celebrated theory of Idealism,—that there is no proof of the existence of matter anywhere but in our own perceptions.—as though the words proof and perception did not both imply mind, which can never be more than one of the two terms of the relation expressed in thought. If mind implies an external relation it implies space or *matter*. This theory of Idealism has been examined as it first appeared in Plato, and we again study it in its subsequent unparalleled development in Kant's a priori philosophy. Suffice it to say that Berkeley has been more or less faithfully reproduced in the Subjective Idealism of Schelling and the Absolute Idealism of Hegel, both generic developments of Kant and remote developments of the Dialectics of Plato, and the Skepticism of the New Academy: for, strange to say, the unnatural exaltation of the fact of perception which we find in Idealism leads directly to the distrust of mind exemplified in Skepticism.

Berkeley gave evidences of being influenced by Locke and Hartley. He followed Locke in regarding the proposition, that a material world really exists, as not strictly demonstrable, but went beyond him by declaring the proposition false. He followed Hartley in asserting that there was a necessary succession or association of ideas, but he went beyond him by declaring that the order of nature was not *reflected* by mind, but was *caused* by mind. "That which we call the law of nature," he says, "is in fact only the order of the succession of our ideas." This is manifestly reversing the order of perception, or assuming individuality to be the ultimate fact, and general existence to be a subordinate fact derived from individuality; the absurdity of which, when followed to its logical consequences, is beyond expression.

Berkeley published, in 1725, "A Proposal for Converting the Savage Americans to Christianity." To promote this idea he undertook to found a college in this country. The English government promised to aid the enterprise, and he sailed for Rhode Island in 1728. During the voyage he wrote a poem on the subject of his mission.

While in this country he preached for about two years at Newport, R. I., but the British ministry failing to keep their promise concerning the projected college, he returned home.

The Skepticism of David Hume was so marked and so ably reasoned that it awakened a number of Scottish philosophers, headed by Thomas Reid, to a vigorous polemic against it, and in Germany incited Immanuel Kant to the construction of his Critical Philosophy. At the age of twenty-six, Hume published in London (1738) his "Treatise on Human Nature," in which the principles of his Skepticism are declared, and of which work Mackintosh says: "It was the first systematic attack on all the principles of knowledge and belief, and the most formidable, if universal Skepticism could ever be more than a mere exercise of ingenuity." In 1742, his "Essays, Moral, Political and Literary," appeared; in 1752, "Political Discourses," and soon after, the famous "History of England."

Hume traces our idea of Cause to what he calls habit, our habit of observing the causes of events; and from this he argues that it is impossible for us to form any idea of the real nature of cause, because our idea is derived entirely from particular experiences. He forgets that the firmest ground of certainty is our inability to disbelieve. Hence an experience which is without exception is universal to us. we are able to reduce every conceivable phenomenon, or experience, to an ultimate fact, which remains constant in every experience, that fact, to us, is our highest generalization of cause, and constitutes the general existence of which individuality is but the consequence. Infinity, to man, is that which he is unable to limit; the Absolute, that to which he is unable to supply conditions. The former effort has manifestly more to do with externals, or objects, than the latter, and is therefore the objective as distinguished from the subjective, aspect of the irreducible fact, cause, or

Motion. Hence Hume, in denying the possibility of our knowing the nature of the objective connection between cause and effect, merely stated, in other words, the old theory of Carneades, that we cannot know phenomena as they really are. This theory we have fully dealt with in chapter IV.

As a natural consequence of Hume's theory of the unreal nature of knowledge, he denied that we could form a conception of God, or the immortality of the soul,—two widely different propositions, as God is the ultimate fact, and Immortality is the endless perpetuation of a relative fact, which gives us a contradiction in terms.

Hume's political writings brought him into prominence, and after his return from Paris, accompanied by his friend Rousseau, he was intrusted with the diplomatic correspondence of England (in 1767). Soon after this he retired to Edinburgh, the scene of his best literary efforts, and lived in retirement until his death in 1776.

CHAPTER VII.

GERMAN PHILOSOPHY.

Kant—Fichte—Schelling—Hegel—Schleiermacher—Schopenhauer.

For those who have ceased to regard the mind as a mystery, a critical review of the German *a priori* philosophy is unnecessary, for they will easily identify this new growth of Idealism with its kindred errors of the past. They will regard such events as the Centennial translation of Kant's "Critique of Pure Reason," by Professor Max Müller, and other like publications, as the last guns which obstinate artillerymen fire after the tide of battle has turned against them and their cause has been rendered hopeless.

The vast majority of people, however polite may be their culture, are accustomed to view history through its external events, and to judge thought by its official position. them, reformations are invisible until their effects become crystallized in structural changes, and logical movements are unappreciated until they appear in text-books and encyclopædias. To such as these the a priori philosophy will be a reality as long as animate professors expound it to living students. But to the earnest thinker who is in full sympathy with the progress of his times, whether he be able or not to state categorically his belief, there are abundant evidences that Idealism has been permanently superseded by a higher and a better faith. The proof of this is the increasing contempt with which scientific men, whatever may be their religion, regard metaphysics, and the importance which the teaching of morality has gained over the mere defence of dogma throughout the Christian world. An understanding of the scope of language has insensibly dawned upon our era, as a result

of which ideas are subordinated to actions; beliefs are beginning to be estimated by the lives of the believers; and although the organization of religion and learning remains apparently the same, theology and metaphysics, considered as distinct sciences, are almost universally regarded as merely formal acquirements of little or no practical value. When in addition to these facts it is remembered that almost every surviving system of theology or of metaphysics is idealistic in its tendency, we perceive that there is in effect a popular uprising against the empty idioms of the *a priori* school, which extends far and wide beyond the limits of philosophic culture.

We have no idea, however, of depending upon a sympathy so general and indefinite for the refutation of Idealism. There are too many instances in history of the re-establishment of false doctrines long after they have been to all appearances destroyed, to trust to what is, after all, but a harbinger of victory.

As Germany slowly arose from the almost indescribable desolation of the Thirty Years' War, she entered upon a century of her history during which she had no national existence or memories, no literature or language, no social, religious, or moral life. The nation had expired when peace was concluded in 1648. This war not only destroyed an old civilization which was fairly abreast with that of the rest of Europe; it so completely destroyed it that the nation has been two hundred years in regaining her natural status in the world. Commercial statistics show that the general prosperity of Germany in 1850 had but just reached the level of that which she enjoyed at the beginning of the war of 1618. "The highly cultivated language of Luther was forgotten, together with the whole literature of his time. Many schools and churches stood abandoned, for public instruction and public worship had nearly perished. * * * There was no middle class nor gentry left; the higher noblemen had become petty despotic princes, with no hand over them, since the Emperor was but a name; the lower went to their court to do lackey's service. A whole generation had grown up during the war, and considered its savage barbarism as a normal state of society. * * * For all habits of self-government, even in the cities, had gone; the gentlemen had become courtiers instead of magistrates. An unprecedented coarseness of manners had invaded not only courts and cities, but also the universities and the clergy." 1

A century later, when Frederick II. realized the desires of Prussia in a reign memorable for its impartial devotion to the whole nation, firmly establishing the Prussian State, the intellectual life of Germany was not only awakened but immediately burst into a luxuriant growth. Universities were established and regenerated, great scholars, great poets, and great thinkers immediately appeared. Leibnitz, Kant, Goethe, Schiller, Herder, and the rest, came to glorify the new national life. The beauties of the ancient classics were rediscovered, history was read by fresh minds and its organic nature disclosed, sciences were created to deal with the new problems of life; for a nation had arisen and taken a new interest in humanity. In the midst of this intellectual exaltation German philosophy was born. Is it any wonder that its whole existence has been marked by a kind of subjective intoxication?

Each national language formulates its philosophy with an unfeigned satisfaction and pride. The old, old problems of life, which Greece absorbed from the East and expressed so vividly, were new in Germany; but a careful examination of their structure discloses them to be of the same logical species as their progenitors. The German type of these problems, however, has marked modifications due to a greater and a higher environment. German philosophy is more Greek than the Grecian; it is a refined leaven of the Greek thought, so powerful that it has fermented the mind of Europe ever since its appearance. It has produced idealists beside whose theories Plato's Idealism is rational; it has produced materialists whom Aristotle would not have recognized; it has

¹ See "German Thought," by Karl Hillebrand.

generated skeptics whom Carneades would have wondered at. But of all these schools Idealism has taken the deepest root, its fancies have most pleased the multitude, and what was in the beginning the innocent recreation of a few literati has become a national vice.

How different has it been with France and England! These nations have had their wars and revolutions, but they have never suffered destruction: their development has had no great gap in it: it has been more gradual, and consequently more rational. During the time that Germany was slowly regaining life, France was leading the civilization of Europe under Louis XIV. England was in advance in political institutions and religious liberty, and, as well as Spain and Holland, was superior in commerce and conquest; but in all those graces of life and mind which tend to develop and refine the individual, and in the unity and strength of her national life, France of the eighteenth century was preeminent. "The French," says Taine, "became civilized by conversation. Their phrases, still formal, under Balzac are looser and lightened; they launch out, flow speedily, and under Voltaire they find their wings. Pedantic sciences. political economy, theology, the sullen denizens of the Academy and the Sorbonne, speak but in epigrams. * * * What a flight was this of the eighteenth century! Was society ever more anxious for lofty truths, more bold in their search, more quick to discover, more ardent in embracing them? The perfumed marquises, all these pretty, welldressed, gallant, frivolous people, crowd to philosophy as to the opera; the origin of animated beings, the question of free judgment, the principles of political economy,—all is to them a matter for paradoxes and discoveries."

Just previous to this time we find Leibnitz complaining of the sensuality and ignorance of the German gentry as compared with the love of science in England, and the intelligence and culture of the French. Count Mannteufel writes to Wolff, as late as 1738, "The German princes, who might be compared to your lords, think it beneath their dignity to cultivate their mind." Thus we have England, in the first half of the eighteenth century, enriched by Shakespeare, Dryden, Pope, Addison, and Swift, and learning from Locke and Newton; France in possession of Pascal, Descartes, Molière, Malebranche, Racine, and Boileau; England earnest and studious; France brilliant and refined, and Germany as yet intellectually unborn.

Looking at Germany from the closing years of the nineteenth century, with an unequalled army of trained scientists animated by the true spirit of original investigation, and almost universal culture, with intellectual and religious freedom, one might easily expect great things of her. But her originality, her genius, which attained such a marvellous life during the century which closed with 1850, has seemingly passed away, and it is in her abnormal Idealism, the natural consequence of a sudden intellectual development, that we are to find the cause.

There is a lesson to be learned from the process which underlies the survival of great names in history. It is that the most indestructible lives are not necessarily those which have most interested their contemporaries. but those which have instigated the most needed reforms. As these lives recede in history, they fade out or become brighter according to the degree in which they have actually served the needs of their time. We find, therefore, that the reputation of Kant, the first of the great German thinkers, depends upon the intrinsic value of his philosophy, although his philosophy is really the least impressive feature of his life. What Germany most needed, what every nation most needs, is a true philosophy. Kant endeavored to supply this need, and if he failed, his great learning, his broad humanity, his moral acumen, may insure for him the lasting love and esteem of his countrymen, but they cannot sustain his greatness as a logical reformer.

The "Critique of Pure Reason" is acknowledged to be the representative work of Kant. Let us carefully examine it with a view to forming an estimate of its value. The first words of the preface are: "Our reason (*Vernunft*) has this peculiar fate, that, with reference to one class of its knowledge, it is always troubled with questions which cannot be ignored, because they spring from the very nature of reason, and which cannot be answered, because they transcend the powers of human reason."

This simply means that the ultimate nature of reason is incomprehensible, which is rather a discouraging admission to make at the very outset of a work, the object of which is to examine into the nature of reason. Kant must have believed, however, that the nature of reason was comprehensible in some degree, otherwise he would never have attempted an exhaustive criticism of "Pure Reason."

Let it be our object, then, to discover what degree of comprehensibility Kant believed in, or hoped for, with regard to the nature of reason. The preface continues as follows: "Nor is human reason to be blamed for [being incomprehensible]. It begins with principles which, in the course of experience, it must follow, and which seem sufficiently confirmed by experience. With these, again, according to the necessities of its nature, it rises higher and higher to more remote conditions. But when it perceives that in this way its work remains forever incomplete, because the questions never cease, it finds itself constrained to take refuge in principles which exceed every possible experimental application, and nevertheless seem so unobjectionable that even ordinary common-sense agrees with them."

This clearly states a well known fact, that the reason springs from particular experiences and rises to general truths. But among these general truths, Kant tells us, the Reason can find no end, no resting-place, and is "constrained to take refuge in principles which [transcend experience] exceed every possible experimental application."

The point to be marked here is, that it is impossible for Reason to act at all without putting in motion or expressing its deepest principles. If reason springs from experience, as Kant admits, we can find in experience the expression of its

first principles. These categories, or most general principles, Kant declares, transcend all experience, and yet he clearly admits that the *reason*, of which these principles are simply the aspects, begins in experience. This contradiction we find still more emphatic further on. In the introduction Kant tells us,—"If we remove from experience every thing that belongs to the senses, there remain, nevertheless, certain original concepts, and certain judgments derived from them, which must have had their origin entirely *a priori*, and independent of all experience, because it is owing to them that we are able, or imagine we are able, to predicate more of the objects of our senses than can be learned from mere experience, and that our propositions contain real generality and strict necessity, such as mere empirical knowledge can never supply."

Here is an assertion which, in our time, sounds indeed preposterous,—that there is an absolute dividing line, or difference of nature, between sensuous apprehensions and the coordination of those apprehensions which gives us the highest By the term "a priori," which achievements of reason. really means nothing but before, Kant wishes to designate certain mysterious conceptions which cannot be accounted for by the natural activities of the sentient organism. But these principles, notwithstanding their mysterious nature, are supposed to reside somewhere in the organism. On the same page we are told that there is a certain kind of "knowledge which transcends the world of the senses, and where experience can neither guide nor correct us: here reason prosecutes investigations, which by their importance we consider far more excellent, and by their tendency far more elevated, than any thing the understanding can find in the sphere of phenomena."

This looks rather ominous. If Kant is to take us into a region of knowledge where our investigations cannot be verified by any possible experiences,—a region of investigation which is far more "excellent" and "elevated than any thing the understanding can find in the sphere of phenom-

ena," no one will blame us if we feel alarmed at the thought of the intellectual apparitions which we are to meet there.

But any reluctance which we may have to accompany our author is dissipated when he continues,—"Nay, we risk rather any thing, even at the peril of error, than that we should surrender such investigations, either on the ground of their uncertainty or from any feeling of indifference or contempt.

* * * Besides, once beyond the precincts of experience, we are certain that experience can never contradict us, while the charm of enlarging our knowledge is so great that nothing will stop our progress until we encounter a clear contradiction."

From this it is evident that the only defence we are to have, in the region of knowledge to be traversed by the "Critique of Pure Reason," against the delusions of the imagination, is the sense of "clear contradiction." This is a certain relief; for it assures us that we are not expected to leave all sense behind. But the question arises: How, in a sphere of "knowledge which transcends the world of the senses," are we to retain enough sense to appreciate a clear contradiction?

The modern psychologist has no faith in the existence of "Pure Reason"; the very name implies a belief in the actual separation of what are but aspects of one fact of sentiency. To show how firmly Kant believed in this actual separation, we give his definition of Pure Reason: "Every kind of knowledge is called pure if not mixed with any thing heterogeneous. But more particularly is that knowledge called absolutely pure which is not mixed up with any experience or sensation, and is therefore possible entirely a priori. Reason is the faculty which supplies the principles of knowledge a priori. Pure Reason, therefore, is that faculty which supplies the principles of knowledge a priori apprinciples of knowledge a priori can be acquired and fully established. A complete application of such an

¹ Kant's "Critique of Pure Reason," vol. II., pp. 2, 3.

Organum would give us a System of Pure Reason. But as that would be a difficult task, and as at present it is still doubtful whether such an expansion of our knowledge is here possible, we may look on a mere criticism of pure reason, its sources and limits, as a kind of preparation for a complete system of pure reason. It should be called a critique, not a doctrine, of pure reason. Its usefulness would be negative only, serving for a purging rather than for an expansion of our reason." Any meaning which this definition has certainly hinges upon the term a priori. The further service which this term is made to do in Kant's ideas can be judged of from the following: "I call all knowledge transcendental which is occupied not so much with objects as with our a priori concepts of objects. A system of such concepts might be called Transcendental Philosophy. for the present this is again too great an undertaking. We should have to treat therein completely both of analytical knowledge and of synthetical knowledge a priori, which is more than we intend to do, being satisfied to carry on the analysis so far only as is indispensably necessary in order to understand in their whole extent the principles of synthesis a priori, which alone concern us. This investigation, which should be called a transcendental critique, but not a systematic doctrine, is all we are occupied with at present. It is not meant to extend our knowledge, but only to rectify it, and to become the test of the value of all a priori knowledge." 2

Thus we have the privilege of reviewing a transcendental criticism of a priori knowledge, or, knowledge which acknowledges no connection with experience.

Kant describes the scope of his great work in these words: "All that constitutes transcendental philosophy belongs to the Critique of Pure Reason. * * Transcendental philosophy is the wisdom of pure speculative reason. Every thing practical, so far as it contains motives, has reference to

sentiments, and these belong to empirical sources of knowledge." 1

The "Critique of Pure Reason" opens with a discourse on what Kant calls "Transcendental Æsthetic," and from that proceeds to "Transcendental Logic," "Transcendental Analytic," "Transcendental Dialectic," and closes with the Method of Transcendentalism, under the respective heads of "Discipline of Pure Reason" and "Canons of Pure Reason." These titles have a magnificent sound, but there is too much that is transcendental (above the earth) about them. The careful or conscientious thinker, being earthly, likes to keep his feet upon the solid ground of good sense: he feels that this is the only position which secures logical strength and repose, and that no thoughts are too high, too pure, or too excellent to rest upon so human a base. Correct reasoning is logical integrity, intellectual morality; but we have no right to impeach the logical integrity of the "Critique of Pure Reason" by assuming any connection between moral and intellectual procedures; for its author tells us plainly, in the last page of the introduction, that "although the highest principles of morality and their fundamental concepts are a priori knowledge, they do not belong to transcendental philosophy, because the concepts of pleasure and pain, desire, inclination, free-will, etc., which are all of empirical origin, must here be presupposed." This leaves us in an uncomfortable state of uncertainty whether he means that transcendental philosophy has nothing to do with morality, or whether a priori knowledge has nothing to do with transcendental philosophy. At all events, the assertion is definite that in transcendental philosophy the moral sentiments, so far as they represent a motive, have no place.

Hence the author of the "Critique of Pure Reason," in describing the scope of his work, deliberately takes leave of all that is estimable and useful in philosophy, namely, the study of life as a means of illuminating conduct, and applies himself to the creation of that system of "a priori knowledge" now widely known as German Idealism.

¹ Kant's "Critique," pp. 12, 13.

Herder, the Pindar of Germany, a pupil of Kant, a profound scholar and moral teacher, earnestly denounced the Kantian philosophy. James Sully, in the *Fortnightly Review* of October, 1882, thus describes the antagonism of teacher and pupil:

"Herder's conception of history as but an extension of nature's processes was diametrically opposed to Kant's dualism of human freedom rising above and opposing nature. * * * He had no liking for Kant's critical philosophy, with its cumbrous apparatus of 'intellectual forms.' To his concrete mind ever impressed with the organic unity of man, it seemed to resolve the human intellect into a number of unreal abstractions. It was a distinct retrogression from the experience philosophy of his predecessors, and along with the French Revolution threatened 'to send back the world a hundred years.' Herder's chief dislike of the Kantian philosophy, however, arose out of his view of its hurtful consequences in literature, art, and theology. 'Criticism' was the fashion of thought of the hour. 'In every journal' (writes Herder) 'these dogs and curs bark and velp the critical canons without canon, without feeling, law, and rule. God help us!' The sharp separation of art and morality and the worship of pure form in art which Schiller and Goethe were preaching, were professedly based on Kant's teaching. And then there was the young generation of theologians who had come under the spell of Fichte's eloquence at Iena, and who were blatant with somewhat vague ideas about liberty and the supremacy of reason. One can hardly wonder that the soul of the General Superintendent should have been excited to wrath by the appearance of vouthful candidates for clerical appointments who thought to conceal by loose talk of this sort the depth of their ignorance on all theological matters, candidates of whom one even had the audacity to write an essay against marriage.

"So it came to pass that Herder's spirit was inflamed against Kant, and delivered itself of a solemn denunciation. In the year 1799–1800, there appeared from his pen two

works which were intended to give the coup de grace to Kant's influence. These were the 'Metakritik,' which was directed against the 'Critic of the Pure Reason,' and the 'Kalligone,' which was to be a refutation of the theory of taste and art put forth in the 'Critic of the Practical Reason,' The mode of attack may be seen by a reference to the introduction to the 'Metakritik.' It is an appeal from chair philosophers to the sensible laity. He dwells on the mischief wrought by the Kantian teaching. 'For twelve years the critical philosophy has been playing its part, and we see its fruits. What father (let him ask himself) wishes his son to become an autonomous being of the critical sort, a metaphysician of nature and virtue, a dialectical or revolutionary pettifogger, according to the critical stamp? Now look round and read! What recent book, what science is not covered with flaws of this kind, and how many noble talents are (we hope for a time only) ruined! Foreign nations scorn us: "Are you there, you Germans, you who were so far on in many things? Are you speculating about the question how it is possible for your understanding to have come into existence? * * * Unformed nation! how different the things you ought to be thinking about!"'

"The remedy for the evil lies in the hands of every intelligent reader. Ordinary men are fully capable of destroying the 'misty woof of words.' Everybody has a mind which he can interrogate in order to know whether it behaves in the fashion set forth in the 'Critic.' 'Ask thyself, thy senses, thy understanding, thy reason; they have imprescriptible rights. Are the senses willing to be transubstantiated into empty forms, the understanding into a senseless process of spelling, and the reason into a chaos?'"

But this brave attack and timely warning fell to the earth; it passed unheeded. And thus Herder, "the humanizer of theology, the reviver of pristine life in literature, injured himself only by his rash venture into the thorny enclosure of metaphysics. He called into existence a whole army of enemies only too ready to enlist under the banner of the

Königsberg philosopher, and he alienated some of his best friends."

The mind of Germany has indeed been put back a hundred years in its growth by the Kantian philosophy. Idealism hangs like a fog over her intellectual life; her art, her literature, and even her science, are dwarfed by it. In Germany the religious world is either superstitious or materialistic; thought being separated from morality or real life, the religion of philosophy does not exist; even her political life seems to be retarded by this unnatural divorce. The warmest friends, the ablest critics of this great nation compare her to a mind without a body. From this can it not be inferred that her body in the highest sense is without a mind?

The fluent and methodical manner in which Kant proceeds to analyze perception is calculated to throw one off his guard. The propositions which embrace his description of mental phenomena are stated with such precision and apparent candor that one is apt to take their logical integrity for granted. For instance, at the outset he affirms that "sensibility alone supplies us with intuitions (Anschauungen). These intuitions become thought through the understanding (Verstand), and hence arise conceptions (Begriffe). thought, therefore, must, directly or indirectly, go back to intuitions (Anschauungen), i. c. to our sensibility, because in no other way can objects be given to us." Thus we have sensation and thought duly recognized as different aspects of mental phenomena, their separation being purely artificial. Then follows the very fair assertion: "The effect produced by an object upon the faculty of representation (Vorstellungsfähigkeit), so far as we are affected by it, is called sensation (Empfindung). An intuition (Anschauung) of an object, by means of sensation, is called empirical. The undefined object of such empirical intuition is called phenomenon (Erscheinung)." But suddenly we have a leap into obscurity which is amazing, and which of course we cannot follow. Witness these words: "I call all representations

¹ Kant's "Critique," p. 17.

in which there is nothing that belongs to sensation, *pure* (in a transcendental sense). The pure form, therefore, of all sensuous intuitions, that form in which the manifold elements of the phenomena are seen in a certain order, must be found in the mind *a priori*. And this pure form of sensibility may be called the pure intuition (*Anschauung*)."

A moment ago we were told that "sensibility alone supplies us with intuitions"; that "all thought must, directly or indirectly, go back to intuitions, i. e. sensations": that "sensation is the effect produced upon the faculty of representation by an object"; thus completing the chain of cause and effect between the many forms of mental activity which Kant names as sensuous apprehensions, representations, intuitions, and thoughts. In the face of this we are told that he "calls all representations in which there is nothing that belongs to sensation, pure (in a transcendental sense)." Truly this transcendental sense seems to be the source of Kant's lasting error; lasting because, as we shall see, he has articulated his system so ingeniously and covered up its logical defects so dexterously with such a wealth of tautology, that nothing but the most persistent vigilance can disclose the unconscious deceit which permeates the whole "Critique of Pure Reason"

Speaking of space, Kant says: "No determinations of objects, whether belonging to them absolutely or in relation to others, can enter into our intuition before the actual existence of the objects themselves; that is to say, they can never be intuitions a priori. * * * Space is nothing but the form of the phenomena of all external senses; it is a subjective condition of our sensibility, without which no external intuition is possible for us." Such language as this is simply an outrage upon good sense. If it came from a less illustrious pen than that of Kant, we might well pass it by with contempt. It involves a mass of contradictions and is loose and incoherent, logically, to the last degree.

The determinations of objects, or the properties by which

¹ Kant's " Critique," p. 23.

objects are perceived, imply a relation between the perceiving subject and the object: the determinations of objects. therefore, cannot belong to them absolutely, for they imply a relation. When Kant says that the "determinations of objects cannot enter into our intuition before the existence of the objects themselves." it is to be remembered that, as the determinations are qualities or functions of the objects, they imply or presuppose the existence of the object, and hence there can be no question of priority. As for the determinations never becoming "intuitions a priori," we have been distinctly told that intuitions come alone through sensibility. We therefore deny that there is any meaning in the term "intuitions a priori." The difference between sensuous intuitions and intuitions a priori is based upon an arbitrary separation, by Kant, of the matter and form of phenomena; a distinction which has no foundation in fact, for the form of objects is clearly the expression of certain statical or space aspects: and the word matter is merely a generalization of the statical aspects of all phenomena. When Kant says, therefore, that space is a subjective condition of our sensibility without which no intuition of externals (objects) is possible, it is clear that he does violence to facts, first by insisting that space means form and does not mean matter, and then that form is absolutely distinct from matter or external phenomena. In a word, Kant abstracts from that aspect of motion or general existence, which we call space, a so-called transcendental principle which he calls form, and leaves behind a mutilated conception which he calls matter. Form, he says, belongs to the mind and transcends all sensibility or experience; but matter does not belong to the mind, and cannot get into it, because it is not form. Surely

^{1&}quot; The matter only of all phenomena is given us a posteriori; but their form must be ready for them in the mind (Gemüth) a priori, and must therefore be capable of being considered as separate from all sensations. * * * The pure form, therefore, of all sensuous intuitions,—that form in which the manifold elements of the phenomena are seen in a certain order,—must be found in the mind a priori. And this pure form of sensibility may be called the pure intuition (Anschauung)."—" Critique of Pure Reason," p. 18.

the difficulty begins and ends with what Kant says, for he offers no proof whatever that form is transcendental, or that it is separable from the statical aspect of phenomena.

The reader will no doubt be edified by the following definition of time and space offered by Kant: "Time is the formal condition, a priori, of all phenomena whatsoever. Space, as the pure form of all external intuition, is a condition, a priori, of external phenomena only. But as all representations, whether they have for their objects external things or not, belong by themselves, as determinations of the mind, to our inner state; and as this inner state falls under the formal conditions of internal intuition, and therefore of time, time is a condition, a priori, of all phenomena whatsoever, and is so directly as a condition of internal phenomena (of our mind), and thereby indirectly of external phenomena also."

As a specimen of a priori or transcendental reasoning, this is a masterpiece: but it would not be in keeping with the spirit of the "Critique" to try and reduce these conceptions to "sense," or to assimilate them with "experiences." We suppose that "the formal condition, a priori, of all phenomena whatsoever" means the idea of all phenomena; therefore we have the assertion that time is the idea of all phenomena; but we are told that space is a condition, a priori, of external phenomena. Now, by external, Kant means external to the mind, or phenomenal, so that external phenomena means all phenomena. Hence the difference between these definitions of space and time results in nothing, and we have the simple statement,—if a simple statement can be drawn from such language,—that time and space are the ideas of all phenomena. "But," Kant contends, "as all representations, whether they have for their objects external things or not, belong by themselves, as determinations of the mind, to our inner state; and as this inner state falls under the formal conditions of the internal intuition, and therefore of time, time is a condition, a priori, of all phenomena whatsoever, and is so directly as a condition

¹ Kant's " Critique," pp. 29, 30.

of internal phenomena (of our mind), and thereby indirectly of external phenomena also." Is not this simply an assertion, that time is the idea of external phenomena, and also that it is the condition of internal phenomena (or mind)? In a word, Kant tries to occupy both sides of an imaginary boundary line, which he would draw between two aspects of a single fact of existence, and thereby, without perceiving it, obliterates the line.

It will be remembered that phenomena are rigidly excluded by Kant from the subjective or a priori world: that man is not a natural but a supernatural being, using natural and phenomenal as convertible terms. But sensibility is of course natural and must belong to the world of phenomena. This difficulty he avoids by creating for himself an a priori man (in a transcendental sense), who is put into an a priori world; and if by any chance the a priori man manifests any thing phenomenal, or natural, or sensible, he is ordered by the irate philosopher of Königsberg to resume his a priori character. Then the good Kant looks about him and perceives that space is an inconveniently real and universal principle, and also that his a priori man has space relationships which cannot be destroyed; so he avoids the difficulty by saying that all space is a priori and is in the a priori man. Whatever of space is not in the a priori man, is only matter and has no reality, for all reality is in the a priori man. This beautiful truth he expresses in the following familiar language: "Space, as the pure form of all external intuition, is a condition, a priori, of external phenomena only. But all representations, whether they have for their objects external things or not, belong by themselves, as determinations of the mind to our inner state." This definition brings him in collision with time, which he finds to be also an inconveniently absolute principle that had not been well considered in the first creation of the a priori man. So he boldly attempts to make time a priori; but all his efforts prove fruitless; he struggles hard, but time resists. Kant, however, would not have been the

greatest of German philosophers had he allowed himself to be vanquished by time, so after a long and labored argument which attempts to prove the ideality of time, he makes the unprecedented point that time has an empirical existence, but that empirical not being a priori is not really any existence at all. The following argument is added under the head of an

EXPLANATION.

"Against this theory, which claims empirical but denies absolute and transcendental reality to time, even intelligent men have protested so unanimously, that I suppose that every reader who is unaccustomed to these considerations may naturally be of the same opinion. What they object to is this: Changes, they say, are real (this is proved by the change of our own representations, even if all external phenomena and their changes be denied). Changes, however, are possible in time only, and therefore time must be something real. The answer is easy enough. I grant the whole argument. Time certainly is something real, namely, the real form of our internal intuition. Time, therefore, has subjective reality with regard to internal experience; that is, I really have representation of time and of my determinations in it. Time, therefore, is really to be considered, not as an object, but as the representation of myself as an object. If either I myself or any other being could see me without this condition of sensibility, then these self-same determinations which we now represent to ourselves as changes would give us a kind of knowledge in which the representation of

^{1&}quot;Time is therefore simply a subjective condition of our (human) intuition (which is always sensuous, that is, so far as we are affected by objects), but by itself, apart from the subject, nothing. Nevertheless, with respect to all phenomena, that is, all things which can come within our experience, time is necessarily objective. We cannot say that all things are in time, because, if we speak of things in general, nothing is said about the manner of intuition, which is the real condition under which time enters into our representation of things. If, therefore, this condition is added to the concept, and if we say that all things as phenomena (as objects of sensuous intuition) are in time, then such a proposition has its full objective validity and a priori universality."

—"Critique of Pure Reason," pp. 30, 31.

time, and therefore of change also, would have no place. There remains, therefore, the empirical reality of time only, as the condition of all our experience, while absolute reality cannot, according to what has just been shown, be conceded to it. Time is nothing but the form of our own internal intuition.

"Take away the peculiar condition of our sensibility, and the idea of time vanishes, because it is not inherent in the objects, but in the subject only that perceives them." Take away the *a priori* man, and time is annihilated.

I do not give these quotations for the purpose of proving any thing concerning time or space, but to show how incoherent and contradictory were Kant's explanations of these ultimates. It is impossible to read the above quotations without seeing that both the objective and subjective existence of space and time are admitted in one breath, and that the effort to limit the aspects of motion to an imaginary subjective world absolutely separated from the world of sense, was as futile as it is, in the light of our day, absurd.

After laying such a foundation of error, one can imagine the dreary waste of reasoning which follows in the subsequent chapters of the "Critique." The *a priori* man is driven from pillar to post in the storm of facts which transcendental reasoning stirs up, and the extraordinary vitality which he displays is a lasting proof of the power of organization, whether it be for good or for evil; for this *a priori* man is wonderfully articulated with facts where they are to be had, and an abundant supply of words where facts are wanting.

We have reason to be grateful that philosophy is not so rare a thing in the world that one is obliged to delve among the intricacies of "Kant's Transcendental Dialectics" for

¹I can say, indeed, that my representations follow one another, but this means no more than that we are conscious of them as in a temporal succession, that is, according to the form of our own internal sense. Time, therefore, is nothing by itself, nor is it a determination inherent objectively in things.

² Kant's "Critique," pp. 32, 33.

the facts of consciousness. There is no denying that a great many of these facts are given by Kant, and that one can glean from his writings much that is valuable concerning the procedure of the mind; but it is the opinion of all competent authorities that the fundamental principles of Kant's philosophy declare against the possibility of a unification of knowledge.

Strange as it may seem, the philosophy of Kant strongly resembles the Skepticism of Hume. Hume openly declared philosophy to be impossible, upon the grounds that the operations of the mind are transcendental, or unknowable, while Kant acknowledged reality only in the subjective sphere, placing limits upon the intellect which are fatal to an understanding of the divine unity of nature; or, to that conception of God which can alone harmonize life and mind.

Kant's theory of the limitations of knowledge is thoroughly anthropomorphic. It finds in knowledge certain principles of certitude which appear to him to be universal; but because he discovers these principles through the agency of his own thought, he concludes that at all events they cannot extend beyond the range of human consciousness. The inevitable relations of consciousness to sentiency, and of sentiency to the general activities of nature, never seem to break upon his mind. But having measured the human understanding and described its absolute (?) limits, he is obliged to admit that it is only an island in a sea of mystery. This is the very position of the ancient skeptics, who saw no real harmony or identity of procedure between mind and the general activities of nature.

Thus we find that the old theories of Skepticism, which were so highly developed by the Greeks in the New Academy, are reproduced in the Kantian dialectics with scarcely a variation; while the novelty of their appearance in the German language under the elaborate forms of the "Critique of Pure Reason" was enough in itself to account for the reputation they at once achieved. The Skepticism of Kant is thus but a reproduction of ancient Skepticism,

which held that we cannot know things per se—absolutely—or as they really are in themselves. This can hardly be a correct theory of perception, since human knowledge is the relation between a sentient organism and its surroundings, and must be the expression of conditions, whereas absolute means independent of conditions. Absolute or a priori knowledge, therefore, is a contradiction in terms. Hence a system which rests its fundamental principles upon the assumption of an absolute knowledge becomes an absurdity.

Lewes, who made a profound study of Kant, says: "In his 'Critique' we are only to look for the exposition of a priori principles. He does not trouble himself with investigating the nature of perception; he contents himself with the fact that we have sensations, and with the fact that we have ideas whose origin is not sensuous. ** He did not deny the existence of an external world; on the contrary, he affirmed it, but he denied that we can know it; he affirmed that it was essentially unknowable."

The corner-stone of Kant's philosophy, as expressed in the "Critique of Pure Reason," is that there is no reality exactly corresponding to the notions of men, and that what constitutes reality for us is simply our own mental representations. Let us examine this proposition. In perception there are two factors, the subject and the object; or of the phenomenon of perception there are two aspects, the subjective and the objective. Kant says that there is no external reality corresponding to the subjective side of perception, and that, therefore, as there is no disputing the reality of the subjective side or thought, all reality must be thought. This logical snarl is wholly due to a false limitation of the meaning of words. All those forms of mental activity known as notions, mental representations, or thoughts, imply an object as well as a subject. The separation of subject from object in the consideration of thought is purely artificial. When we look upon thought as the activity of a sentient being, we cannot exclude from view the infinite conditions of this activity which relate it to universal life;

we cannot isolate the subjective phenomenon of thought by appropriating to it all reality. Thought is distinctly a relation, the function of subjective and objective conditions.

Kant's assertion, therefore, that all reality is subjective, is a one-sided view of the fact of thought. If the many names for mental or psychical activity, such as perception, thought, mental representation, etc., were recognized as relatively equivalent terms, and if mental phenomena were acknowledged as the activity of an organism, whether that organism be an individual or a race, there would be no difficulty in accounting for the subjective and objective sides of thought. It is our failure to identify these contrasted sides as aspects of a single fact which alone impels us to attribute exclusive reality to either the one or the other. To this latter assertion all Kantians would at once demur, for they are continually speaking of absolute mind, or intelligence. The term absolute simply means time, or the unconditioned, and therefore cannot be applied to any individual phenomenon, such as thought or mind. This explanation might dispose of all the difficulties of the Kantian system, if there were not a distinct contradiction of this theory of the absolute nature of mind developed in Kant's psychology: for there is no denying that he also teaches that there is *no* absolute dividing line between subject and object in the act of perception that the mind does not think in itself, but is acted upon and reacts upon its surroundings in producing thought. creation, however, of an a priori sphere of thought, which is absolutely separated from sensibility and external phenomena, so confuses the theory of the union of subject and object, that it is difficult to understand how he could have retained two such conflicting opinions at once.

The teacher of philosophy is bound to express himself with simplicity and clearness; and when he does not, it is fair to conclude that he himself is not clear upon the subject. The serious contradictions which occur in the two editions of the "Critique of Pure Reason" are admitted by the most pronounced Kantians. In speaking of these two

editions. Prof. Müller says: "That the unity of thought which pervades the first edition is broken now and then in the second edition, no attentive reader can fail to see. That Kant shows rather too much anxiety to prove the harmlessness of his 'Critique' is equally true, and it would have been better if, while refuting what he calls Empirical Idealism, he had declared more strongly his unchanged adherence to the principles of Transcendental Idealism. * * * I must confess that I have always used myself the first edition of Kant's 'Critique,' and that when I came to read the second edition. I never could feel so at home in it as in the first. The first edition seems to me cut out of one block. the second always leaves on my mind the impression of patch-work." These contradictions are slight, however, when compared with those already pointed out in the main argument of the "Critique" with regard to the nature of perception.

Hence, since it is well known that the Nature of Perception is the foundation of every philosophy, we think we are justified in accepting what, outside of Germany, is becoming a very general opinion that Kant's "Critique of Pure Reason" is a monument of logical subtlety and at the same time an incorrect and hopelessly confused analysis of Mind. That this view is not generally shared by those who have studied in Germany under the influence of the Kantian system is only too manifest. Professor Noire, in the introductory review to Max Müller's translation of the "Critique," after giving evidence of a very high order of philosophic culture, closes his examination of the pre-Kantian systems as follows: "Kant alone succeeded in solving all the contradictions and paradoxes in which the reason was entangled, and in explaining them completely in accordance with their own nature, as he dropped the sounding-line into depths which as yet no mortal mind had dared to fathom, and brought up from thence to the light of day news of the primary conditions and eternal postulates of reason. It is therefore not

¹ Kant's "Critique," Translator's Preface.

too much to say that Kant is the greatest philosophical genius that has ever dwelt upon earth, and the 'Critique of Pure Reason' the highest achievement of human wisdom." 1

And Max Müller makes more conspicuous this flagrant example of ethnic conceit by declaring that the thought of Kant fills up the entire logical perspectives of humanity. The only exception to be taken to this view of Professor Müller is, that he has manifestly confused his own logical perspectives with those of humanity.

The "Critique of Practical Reason," which appeared in 1790, is generally admitted to be a retraction of the principles of the first edition of the "Critique of Pure Reason." But Kantians of the present day, for the most part, deny to their master the privilege of changing his mind, for they are almost unanimously of the opinion that the first edition of the "Critique of Pure Reason" really represents the teachings of Kant, while the second edition and the "Critique of Practical Reason" they seem to entirely ignore.

We will not, however, be influenced by these eccentricities of the followers of Kant; for the least we can accord to the great master is, that his mental development was continuous, and suffered no serious mishap during the heyday of his literary activity.

The "Critique of Practical Reason" deals with the subject of Morality. Its estimation of human duty is exalted, but its effort to trace duty to an ultimate principle has been widely criticised. Kant's original theory of justice was, that it is an entity, an innate principle of the human mind, present alike in all races and individuals, and independent of social progress. This theory he afterward modified, but still held to the belief that justice was universal. The strongest objection made to this belief was, that certain tribes of savages killed their old men when they became feeble. The mode of determining the degree of feebleness which merited death was, to require the most venerable men of the tribe to cling to the branch of a tree,

¹ Kant's "Critique," vol. I., p. 359.

which was violently shaken, and those who failed to retain their hold were put to death. Kant's reply to this argument was, that the fact that these old men were allowed a chance for life proved the presence of the idea of justice in the tribe. Was there ever an *injustice* which did not prove as much?

In our day, it is well known that the conception of justice (which, it is to be remembered, is a purely relative term) has grown up from the simplest mechanical experiences; such, for instance, as the balancing of weights. The idea of justice or duty becomes clearer and more general with social advancement. Kant's theory, therefore, that justice is a priori, a mysterious presence in the mind which cannot be explained by natural experience, reduces the source of morality to the level of a superstition which is the opposite of philosophical.

Morality is rightly reasoned conduct; but all reasoning cannot be represented in abstract symbols. There is a logic of feeling as well as of signs, an unspoken movement of the emotions which enters into every human determination. Since morality is the highest exercise of the judgment, the most complete harmony between practical and intellectual life, false methods of philosophizing, erroneous explanations of the procedures of the mind, are demoralizing in their effects upon society. The direct influence of idealism upon morality is seen in the tendency toward the idealization of human attributes, such as love, virtue, or reason. The enthronement of these qualities as a priori or absolute principles in life leads directly to the greatest extravagances of conduct. The theory that love is a God-inspired feeling, and that when a feeling can be clearly demonstrated to be love it becomes holy, or justifies itself, is a natural consequence of idealism; and it is one of the most pernicious beliefs that it is possible to entertain. What rivers of blood have been shed, what homes destroyed, what hearts broken, in learning the nature of love! Although love expresses the deepest feelings of which we are capable, it is but the function of a vast plexus of conditions, and depends upon these conditions for its justification. However exalted and purewe may imagine a passion to be, whether life and happiness depend upon its gratification or not, the question whether the feeling is right or wrong is governed by the conditions which surround it, and has nothing whatever to do with its *intensity* or imagined purity. Again: the idealization of virtue, or selfabnegation—the theory that virtue is an absolute principle moving in a foreign universe of sin—an a priori, God-inspired intuition—instead of the natural development of a well-ordered life, the result of pure examples and good habits, leads to all those extravagances of conduct which vary from asceticism and other forms of moral austerity to the more general and lower grades of hypocrisy. Lastly: the idealization of the faculty of reasoning (mind) gives rise to the greatest logical extravagances, from the Dialectics of Plato and the absolute Skepticism of the Academicians to those forms of Idealism known as the a priori philosophy of Kant and his followers, the influence of which still remains in modern agnosticism. Thus the success of morality, the advancement of the chief science of life, depends directly upon a just appreciation of the limits of language and the nature of perception, which alone can make possible the Unification of Knowledge.

All recognized German philosophy subsequent to Kant is but a development of either the practical or the ethical side of the Kantian system, with a more or less marked subservience to the Idealism with which Kant so deeply imbued the German mind. The cast of thought, therefore, which we find in Fichte, Schelling, Hegel, Schopenhauer, Herbart, and the other post-Kantian writers, seems predetermined to an extent which it would be difficult to understand without first becoming acquainted with what may be called the solidarity of German philosophic culture,—the almost servile imitation which marks the development of the German conception of Mind.

There are instances, however, in the writings of all the above-named authors where they have risen above the arbi-

trary influence of their great predecessor, and delight us with their originality and genius. This was especially the case with Fichte, who seems to have had the faculty of making all who came within his influence respect and love him. An example of the highest type of German character, he was a moral and intellectual enthusiast.

Johann Gottlieb Fichte was born at Rammenau, a village in Upper Lusatia, in May, 1762. His first serious effort in philosophy was the study of Kant's "Critique of Practical Reason," in which he tells us that he discovered, for the first time, the absolute freedom of the will. The theological training which he received in preparation for the ministry had given him the belief in a supernatural source of morality; and as ethics was the subject nearest to his heart, a deep and natural sentiment, he was both surprised and overioved to find what he regarded as a successful attempt to trace the inspiration of virtue to the natural operations of the mind. He prepared a hurried treatise called "A Critique of Every Possible Revelation," and making a pilgrimage to Königsberg, presented it to Kant, who, recognizing in it a high order of ability, was instrumental in securing its publication. By an accident, the author's preface, in which he acknowledged himself a beginner in philosophy, was omitted from the first edition, nor did his name appear on the title-page. Some of the German newspapers jumped at the conclusion that it was a production of Kant, especially as it seemed to be a development of the ethical teaching of that writer, and accorded to it unbounded praise. When the mistake came to light, Fichte's reputation was instantaneously made, and the result was an invitation to fill the chair of Philosophy at Jena (1793). Here, according to one of the favorite critical methods of his age, he was assailed for atheism, and refusing to make any retractions he resigned (1799). After many changes of place he was made professor of philosophy in the New University at Berlin, where his career was short but dramatic. His eloquence and ability secured him immediate and wide attention:—his lectures on Ethics were

stirring, and made a visible impression upon his times; but the national enthusiasm which marked the opening of the memorable campaign of 1813 carried him from the close of one of his lectures into the ranks of the assembling army, and within a year he was taken with a fever and died.

The Fichtean philosophy was elaborated during the few years of stormy activity which its author passed at the University of Iena. He endeavored to develop the practical or ethical side of Kant's philosophy; for it was to expound the Kantian system that he had been invited to the chair. But a revolution in Kant's own views had taken place: his "Critique of Pure Reason" had been virtually retracted by his "Critique of Practical Reason"; and as these works appeared but six years apart, the latter shortly before Fichte began lecturing at Jena, it will readily be seen that the first great disciple of Kant had a somewhat difficult and confusing task in expounding the views of his master. The object in reciting these details is to show how closely woven all that is known as German philosophy is, and how much it consists in the arbitrary creations of a few men, all living at about the same time, and most of them having personal intercourse and sympathy; Kant being the senior of the group and the instigator of the whole movement.

We can find no fault with Germany, therefore, when she, even at this time, looks to Kant as her greatest philosopher, for all German philosophy is acknowledged to be but branches or side developments of the Kantian theories. But when Germany says that Kant is her greatest mind, she underestimates the value of her other geniuses, such as Herder, Goethe, Schiller, and Lessing, who have contributed so much to the knowledge of the world. Kant's philosophy, with all its branches, has, it is true, been written in German, but not in the universal language of good sense.

Fichte exaggerated the idealism of Kant, which we have already described, by advocating what is known as *Subjective Idealism*. This means that objects of thought or perception do not exist externally, but only subjectively, or in the

mind. This belief, absurd as it seems, we are bound to believe was sincere, although it commits the fatal error of confusing thoughts with things: the very thing that Plato and the Skeptics did, but in a less grotesque manner. reasoning by which this belief is brought about has been analyzed in our description of Greek thought. which this reasoning so successfully conceals arises entirely from giving certain words different meanings, and afterward employing these words as having the same meaning. For instance. Fighte tries to establish the identity of being and thought, or general existence and personal existence. If we allow him to do this in the beginning, of course he can make whatever use he pleases of facts; for if we admit that facts exist only in the mind, and if the mind is expressed only through language, he can form any hypothesis he wishes and we are powerless to resist: for with an intellectual appetite which is hardly conceivable he devours fact itself, and consequently has on his own side all the facts in any argument he chooses to moot. But Fichte was too moral a man to make any dishonest use of the great logical advantage thus claimed. He amused himself in building up theories, which in turn served to amuse others. These theories have been called by his commentators "Theoretical Philosophy," to distinguish them from practical philosophy —a not unsuggestive distinction. We must not forget, however, that Fichte's incomparable character, his enthusiasm for intellectual and moral reform, his brilliant talents and scholarship, won for him vast numbers of admirers.

Shortly after he began his lectures at Jena, Forberg writes: "Fichte is believed as Rheinhold never was. The students understand him even less than his predecessor, but they believe all the more earnestly on that account."

Leaving the metaphysics of Fichte to their fate, we turn with pleasure to his Moral Philosophy, which has a freshness and reality about it that enable it to survive the mystifying influences of his logic. What, he asks, is the revelation which consciousness gives? It consists in the fact that

"I am free: and it is not merely my action, but the free determination of my will to obey the voice of conscience, that decides all my worth. More brightly does the everlasting world now rise before me; and the fundamental laws of its order are more clearly revealed to my mental sight. My will alone, lying hid in the obscure depths of my soul, is the first link in a chain of consequences stretching through the invisible realms of spirit, as in this terrestrial world the action itself, a certain movement communicated to matter, is the first link in a material chain of cause and effect, encircling the whole system. The will is the efficient cause, the living principle of the world of spirit, as motion is of the world of sense. I stand between two worlds, the one visible. in which the act alone avails, and the intention matters not at all: the other invisible and incomprehensible, acted on only by the will. In both these worlds I am an effective force. The Divine life, as alone the finite mind can conceive it, is self-forming, self-representing will, clothed, to the mortal eye, with multitudinous sensuous forms, flowing through me and through the whole immeasurable universe, here streaming through my veins and muscles.—there pouring its abundance into the tree, the flower, the grass. The dead, heavy mass of inert matter, which did but fill up nature, has disappeared, and, in its stead, there rushes by the bright, everlasting flood of life and power from its Infinite Source."

This kind of eloquence, which was a new thing in the German language, must have moved the hearts, excited the minds, and transcended the understanding of Fichte's students. When it is carefully analyzed, however, it is found to be a sort of summer-night's dream in philosophy, which is fascinating though enervating to the mind.

Frederick William Joseph Schelling was born in Würtemberg, January, 1775, and was therefore thirteen years younger than Fichte. He afterward became Fichte's pupil and chief expositor, succeeding to his chair at Jena. Schelling made the acquaintance of Hegel at the University of Tübingen, where a warm and lasting friendship was formed between

them. He remained in Bavaria until 1842 (where he was "honored, rewarded, and ennobled," when the King of Prussia persuaded him to come to Berlin to fill the chair once held by Hegel. Lewes tells us that in 1845 he "had the gratification not only of hearing him lecture on Mythology to large audiences, but also of hearing him, in the expansiveness of private conversation, pour forth his stores of varied knowledge." He continued an active, intellectual life to the last, and died August 20, 1854.

Schelling taught that the Reason was incapable of solving the problems of philosophy,—a very old doubt, but certainly an inconsistent one; for does not philosophy, which is an effort to solve the problem of existence, presuppose a belief in our ability to succeed? But this inconsistency was a mere trifle to some of the difficulties which Schelling attempted to overcome. He saw that it was necessary to have some faculty which he could believe was able to solve the problem of life, so he decided to call this faculty the "Intellectual Intuition,"—a name so apt and pleasing that it has continued in use ever since, and is devoutly believed in as a mental principle distinct from the natural coördinations of reason, even by advanced psychological writers, who are supposed to belong to an opposite school.

Schelling inaugurated what may be called an aristocracy of intuition, to which only a privileged few could gain admittance. The line which circumscribed this élite, however, seems to have been drawn against all those who could not understand Schelling's philosophy. "Really," he exclaims, "one sees not wherefore Philosophy should pay any attention whatever to Incapacity. It is better rather that we should isolate Philosophy from all the ordinary routes, and keep it so separate from ordinary knowledge that none of these routes should lead to it. Philosophy commences where ordinary knowledge terminates." Here we see some of the first fruits of that unnatural transcendentalism which Kant so successfully established in Germany.

The foundation of Schelling's philosophy was the luminous principle that "Nature is Spirit visible; Spirit is invisible Nature: the absolute Ideal is, at the same time, the absolute Real." If this proposition were as harmless as it is meaningless, we could well afford to pass it by without further comment. Let us, however, examine this saying, which depends so largely upon the meaning of the word absolute.

The salient points in Schelling's philosophy are best brought out by comparing his system with that of Fichte. Fichte said that the Non-Ego was created by the Ego; Schelling said that the two were equally real, and that both were identified in the Absolute. "In what, then, does Schelling differ from Fichte, since both assert that the product (Object) is but the arrested activity of the Ego? In this: the Ego in Fichte's system is a finite Ego.—it is the human soul. The Ego in Schelling's system is the Absolute—the Infinite—the All, which Spinoza called Substance: and this Absolute manifests itself in two forms—in the form of the Ego, and in the form of the Non-Ego—as Nature and as Mind." When we remember that the word absolute has no deeper meaning than Time, and that Time is not an ultimate but a relative fact—an aspect of Motion; when we think that the Ego means nothing but the individual: that the Infinite means that other aspect of Motion which we call Space: and that Substance, also, when used in its widest sense, means Space; we can see how all these efforts to transcend the limits of language, to place words before things, ideas before facts in the order of reality, serve but to emphasize the great truth that a true conception of knowledge can be obtained alone by reducing the number of the categorical terms until the meaning of all possible combinations of words converges in that of a single term or universal principle. How long will the higher ingenuities of man be exerted to resist this all-powerful truth, and, by so doing, postpone the success

¹ Lewes: "Hist. of Phil.," p. 709.

of philosophy, which is simply an ultimate analysis bringing the mind, or individual life, into harmony with general existence?

But notwithstanding its intricacies and absurdities, there is an underlying strength in Schelling's thought which makes it evident that if Germany could only throw off this curse of Idealism, her genius would again assert itself and accomplish great things in the world of speculation. Schelling's writings display great knowledge and research, fine intuitions, but so many changes of opinion occur that, although some positions are adhered to throughout, it is impossible to construct from them any coherent method.

In this particular Hegel differs from Schelling; for in Hegel we have a new and coherent method of dealing with the problems of philosophy.

George Frederick William Hegel was born at Stuttgart in 1770, and studied philosophy and theology at Tübingen. He was a private tutor in Switzerland and Frankfort until the death of his father in 1801, when a small inheritance enabled him to remove to Jena and to publish his first work, a dissertation directed against the Newtonian system of Astronomy, in which he pitted the transcendental theories of Schelling against the scientific method of induction. In any other country this proceeding would have helped the fame of Newton; but in Germany it obtained for Hegel the reputation of an original thinker. Soon after this he joined Schelling in editing the "Critical Journal of Philosophy," in which appeared his celebrated essay entitled "Faith and Knowledge," a criticism on Kant, Jacobi, and Fichte. It was at Jena also that he wrote his "Phänomenologie des Geistes," the writing of which was not even interrupted by the battle which gave that place into the hands of the French. On the night of this battle he is said to have finished the work, oblivious of the pain and terror with which he was surrounded. We shall not be disappointed in the production of a mind capable of withdrawing itself so completely from the world. In 1816 he was called

to the chair in Heidelberg, and two years later to that of Berlin, the first in Germany. Here he formed a school which included many illustrious members,—and lectured until his death in 1831.

What has made the fame of Hegel is the invention of his new method of philosophy. The world hitherto had been unable to discover the procedures of the mind: Hegel fixed upon a mental procedure of his own and discovered it to the world. This method was none other than the famous identity of contraries, which teaches that objects or ideas which are different are, in a sense, not different; that contradiction implies an innate identity; that subject and object are one, or that internal and external are equivalent terms in a transcendental sense. This, of course, was a great discovery, because, at least in the form in which Hegel expressed it, it had never been made before; and Hegel at once became a German prophet. Some hardy critics pronounced the principle absurd, because it led to contradictions, but Hegel replied that this was the very reason why it was true: for, he said, the conditions of all truth consist in the identity of contraries or contradictions. This, it cannot be denied. was logical, providing his first assertion be admitted. The ground for this assertion, it is true, is a question of fact, but Hegel held himself superior to facts, and the intellectual portion of Germany applauded his brave position.

Hegel established "Absolute Idealism." Kant was content with plain idealism, Fichte with subjective, and Schelling with objective idealism. Hegel wanted absolute idealism, and he therefore established it.

"It may be thus illustrated: I see a tree. Psychologists tell me that there are three things implied in this one fact of vision, namely, a tree, an image of that tree, and a mind which apprehends that image. Fichte tells me that it is I alone who exist; the tree and the image of the tree are but one thing, and that is a modification of my mind. This is Subjective Idealism. Schelling tells me that both the tree and my Ego are existences equally real or ideal, but they are

nothing less than manifestations of the Absolute. This is *Objective Idealism*. But according to Hegel, all these explanations are false. The only thing really existing (in this one fact of vision) is the Idea—the *relation*. The Ego and the Tree are but two terms of the relation, and owe their reality to it. This is *Absolute Idealism*." ¹

Some say that this idealism of Hegel is but the skepticism of Hume in a dogmatic form; others, that it is a refinement of the Spinozistic notion of Substance. It is, in my opinion, a great truth badly expressed.

The twelve octavo volumes of Hegel's Philosophy and Logic were not written in vain: they constitute the most tortuous and fantastical expression that the world has ever produced of the simple truth that the ultimate fact or relation is Motion, and that Time and Space are its subjective and objective aspects. The harmonies of this truth can be traced throughout his dexterous paradoxes and his ingenious word-puzzles, but with an effort that is out of all proportion to the benefit derived. In fact Hegel, instead of helping the world to find the ultimate reality, seems to have done all he could to render it forever incomprehensible. And had we no other means of studying philosophy than Germany thus affords us, it is a question whether our civilization would last long enough to bring this truth to light. The difficulty, therefore, is not in understanding German thought, but in establishing, by any reasonable mental effort, an agreement between its assertions and the facts of consciousness and life.

The warning of Herder against the idealism of Kant and his followers, however, was not entirely lost. There has been a distinct opposition in Germany, which has, in a measure, represented Herder and repeated his protests, but with little or no effect. Chief among this opposition we find the name of Schleiermacher (1768-1834), preceded by Christian Gottlieb Selle, Adam Weishaupt, Feder, Tittel, and Tiedemann. These men have defended the doctrine of the objective and real validity of knowledge, but their voices have been practically unheeded by both philosophic and scientific Germany.

¹ Lewes: "Hist. of Phil.," pp. 723, 724.

Again: Schopenhauer, the pessimist (1788-1860), tried to reconcile idealism and realism, and postulated the Will (used in a wider sense than as a human faculty) as the ultimate reality. The success of these efforts can be best judged of from the writings of such prominent modern scientists as Du Bois-Reymond, and his pupil Professor Rosenthal, who distinguished themselves by brilliant discoveries in nervous phenomena, the very citadel of thought, and yet regard the mind with superstition, plainly showing the influence of the a priori philosophy. We also have the recent assertion of Karl Hillebrand, that "almost all the really great men of science in Germany are neither materialists nor spiritualists, nor skeptics, but critics of the Kantian school." 1

But again it is to be remembered that Germany has practically repudiated, little by little, all the post-Kantian philosophy of Fichte, Schelling, and Hegel, whom Schopenhauer courteously calls the three great impostors, and rests her case upon what Kant himself lived to refute and recall, the analysis of mind to be found in the "Critique of Pure Reason."

We are told that Fichte, Schelling, and Hegel endeavored to be true Kantians, but by resting one foot on the "Critique of Pure Reason," and the other on the "Critique of Practical Reason," they were obliged to perform all sorts of logical contortions to preserve their equilibrium.

When all these things are considered are we not, upon the whole, entitled to say that the transcendental production known as German philosophy assumes, to the disinterested student, the appearance of a huge family quarrel rather than a worthy attempt to solve the problems of life; and that, as far as the progress of thought is concerned, the world can well afford to dispense with it?

Hence it is with a feeling of unfeigned relief that we turn to the more mature and gradually developed culture of France and England, in which soil the idiosyncrasies of thought that achieved such rank development in Germany, although frequently making their appearance, have never been able to gain a substantial hold.

^{1&}quot; German Thought," p. 203.

CHAPTER VIII

THE ECLECTICISM AND POSITIVE PHILOSOPHY OF FRANCE
AND THE SCOTCH SCHOOL

 $\label{eq:Gassendi-Malebranche-Condillac-Cabanis-Gall-Royer-Collard-Cousin-Comparison} -- Comte-Reid-Hamilton.$

AFTER the religious fervor of Europe had expended itself in the Crusades, there remained the three famous orders of chivalry known as the Teutonic Knights, the Templars, and the Knights of St. John. The latter maintained their organization by a long and valiant defence of Southern Europe against the Turks. The Templars were disbanded about fifty years after the last Crusade, while the Teutonic Knights turned their attention to Christianizing what was then known as pagan Prussia. This they did by almost exterminating a brave and hardy people, who loved their rude mythology and bitterly opposed the forms of Christian worship and the rule of the Empire. While this was going on, Paris had become the first great seat of learning in Christendom; its University was then a congeries of schools connected with monasteries and churches, but without that corporate unity which afterward made it the model of almost all the Universities of Europe.

As an example of its early importance, Henry II. of England, in 1196, offered to refer his dispute with Becket to the arbitration of the Peers of France, the Gallican Church, or the Nations of the University of Paris. Toward the end of the thirteenth century Pope Nicholas IV. conferred privileges upon the doctors and students which virtually gave the University a government of its own; and in the middle of the fifteenth century it was attended by over twenty-five

thousand students, which at that time was nearly half the population of Paris. It was in Paris that the chief battles of Scholasticism were fought. William de Champeaux, Abelard, Thomas Aquinas, and Duns Scotus, all lectured there. When the great Luther sounded the alarm of independent thought, which resulted in the emancipation of learned Europe from the papal authority of Plato and Aristotle, Loyola opposed the movement by establishing the Society of Jesus, with its invincible organization and renowned culture. His object was to preserve the Catholic faith in its entirety, including its ancient philosophy. But it was the favorite pupil of the Jesuits, Descartes, who soon afterward dealt the death-blow to Scholasticism, emancipating thought from the tyranny of the church.

Thus it was in the turmoil of the theological war which raged throughout England, France and Germany, and culminated in the establishment of Protestantism, that modern philosophy was born. It was born in the writings of Descartes and Spinoza, and was therefore an avowed attempt to define, not motion, but the nature of God. Thus in severing its connection with theology philosophy exalted its religious character, instead of debasing it. It proceeded, untrammelled by obsolete faiths, to form a true conception of the unity of God,—to bring all thought into harmony with this highest of thoughts,—to establish an ultimate generalization.

But what great influence has been urging the claim of Motion to its position as the highest or most general conception? Is it not the voice of Science, trying to persuade us that God is a principle, not a person? Its method is patiently to classify and arrange all experience into one vast organon of truth. As Science progresses, it becomes more and more conscious that there is but one fact or principle, in which all analysis ends and all synthesis begins.

Bacon, in England, took the sure path of science, feeling that although he might not reach a complete analysis of knowledge, such progress as he made would be in the right direction. There was but feeble resistance offered to this reform in France; the age felt the need of throwing off the delusions of arbitrary dialectics and reaching out for actual facts. Such, however, is the fascination in seeking the ultimate analysis of life, that the superb scientific achievements of Descartes were neglected for his complicated and unsatisfactory metaphysics, which led to a dual principle, and therefore did not even pretend to unify knowledge.

To the philosophy of Descartes was opposed that of Gassendi, who inaugurated the eclectic philosophy,—a school which subsequently attained to such eminence in France

through Royer-Collard, Jouffroy, and Cousin.

Pierre Gassendi was born in Provence, France, in 1592, and became a distinguished astronomer and mathematician, as well as a theologian. At the age of twenty-four he was appointed Professor of Theology at Aix, where he had studied. His first work was a polemic entitled "Paradoxical Essay Against Aristotle" (1624), in which he opposed the Aristotelian Astronomy, but announced his fidelity to the church, maintaining that Christianity was in nowise dependent upon the then Christian philosophy. In 1647, through the influence of the Archbishop of Lyons, brother of Cardinal Richelieu, he was appointed Professor of Mathematics in the College-Royal of France, where his lectures attracted great attention, and were attended by the *élite* of Paris.

"A System of Epicurean Philosophy" and "The Philosophical System of Gassendi" were his principal works. The latter was a combination of the various systems of antiquity, with a view to showing by their juxtaposition the correct method; which is the plan of Eclecticism.

Gassendi also wrote a criticism of the "Meditations" of Descartes, opposing the innovations of that writer in metaphysics. But his chief power was in the field of scientific investigation, where he had such friends as Kepler, Galileo, and Descartes. His reasonings with regard to the atomic theory are especially interesting and show a great boldness of thought.

Gassendi combined the idea of material substance as taught by Descartes, with the idea of atoms. The weight of the atom he identified with its motion or energy; thus refuting the theory of the *imponderability* of atoms which we find current among some physicists even of the present day. Motion, which is the fundamental fact in all phenomena, was selected by Gassendi in lieu of Descartes' erroneous theory of an ultimate substance or matter. "The atoms (created and set in motion by God) are the seed of all things: from them, by generation and destruction, every thing has been formed, and fashioned, and still continues so to be."

It is also interesting to observe that Gassendi explained the fall of bodies by the earth's attraction, and yet, like Newton himself, held action at a distance to be impossible.

A reference to the teachings of Democritus and Epicurus will distinctly show the source of Gassendi's speculations, as both these men offer a very refined and, considering their time, a wonderfully advanced theory of the universe, in which all phenomena are reduced to the principle of the related activities of atoms, or the finest imaginable subdivision of matter,—the first step in the direction of an ultimate analysis.

Gassendi also wrote a history of the science of Astronomy, including an account of the lives of Copernicus and other great astronomers,—an excellent description of the state of that science in his day.

The seventeenth century in France was as conspicuous for its theological activity as the eighteenth century was for its general and absorbing interest in philosophy.

Nicholas Malebranche (1638–1715) was the last and greatest of those Oratorian priests and writers who contributed so largely to the religious literature of France.

The philosophy of Malebranche was entirely subservient to the doctrines of the Catholic Church, and developed the ideal or mystical side of Descartes' teachings. It is so full of beauty and high moral purpose, however, that no philosophic writer has been more read and admired in France, not even Descartes. His chief work, "Recherche de la Vérité" (1674), was immediately recognized for its literary and philosophic merit. As a metaphysician, Malebranche interests us but little, for his reasonings are so mystical, or ideal, that he has been called the Kant of his country. He was essentially a Christian philosopher, and deduced his theory of knowledge from communication with a personal Deity,—something after the method of St. Augustine or Moses, but with a less concrete conception of God.

Malebranche taught that the soul and the body are entities, absolutely distinct, and, as a natural consequence, that the senses cannot supply us with truth. As God embodies all truth, the soul must receive this truth directly from God, and endeavor to preserve it untainted by the sinful body. All of this sounds more like theology than philosophy. Malebranche was nevertheless far too good a writer and thinker to be neglected in a review of philosophy. He had an intuition of divine unity, and endeavored to express it by harmonizing the philosophy of Descartes with Christian beliefs. This gives us a succession of essays on duty which nothing but a most delicate and profound understanding of life could produce. These thoughts on ethics are interspersed with Platonic metaphysics, rendered in the terminology of Descartes.

Next in the history of French thought, and really the direct logical successor of Gassendi and Descartes, we have Etienne De Condillac, who was born at Grenoble in 1715. The attention which Locke's philosophy had attracted in France was signalized by this writer. Locke had endeavored to prove that all thought springs from sensation and reflection. Condillac offered a simplification of this theory by saying that thought and sensation are but different views of the same thing, that sensation presupposes a sensorium, and that every activity of a sensorium is in some degree a thought. This opinion is vehemently opposed by modern psychologists, upon the ground that thought is

exclusively the function of a special thinking organ called the brain; and that the fact that some animals evince highly complex sensations after the brain has been removed proves that sensation is independent of thought.

Condillac and his pupils gave to the word thought a wider meaning than perhaps properly belongs to it, but this is excusable when we remember that it is only by calling attention to the elasticity of the meaning of words that their hidden interdependencies are brought to view. The aphorism "to think is to feel" (penser c'est sentir) is called an absurdity of the Sensational school, to which Condillac belonged; but there is no denying that this dictum has a logical value, for the simple reason that no psychologist is able to point out exactly where sensation ceases and thought begins, although these faculties are distinct enough when viewed separately.

Thought is a coördination, an activity, which takes place in the nervous system. That its operation is not entirely confined to the brain there are many means of proving. effects upon thought which disturbances in the system. remote from the brain, occasion, to say nothing of the organic diseases which wholly incapacitate the mind, are familiar instances of the obscure cooperation of the whole sensorium in the act of thinking. The muscle and the nerve are nowhere absolutely disjoined. But there is no need of confusing their functions. Condillac had no difficulty in distinguishing between thought and sensation, as the words are commonly used; he simply wished to point out the fact that there is no absolute dividing line between thought and sensation; and in so doing he rendered a service to philosophy; although it is easy, from the better understanding which we now have of the subject, to find fault with his phraseology.

Condillac, in his criticism of Locke, says: "Locke distinguishes two sources of ideas,—sense and reflection. It would be more exact to recognize but one; first, because reflection is, in its principle, nothing but sensation itself;

secondly, because it is less a source of ideas than a canal through which they flow from sense. This inexactitude, slight as it may seem, has thrown much obscurity over his system. He contents himself with recognizing that the soul perceives, thinks, doubts, believes, reasons, wills, reflects; that we are convinced of the existence of these operations, because we find them in ourselves, and they contribute to the progress of our knowledge; but he did not perceive the necessity of discovering their origin and the principle of their generation.—he did not suspect that they might only be acquired habits: he seems to have regarded them as innate, and he says only that they may be perfected by ex-This seems unjust to Locke, when we remember how he strove to prove that we have no innate idea; and vet Condillac's exception is well taken, for Locke does speak of many faculties as belonging to the mind, without offering any clear explanation of their origin.

Condillac's psychology can hardly be called scientific, if we compare it with such recent works as those of Bain, Spencer, and Lewes. At the age of thirty-one he published his first work, an "Essay on the Origin of Human Knowledge" (1746). This was followed, in 1754, by his "Treatise on Sensation," which spread his reputation throughout Europe: soon after this he was appointed preceptor to the Prince of Parma, for whose use he wrote his "Cours d'Études." Among his literary friends we find the names of J. J. Rousseau, Grimm, and Diderot. In 1768 he was elected a member of the French Academy, but never afterward attended any of its sittings.

The chief merit of Condillac was his discovery of the importance of language as a factor in intelligence. He taught that we owe the development of our faculties to the use of signs, and that the power of thinking is directly dependent upon the exercise of speech. When we think how important these inductions are, and how little progress

^{1&}quot; Extrait raisonné du Traité des Sensations."—"Œuvres de Condillac" (1803), IV., 13.

has since been made beyond them, we realize the signal importance of Condillac's services to thought.

As Comparative Physiology originated with Goethe, so did Comparative Psychology, notwithstanding its present undeveloped state, originate with Cabanis, a French physician and philosopher, born at Conac, in 1757. Cabanis admitted that all mental phenomena were reducible to activities akin with sensation, but he asked, What, after all, is sensation? Is it feeling—the name we give to sensations of which we are conscious; and if so, what degree of consciousness does the word sensation imply? What are we to call those myriad changes constantly going on within us of which we are entirely unconscious? Is it not clearly only those activities which are sufficiently obtrusive to attract attention that we call feeling; and are not all internal activities, in the broadest sense, sensations? These inquiries of Cabanis fairly opened the problems of Comparative Psychology, for they cited, as the field of psychological research, the whole vast empire of organic life in which the psychical states are but the evidences of a higher complexity of action. In the ascending complexity of organisms we have more and more sensitiveness to remote influences, more and more perfect coördinations of these impressions: and as function and structure are but different views of a single fact of development, we have potentialities which we severally call instincts, faculties, and innate ideas, awakened into activity, not created, by the experiences of life. Without certain inherited structures certain degrees of development are impossible, but the structure is not wholly in the individual, it resides also in the physical and intellectual environment, i. e. in civilization and language. Thus Cabanis not only demarcated the scope of psychology, but he actually began the science by "connecting the operations of intelligence and volition with the origin of all vital movements." Auguste Comte later built upon this great plan, and in the systems of Herbert Spencer and George H. Lewes we shall find it further developed. In 1802 Cabanis produced his principal

work, "Relations Between the Physical System and the Mental Faculties of Man." He warns his readers that they will find no discussions of ultimate principles in his works. He contented himself with studying mind as the function of an organism; and although some of his conclusions were crude, such as that "the brain secretes thought as the liver secretes bile," the worst that can be said of them is, that they are unhappy metaphors imperfectly expressing important truths.

Cabanis was a personal and political friend of Mirabeau, the undisciplined genius of the French Revolution, whom heassisted with his pen during the great struggle. Diderot, Condorcet, and Franklin are also numbered among the friends of Cabanis, who seems to have been in full sympathy with the great political and social movement of his time,—a period in which a calm and complete philosophy was surely not to be thought of.

We have now to note the appearance of an innovation in the study of the mind which was principally due to the German physician Francis Joseph Gall (1757-1828), the founder of the system of Phrenology. He graduated at Vienna, and practised medicine there for many years. He made a special study of the brain, and formed elaborate theories concerning the external signs connected with the different faculties of the mind. About 1805, with his coadjutor, Dr. Spurzheim, he began to propagate his views on Phrenology by lecturing in Paris, Berlin, and other cities. In 1808 he presented to the French Institute his "Researches into the Nervous System in General and the Brain in Particular," which was reported upon adversely by the committee to which it was given. Soon after this he began the publication of his principal work, "The Anatomy and Physiology of the Nervous System in General and the Brain in Particular." During the last twenty years of his life he was a resident of Paris.

The bold theory that certain portions of the brain corresponded with certain mental faculties stimulated a more

thorough research into nervous phenomena. The chief objection made to the generalizations of phrenologists is, that the exceptions to their rules are so many and serious that the rules are virtually destroyed by them, leaving but isolated observations which give little prospect of ever becoming a science. The correspondence, for instance, between certain cranial shapes and certain mental peculiarities is scarcely ever to be relied upon. Who would be willing. upon seeing the shape of the skull, without hearing the voice. observing the actions, or weighing the words of a person, to make even a guess at his mental capacity or characteristics? We must remember that the cranioscopist has the advantage of all these other means of judging before making his guess. Even the simplest of all phrenological generalizations—"the size of the brain is a measure of power, other things being equal."—has so many exceptions that it is practically valueless. Of this rule, Lewes, who is so much at home on the subject, says: "Phrenologists forget that here the 'other things' never are equal: and consequently their dictum. 'Size is a measure of power,' is without application. There never is equality in the things compared, because two brains exactly similar in size and external configuration will nevertheless differ in elementary composition. * * * Nerve tissue, for example, contains both phosphorus and water as constituent elements, but the quantity of these elements varies within certain limits: some nerve-tissues have more phosphorus, some more water; and according to these variations in the composition will be the variations in the nervous force evolved. This is the reason why brains differ so enormously even when their volumes are equal. brain differs at different ages, and in different individuals. Sometimes water constitutes three fourths of the whole weight, sometimes four fifths, and sometimes even seven eighths. The phosphorus varies from 0.80 to 1.65, and 1.80; the cerebral fat varies from 3.45 to 5.30, and even 6.10. These facts will help to explain many of the striking exceptions to phrenological observations (such, for example, as the

manifest superiority of some small brains over some large brains)."

As far as Gall's efforts tended to place psychology on a physiological basis, they were in the right direction; but it is to be observed that his chief followers have neglected the physiological side of phrenology for what is called cranioscopy, which on account of the uncertainty of its conclusions cannot be ranked as a science.

Philosophy did not escape the reactions which followed the French Revolution. The reign of terror extended into thought. The horrors resulting from the brief and unnatural rule of ignorance and passion made the people return to the old belief that true intelligence is superhuman, so that the mystic philosophy of Christianity regained its ascendancy in the mind of the nation. The mistake made was that of supposing the highest intelligence to be a mystery with which the church is in some way entrusted.

Theories of life which attempt to do away with the element of mystery, which would make our highest conceptions the natural or logical development of our most familiar experiences, have come in conflict with organized religion, and are therefore supposed to neglect the higher aspects of life. Until it is understood that the highest aspect of life means the most general or intelligent view of existence, until the idea of mystery is discovered to be but some degree of delusion, the endless recriminations which occur between the adherents of those schools of thought known respectively as the "natural" and the "supernatural" will continue to postpone the advent of a true religion, or the Unification of Knowledge.

The effect of the Revolution upon the thought of France was to make it dread every thing anti-religious or anti-spiritual, and to bring the old-fashioned mystic philosophy again into favor. The best minds which France has since produced show an almost pathetic reverence for the spiritual. Had any one been bold enough to affirm that there is no fundamental mystery in life, he would have been at once classed

with the demons of the Revolution. Not French Philosophy alone, but even French criticism, has been warped by this reactionary tendency; and we find the most superb intellects cringing before this spectre of the mind, variously denominated as the unknowable, the infinite, or the absolute, or, worse than all, the spiritual.

Even in the recent speech of Renan, before the French Academy, we find him burning incense to this ancient God by numerous mysterious references to the "Infinite"; while in all the eclectic philosophers, such as Royer-Collard, Cousin, and Jouffroy, this mystical element is clearly present.

When the University of France was established by the Imperial Government, centralizing the whole educational system of the nation, Royer-Collard was called to the chair of philosophy (1800), but only accepted the invitation after long hesitation, and then immediately began a course of study to fit himself for the position. He had studied at the College of Saint-Omer, which was under the management of his uncle, the Abbé Collard, had adopted the legal profession, and taken an active interest in the stormy politics succeeding the Revolution. At the time of his appointment to the chair of philosophy he was regarded as a man of wideculture and fine abilities, but he had not identified himself with any particular school of philosophy. Our interest in him comes from the fact that he founded what is known as the Eclectic System of Philosophy, which afterward gained such a reputation in France. It was at first simply a comparative study of the chief systems of thought, but under Victor Cousin it assumed the character of a distinctive method, which we will duly examine.

The attempt of Royer-Collard was to effect a compromise between what he regarded as the opposite extremes, Sensationalism and Idealism. He rejected Condillac's analysis of consciousness, and endeavored to introduce the mystical element of Idealism in the modified form in which it occurs in the writings of Reid and Stewart. The influence which he exerted on the thought of France has been chiefly

through his pupils, among whom were Guizot, Ampère de Rémusat, and Cousin.

Victor Cousin is one of the chief philosophic writers of modern times. He was the king-maker of the French philosophy during the first half of this century, for he first crowned Reid and Stewart, making the Scotch school popular in France; then studying Kant, he imposed upon his obedient countrymen the autocracy of Königsberg. Wearying of this, he raised to power Proclus of Alexandria, editing his works and advocating his cause: and after this he gave his inconstant allegiance to the transcendental Hegel, weaving his theories into the celebrated doctrine of Eclecticism. To the prodigious amount of study which such changes of heart must have cost, Cousin added the arduous task of editing the complete works of Descartes in eleven octavo volumes, and producing his works on Abelard and Pascal, the celebrated translation of Plato in thirteen volumes, his "History of Philosophy," well known in this country, and several original treatises, besides contributing largely to the literary and philosophic reviews of France.

It would be difficult to find a more agreeable and eloquent writer than Cousin. In him we have a striking instance of the difference between the highest order of erudition and real logical acumen. His style is clear and graceful, his pages are laden with interesting references and pleasing generalizations: but one looks in vain for the development of any great theme or deep-laid philosophic purpose. There is every thing to beguile, but nothing to establish, the mind. His method, briefly described, is, that "All systems are incomplete views of the reality, set up for complete images of the reality. All systems containing a mixture of truth and error have only to be brought together, and then the error would be eliminated by the mere juxtaposition of system with system. The truth, or portion of the truth, which is in one system would be assimilated with the portions of the truth which are in other systems; and thus the work would be easy enough."

The extraordinary success which attended the lectures of Cousin in Paris from the year 1828 can only be accounted for by the beauty and lucidity of his expositions, and his enthusiasm and eloquence. The interest which his lectures aroused has not been equalled since the days of William de Champeaux and Abelard.

At the same time that Cousin and Jouffroy lived and taught, a mind of singular force and originality appeared in France as the founder of the so-called Positive philosophy. The name of Auguste Comte is familiar to the reading world, but the name of his philosophy is even more widely known. There is, however, nothing in his teachings which gives them an exclusive right to the name Positive, for we are unable to find that the author had a firmer grasp of the principles of certitude than many another philosopher.

As the basis of his theory of knowledge, Comte postulates an unknowable existence, which he says we can never know. This mysterious existence, using the language of Plato and the Greek skeptics, he calls noumena. It is to be observed that he gives us no hint as to what the term noumena means. excepting that it is utterly unknowable. The reason which Comte gives for filling in the perspectives of human knowledge with noumena is, that our knowledge is only relative but noumena are absolute. Now, as absolute means without conditions, is it conscientious in Comte to impose upon noumena the condition of existence? As for our knowledge being relative, it could hardly be any thing else, as relative means related, and we are certainly intimately related to the rest of the universe. The principles of certitude, therefore, which Comte fondly hoped to centre in his Positive philosophy are transgressed at the outset of his exposition of knowledge by intruding upon our perceptions the presence of an indefinable mystery. After creating for himself these difficulties. Comte displays wonderful resources in avoiding them. grasp of scientific facts is marvellous; he marshals in review his battalions of data until one is overcome with the extent of his learning; but as the succeeding columns disappear in

the distance he offers no explanation as to whence this vast army comes or whither it is going. In a word, with regard to those ultimate problems of knowledge, such as the limits of language, and the nature of perception, Comte is incomplete and unsatisfactory.

The influence of Comte's writings in England was almost immediate. The English mind leans toward the positive, and was tempted by the name of the system to investigate it. Dr. Thomas Brown, J. S. Mill, Spencer, Lewes, and Harriet Martineau, all expound the *Cours de Philosophie Positive*. Comte had but a limited number of disciples in France; the nation was too well entertained by the brilliant Cousin to give him their attention. The example of England, however, and the writings of Littré, the most eminent of Comte's disciples, at last brought the Positive school into such prominence in France that it is now commonly regarded as the philosophic faith of the nation.

The manner in which Comte abandons, in the outset of his system, the great problem of perception is thus aptly described by Mill: "The fundamental doctrine of a true philosophy, according to M. Comte, and the character by which he defines Positive Philosophy, is the following: We have no knowledge of any thing but phenomena; and our knowledge of phenomena is relative, not absolute. We know not the essence, nor the real mode of production, of any fact, but only its relations to other facts in the way of These relations are constant succession or of similitude. that is, always the same in the same circumstances. The constant resemblances which link phenomena together, and the constant sequences which unite them as antecedent and consequent, are termed their laws. The laws of phenomena are all we know respecting them. Their essential nature and their ultimate causes, either efficient or final, are unknown and inscrutable to us."

The metaphysical errors in this analysis of knowledge are now too familiar to need comment. They are the old, old errors of agnosticism, of skepticism, of the belief in an un-

knowable. These errors give us but another instance of the perverse habit in introspective analysis of creating a mystery and then worshipping it as a "final cause." The assumption made is that there is an absolute knowledge (which is an absurdity), that this absolute knowledge is beyond our knowledge, for "we have no knowledge of anything but phenomena," and yet this absolute knowledge is defined as the "essence," the "real mode of production," the "final causes of phenomena." "The essential nature, the ultimate causes of phenomena are unknown and inscrutable to us," and vet it is insisted that we know of these things which are unknowable. How much more simple would it be to deny the existence of these precious mysteries. Would we run any serious risk in denving the existence of things which have never troubled any one excepting those who affirm over and over again that they know nothing of them? If the compensation for the risk is to be a rational theory of knowledge. let us at least try it. Let some other race of philosophers take up and cherish these mysteries; we have nursed them long enough.

The chief merit of Comte's system is to be found in his sociological inductions, by which he indicates the organic nature of all human development, thus opposing the theory advanced by Rousseau and others, that society with all its complex processes is an artificial structure, a divergence from nature. Notwithstanding the contradictions above enumerated, Comte suggested, through his classification of the sciences, principles of mental evolution which have contributed greatly to our conception of knowledge. Perhaps no writer ever aimed so high, ever attempted to do more. His propositions are splendid. "A social doctrine," he says, "is the aim of Positivism, a scientific doctrine its means." "The aim of Positivism is to create a philosophy of the sciences as a basis for a new social faith," hence his celebrated "Organon of the Sciences" and his "Religion of Humanity"; add to this "the predominance of the moral point of view," "the rigorous subordination of the intellect to the

heart," and we have the figure of the great emotional system of Comte.

There is scarcely an idea which the most advanced biology. psychology, and even sociology establish which cannot be found latent in the writings of Comte, ideas of course derived in part from such writers as Cabanis, Gall, Condillac, and their predecessors. But criticism has no right to give to imperfectly elaborated theories the more perfect form of later and higher developments. Thought, like science, must pass for what it is, not for what it could be, or might have been, The idea that law rules in the moral and social as well as the physical world is clearly emphasized by Comte, but the further development of this idea, which we find in Spencer and Lewes, constitutes the distinction of these latter writers from Comte. Hence, to say that Spencer owes all his philosophy to Comte, an assertion which has attracted some attention in England recently, is as untrue as it is ungenerous. It is a significant fact that the profundities of Comte's system were but poorly appreciated until Spencer actually established great inductions which are scarcely more than germinal thoughts in the positive philosophy. No one can doubt this who will carefully compare Comte's scheme of the sciences with Spencer's synthetic philosophy; and yet Comte's scheme of the sciences is his best work, that which has challenged the widest admiration. The theory of knowledge which runs thoughout this scheme, however, as already pointed out, cannot bear close analysis.

Comte taught that all true methods of investigation are fundamentally alike; that philosophy is but the union of all positive knowledge into a harmonious whole. These are good generalizations; but the moment he particularizes he becomes arbitrary, and contradicts himself. He says that the progress of humanity has three stages,—the theological, the metaphysical, and the positive; for speculation always begins with supernatural, advances to metaphysical, and finally reposes in positive, explanations; which is equivalent to saying that all conceptions of God, or all efforts to arrive

at an ultimate fact or principle, which, in all cultures, have taken the form of metaphysical and theological speculations. are to be cast aside as primitive methods tending but to uncertainty, and that positive philosophy alone complies with the canons of a true investigation. When we consider how faulty is the analysis of knowledge which this "positive philosophy" offers, and how true are the theological and metaphysical intuitions of the race when viewed as a whole. we fail to perceive that positivism has risen to the higher plane of thought and feeling which its author claims for it. This assumption of Comte is all the more strange when we remember how liberally he acknowledges the debt of humanity to all who have contributed to the sum of knowledge either through religion or thought. The explanation is to be found in the fact that he was influenced by the belief in a fundamental mystery, and hence stigmatizes all efforts to find God, or an ultimate principle, as not only hopeless, but as belonging to stages of human development which are primitive in comparison to the unerring procedures of Positivism.

When we think that philosophy can only succeed by harmonizing religion with the search for divine unity known as metaphysics, and that the classifications of science can be but subsidiary to this achievement, we are unable to accept Comte's analysis of human progress or his definition of philosophy. And yet it is easy to see that notwithstanding his imperfect conception of the true nature of theology and metaphysics, he was keenly alive to the fact of a divine unity in life and mind; for in describing the stages of human development he says that the highest condition of the theological stage is "when one being is substituted for many, as the cause of all phenomena"; of the metaphysical stage, "when all forces are brought under one general force called nature"; and of the Positive stage, "when all phenomena are represented as particulars of one general view." This is certainly good evidence that notwithstanding his arbitrary subdivisions of progress he was conscious that the search for the Ultimate Fact, the First Cause, or God, first systematically attempted in ancient Greece, still unremittingly prosecuted in our times, and which has been more or less distinctly voiced in all the concerted thought and feeling of the world, is the true philosophy, and that it must pursue the same methods to the end. Thus it is that in reviewing the writings of Comte we are forced into alternate condemnation and praise, for with the highest merit the gravest inconsistencies are found.

The subdivisions of philosophic thought have been largely determined by the ethnic sentiment, the ties of country and race. In ancient philosophy this is not so apparent, as Greece had little or no competition in the thought of other nations. In the Christian civilization, however, we not only find a rendering of philosophy in each of its languages, but there are further subdivisions corresponding with the geographical boundaries of different peoples speaking the same language. It is natural enough that each different language of Europe should have a philosophy of its own, though these systems may much resemble each other. But when Scotland and England are accredited each with a different school of thought, the merely geographical or national element in the division becomes obtrusive; the classification lacks the dignity which should belong to the highest order of thought.

As Auguste Comte taught a Positive philosophy, so did Thomas Reid promulgate a system of *Common-Sense*; and as the qualities designated by these names are essential to every well-regulated mind, whether its surroundings be those of Athens, Paris, or Edinburgh, we must not be disappointed if we fail to find any very distinct logical characteristics in these systems corresponding with their names.

The chief writers of what is called the Scotch School were, first, Thomas Reid (1710–1796), then Dugald Stewart, Thomas Brown, and Sir William Hamilton. They all lectured in Scotland. Stewart wrote upon the system of Reid, Brown lectured and wrote of both his predecessors, and Hamilton published complete editions of the works of Reid and

Stewart; so we have in the thought of these four men an organon of truth which, whatever may be its other excellencies, can at all events be clearly identified with Scotland.

Bishop Berkeley was the first to formulate in English the doctrine of Absolute Idealism. Hume deduced from Berkeley's arguments a skepticism which, as we have already pointed out, is virtually the same thing as Idealism. Thomas Reid rejected the skepticism of Hume. But by admitting the possibility of an unknowable existence, he really agreed with Hume in all essential particulars. Dr. Thomas Brown. upon being asked whether the difference between Reid and Hume was not chiefly one of words, replied: "Yes, Reid bawled out we must believe in an outward world: but added. in a whisper, we can give no reason for our belief. Hume cries out, we can give no reason for such a notion; and whispers, I own we cannot get rid of it." Thus we have a confession from one of the chief Scotch metaphysicians that Reid, although he claimed to have refuted both idealism and skepticism, was really an agnostic, which is the most popular name for the modern skeptic.

Dugald Stewart comes very near the truth when he says that the belief in the external world, or *space*, is one of the "Fundamental Laws of Human Belief," or, as we would express it, one of the conditions of perception.

Reid sought to prove that our instincts account for our belief in an external world, but he insisted that it is impossible to account for our instincts; which is hardly an acceptable solution of the problem of perception.

"To talk of Dr. Reid," said the *Quarterly*, in its review of Stewart's Second Dissertation, "as if his writings had opposed a barrier to the prevalence of Skeptical Philosophy, is an evident mistake. Dr. Reid successfully refuted the principles by which Berkeley and Hume endeavored to establish their conclusions; but the conclusions themselves he himself adopted as the very premises from which he reasons. The impossibility of proving the existence of a material world from 'reason, or experience, or instruction, or habit, or any

other principle hitherto known to philosophers,' is the argument, and the *only* argument, by which he endeavors to force upon us his theory of instinctive principles."

Sir William Hamilton was one of the clearest and most advanced writers upon metaphysics, of modern times. philosophy is principally devoted to the consideration of three questions.—(1) the perception of the external world: (2) the nature of necessary truths, or the principles of certitude: and (3) the law of causation. The discussion of such questions as these can lead to no definite results unless we first agree upon the signification of those general terms known as the Ultimate Realities, or the categories of thought. words as the Infinite and the Absolute, called by Hamilton the "two inconceivables," are employed so often that we feel convinced they stood for very important facts in his mind. Again: Space, Time, Matter, Force, and Motion, are continually employed in conflicting senses. For instance. Hamilton affirms that Space and Extension mean the same thing, but, if there is any difference at all in them, Space is a priori and Extension a posteriori: or, the idea of Space is given in the fact of mind and the idea of Extension grows up with experience. He also distinctly teaches that. whereas mind and matter both appear in Time, matter alone appears in Space: From which it is fair to conclude that space appears in mind, but mind does not appear in space. Now, as no mind has ever vet appeared out of space, we are unable to appreciate this distinction, however clear it may be to the admirers of the Scotch School. Again: Hamilton, it is well known, employs the word Matter frequently in the Kantian sense of Force, as a necessary element of consciousness. which makes it all the more difficult to understand how an element of consciousness, called matter, which we are told never appears out of space, can be an element of consciousness, if consciousness, or mind, appears only in Time and not in Space. It is generally admitted that matter always occupies space, but if mind cannot appear in space, the question arises, what becomes of the space which matter ought to occupy when it appears as an element of mind in Time alone? It is evident from this that the Scotch School places matter in a very unfair position, for we are left to conclude that the matter which appears as an element of mind does not occupy the space that it should.

Hamilton, as we have said, is one of the clearest and best writers upon metaphysics, of modern times; but it cannot be denied that there are occasional infelicities in his manipulation of the Ultimate Realities, or the categories of thought, which none but the most indulgent readers of his system could overlook.

How can we hope to determine such general questions as the "Perceptions of externals," "Necessary truths," "The law of causation," while such confusion reigns with regard to the meaning of the most general terms employed?

To Bacon can be traced the English love of the real as distinguished from the ideal in thought. The great work of Newton was a natural consequence of Bacon's scientific method, but Newton avoided all metaphysical discussions, not because he was not able to reason as well as any of his contemporaries, but because he was conscious of the need of a common understanding of the significance of general terms. The mind that could affirm that "all philosophy consists in the study of Motion" was incapable of entertaining such a belief as the absolute separation of mind and matter: the mind that saw the impossibility of "action at a distance," or unrelated phenomena, could not consent to an absolute distinction between matter and space, or between force and time.

Science, in England, has steadily progressed upon the plan suggested and developed by Newton. In the meantime the scientific study of mind as the function of an organism, founded by Hobbes and Locke, and developed by Dr. Hartley, the elder Darwin, and the elder Mill, has led to such works as J. S. Mill's "System of Logic," the psychological studies of Professor Bain, and the complete philosophic systems of Herbert Spencer and George H. Lewes.

As these latter systems embody the highest results of English, and in fact of modern, science and thought, our argument can best be furthered by a careful review of them, especially as they constitute the most thorough study in existence of that aspect of knowledge which we call *perception*.

In closing this portion of the work, which has been in large part devoted to the explanation of the scope of language, let us bear in mind that language can only represent motion, that it is impossible to frame a sentence or express an idea which does not imply as a fundamental fact some movement or activity. The most abstract mathematical symbols, such as numbers, letters, a dot, a straight line, or a curve. represent respectively the operation of counting, the grouping of the results of counting, the separation of wholes into parts, the shortest movement between two points, or the movement of a point around a centre. It is well known that the most abstract metaphysical symbols, such as space and time, can only be represented by motions, and are but aspects of the universal fact of Motion. But there are few who are willing to acknowledge the full significance of this truth, that motion is the universal fact: for it means that all comprehension, perception, mind, will, are functions or consequences of this fact. This great truth, which is the simplest statement of the scope of language, can only be apprehended by studying the genesis of language; and although this study is scarcely begun in the world, our argument would be incomplete if we were not to give some idea of it.

The fundamental form of communication is by gesture. Gesture-language, therefore, is the genetic beginning of all language. Even in these days of developed and apparently arbitrary speech it constitutes a universal medium of expression. Animals comprehend movements or gestures more easily than sounds; but when we think that sound, or any other activity which appeals to the senses, is but movement, we begin to appreciate how utterly dependent the mind is upon activity or motion. It is a well-authenticated fact that deaf-mutes and savages converse readily through gestures,

because in the former, speech, or communication by words. is wholly undeveloped, and in the latter but imperfectly. Even when speech is highly developed, gestures are used as a further emphasis of meaning. The interaction of expression and ideas, or language and thought, the fact that they develop each other, is aptly illustrated by the description which Kruse (himself a deaf-mute and a well-known teacher of deaf-mutes) offers of the formation of gesture-language: "Thus the deaf and dumb must have a language, without which no thought can be brought to pass. But here nature soon comes to his help. What strikes him most, or what makes a distinction to him between one thing and another, such distinctive signs of objects are at once signs by which he knows these objects, and knows them again; they become tokens of things. And whilst he silently elaborates the signs he has found for single objects—that is, whilst he describes their forms for himself in the air, or imitates them in thought with hands, fingers, and gestures, he develops for himself suitable signs to represent ideas, which serve him as a means of fixing ideas of different kinds in his mind and recalling them to his memory. And thus he makes himself a language, the so-called gesture-language; and with these few scanty and imperfect signs a way for thought is already broken, and. with his thought as it now opens out, the language cultivates and forms itself further and further." It is well understood among those who have studied gesture-language that deafmutes and savages are far better able to master it and express themselves than educated people who enjoy the full use of their faculties. Said the director of an Institute: "None of my teachers here who can speak are very strong in the gesture-language. It is difficult for an educated, speaking man to get the proficiency in it which a deaf-anddumb child attains to almost without an effort."

It is evident that all language not only springs from gesture-language, but is essentially of the same nature. Not only the means of expression, but the objects of expression, are found upon analysis to be motion. All sentences de-

pend upon some verb (expressed action or being) for their meaning. Now, when being or existence is identified with life or universal activity through the aid of a metaphysical analysis, we see how from the grammatical side of language also we are irresistibly led to this ultimate fact. All parts of speech are but modifications or inflections of motion. Thus "the deaf-mute borrows the signs of space, as we do similar words, to express notions of time: * * * the present tense [of the verb can be expressed] by indicating 'here' with the two hands held out, palm downward; the past tense, by the hand thrown back over the shoulder, 'behind'; the future, by putting the hand out, 'forward.' But when he takes on his conjugation to such tenses as 'I should have carried,' he is merely translating words into more or less appropriate signs." '

Quoting from Quintilian, Mr. Tylor says: "As for the hands indeed, without which action would be maimed and feeble, one can hardly say how many movements they have, when they almost follow the whole stock of words; for the other members help the speaker, but they, I may almost say, themselves speak. ** Do they not, in pointing out places and persons, fulfil the purpose of adverbs and pronouns? So that in so great a diversity of tongues among all people and nations this seems to me the common language of all mankind."

"The best evidence," continues Mr. Tylor, "of the unity of the gesture-language is the ease and certainty with which any savage from any country can understand and be understood in a deaf-and-dumb school. A native of Hawaii is taken to an American Institution, and begins at once to talk in signs with the children, and to tell about his voyage and the country he came from. A Chinese, who had fallen into a state of melancholy from long want of society, is quite revived by being taken to the same place, where he can talk in gestures to his heart's content. * * * Macrobius says it was a well-known fact that Cicero used to try with Roscius, the

¹ E. B. Tylor: "Early Hist. of Man."

actor, which of them could express a sentiment in the greater variety of ways, the player by mimicry or the orator by speech, and that these experiments gave Roscius such confidence in his art, that he wrote a book comparing oratory with acting. Lucian tells a story of a certain barbarian prince of Pontus, who was at Nero's court, and saw a pantomime perform so well, that though he could not understand the songs which the player was accompanying with his gestures, he could follow the performance from the acting alone. * * * Religious service is performed in signs in many deaf-and-dumb schools. In the Berlin Institution, the simple Lutheran service—a prayer, the gospel for the day, and a sermon—is acted every Sunday morning for the children in the school and the deaf-and-dumb inhabitants of the city. and it is a very remarkable sight. No one could see the parable of the man who left the ninety and nine sheep in the wilderness, and went after that which was lost, or of the woman who lost the one piece of silver, performed in expressive pantomime by a master in the art, without acknowledging that for telling a simple story, and making simple comments on it, spoken language stands far behind acting. The spoken narrative must lose the sudden anxiety of the shepherd when he counts his flock and finds a sheep wanting, his hurried penning up of the rest, his running up hill and down dale, and spying backwards and forwards, his face lighting up when he catches sight of the missing sheep in the distance, his carrying it home in his arms, hugging it as he goes. We hear these stories read as though they were lists of generations of antediluvian patriarchs. The deaf-anddumb pantomime calls to mind the 'action, action, action!' of Demosthenes."

The connection between thought and language constitutes the best possible lesson in psychology. In ancient Greece, deaf-mutes were thought to be speechless on account of a deficiency of intellect: we, who take the opposite view, namely, that their deficiency of intellect is due to inability to speak and thus to develop the mind, are still apt to neglect the fact that there are all degrees of intellectual incapacity expressed in imperfections of speech. Thought and the power of uttering thoughts are not only interdependent activities, but they are different views of the same activity. "Thinking is talking to one's self"; "Language shapes itself in mind, and mind in language."

In the gesture-language, we are told, it is impossible to distinguish between the verb and the noun, or the adjective and the adverb. This is because a noun represents the activity or appearance produced by an object, and this appearance is represented by actions or gestures corresponding to it, which really makes every noun a certain kind of action or a verb. "To say, for instance, 'The pear is green,' the deaf-and-dumb child first eats an imaginary pear, and then, using the back of the flat left hand as a ground, he makes the fingers of the right hand grow up on the edge of it like blades of grass. We might translate the signs as 'pear-grass,' but they have quite as good a right to be classed as verbs, for they are signs of eating in a peculiar way, and growing."

Again: since substantives and verbs are thus indistinguishable, the adjectives and adverbs which qualify them are equally so; for gestures bear the same relation to phonetic symbols or spoken words that picture-writing bears to alphabetical writing. In gestures or pictures, the action expressed is conveyed to the mind directly, in its original or concrete form; in spoken or written words, it passes through a metamorphosis of sound and form, a sort of digestion, or reduction to its simpler elements, which adjusts the action to the special senses, or the conditions of perception.

Developed language is susceptible of a vastly greater extension and definiteness, because what might be called the atoms of thought are so much more subdivided, and therefore capable of higher complexities in their redistribution. We cannot make a mould with gravel; we must use the finest clay, so that every detail of the model may be reproduced by the particles employed. To reproduce our thoughts, we must dissolve them into minute particles of sound and form,

called letters; and with this simple medium we reconstruct the most delicate mental delineations. Behind this picture we can clearly see the irreducible fact of Motion, which in a complex form constitutes both the object and subject of thought, approached in its simpler conditions of form and sound through the medium of language.

Hence language is an activity which extends the range of sentiency, relating for us the particular and the general, the complex and the simple, or the human and the divine.



PART II. THE NATURE OF PERCEPTION.



PART II.

THE NATURE OF PERCEPTION.

CHAPTER IX.

HERBERT SPENCER.

The Relation of Perception to Universal Activity—The Definitions of Evolution and of Life—The "Unknowable,"

Human knowledge consists of the elaboration of perceptions, the organization of facts. The principle of perception, therefore, underlies and must explain the whole fabric of ontological science. Notwithstanding the vast proportions to which the writings upon this science have grown, there is probably no department of knowledge which, in the future, will require less space to record its truths than the science of Metaphysics.

The imposing number of works upon ontology have not, however, appeared in vain. It was necessary that every possible construction of the questions involved should be made before the mind could choose between them. Hence bodies of co-ordinated beliefs have sprung up in all directions; these have coalesced into orders or schools named after the characteristics of each, such as ideal, spiritual, rational, natural, and positive. These schools have been subdivided into varieties which bear the names of their principal advocates, forming a long list and representing practically every possible shade of opinion. This is not only the history of metaphysical science, but of all sciences; it is, in fact, the only way in which opinion grows into settled belief. The test of truth in the majority of the sciences, although precisely the same

in nature, is much simpler than in philosophy, because the means of verification are so much nearer at hand. a horizon, however, to every science which eludes the special methods of each, and requires the combined logic of all to survey it. It is this outlying region of experience which constitutes the field of philosophy. Zeller tells us that "the term Philosophy, as in use among the Greeks, varied greatly in its meaning. Originally it denoted all mental culture, and all effort in the direction of culture. The word σοφία from which it is derived was applied to every art and every kind of knowledge. A more restricted significance seems first to have been given to it in the time of the Sophists, when it became usual to seek after a wider knowledge by means of more special and adequate instruction than ordinary education and the unmethodical routine of practical life could of themselves afford." Since the time of Plato this word has assumed a more and more special meaning, until to-day it is widely understood to designate not merely a development of knowledge, but a different kind of knowledge from that to which the particular sciences belong. The term mental science, again, has had, if any thing, a more restricted meaning than the more general term philosophy. The activities of the mind have been regarded as of another source and This idea has grown until the kind than other activities. different mental faculties, such as memory, will, reason, and perception, have come to be considered as separate principles, the interdependencies of which are inscrutable. The confusion which these superstitions have engendered is only just beginning to give way before the new science of psychology, which studies the mind as an organ and its activity as part of organic life.

Perception has always been conceded to be the chief mental faculty, partaking in its nature of all the others. The theories concerning the nature of this faculty, which we find in the different systems of mental science, form the truest index to their comparative logical merit. A careful analysis, therefore, of the theory of perception which is presented in

any system of philosophy, will serve to bring us by the shortest route to a comprehension of its scope, and the position it holds in the great hierarchy of Knowledge.

The philosophy of Herbert Spencer has made an impression in America: it is a system which has especially commended itself to the inquiring minds of our people. The Americans resemble the Greeks in their intellectual economy; they have not buried themselves in the learning of the past, and are therefore keenly alive to the progress, and proportionately less attentive to the history, of thought. This fact has given Spencer's system, as a whole, an importance which it could not have attained in an older country. In England, and on the continent, Spencer's writings are estimated according to their individual merit, philosophical culture there being too general to admit of the concrete conception which we have formed of them.

In reviewing a great and new system, such as the Synthetic Philosophy of Herbert Spencer, it is a certain disadvantage to have studied it only at first hand. enormous reach of its investigations, and the vast co-ordinating power which has made this system one of the greatest achievements of modern thought, are such as to place all who study it, deeply in the author's debt. A new system. scarcely completed, has no subsequent expository 1 to illuminate it, to help us to distinguish between what is really original with the author and what is imbibed from contemporaneous thought. In a mind like Spencer's the rays of contemporaneous thought converge, and it is necessary to view it from a distance in time, in order to separate the reflected from the individual light. Mr. Fiske says: "When Von Baer discovered that the evolution of a living organism from the germ-cell is a progressive change from homogeneity of structure to heterogeneity of structure, he discovered a scientific truth. But when Herbert Spencer applied Von Baer's formula to the evolution of the solar system, of the

I am not unmindful of the excellent works of John Fiske and Malcolm Guthric.

earth, of the totality of life upon its surface, of society, of conscious intelligence, and the products of conscious intelligence, then he discovered a truth in philosophy.—a truth applicable not merely to one order of phenomena, but to all orders." If this claim for originality in Mr. Spencer's behalf could be sustained, we should indeed have in him a Columbus of philosophy, for this vast discovery could be compared to a new continent of thought. That this new continent of thought, known as evolution, has been discovered, no one will deny; but we should hesitate to give the credit to any individual, or even to any century. While we plume ourselves upon the discoveries of our century, we are continually forgetting that we are, in the strictest sense, but a consequence of the past: that by reason of this inestimable debt knowledge is, for the most part, but erudition. and philosophy but Eclecticism. In distributing the honors. therefore, to the originators of this great theory of Evolution, which our race is but beginning to appreciate, our encomiums become a hymn of praise to the thinkers of all ages.

Spencer's philosophic system is an application of the principle of evolution to every conceivable aspect of life and of the universe. It begins with a work entitled "First Principles," which is in effect an epitome of the whole. The immediate purpose of this volume is to demonstrate the interdependence of all phenomena, and thereby to define the term evolution.

Little by little as his argument progresses Mr. Spencer adds to the meaning of this word evolution, or rather he removes one restriction after another to its meaning until its generality alarms the metaphysician, and the inquiry arises, Is it not a universal term? The position here taken with regard to the meaning of ultimate terms is already familiar to the reader. There can be but one ultimate fact, give it what name or names we please; for *ultimate* means final, and a final fact is only distinguished from other facts by its

¹ John Fiske: "Outlines of Cosmic Philosophy," vol. I., p. 40.

simplicity. If it were complex, it could be separated into more general facts. If it is simple, resisting all further analysis, if it is a common property of every fact, if it remains after every analysis has been pushed to its farthest limits, and if it is the foundation of every inference or synthesis,—it is unity itself. That Mr. Spencer employs the term evolution as an ultimate fact will be manifest to any one who will patiently examine his treatment of the subject in "First Principles."

In closing the second chapter on the Law of Evolution. Spencer says: "As we now understand it. Evolution is definable as a change from an incoherent homogeneity to a coherent heterogeneity, accompanying the dissipation of motion and integration of matter." In a chapter entitled "The Interpretation of Evolution," and referring to the above described law of evolution, we find the following: "Is this law ultimate or derivative? Must we rest satisfied with the conclusion that throughout all classes of concrete phenomena such is the course of transformation? Or is it possible for us to ascertain why such is the course of transformation? May we seek for some all-pervading principle that underlies this all-pervading process? * * * It may be that this mode of manifestation is reducible to a simpler mode, from which these many complex effects follow. * * * Unless we succeed in finding a rationale of this universal metamorphosis. we obviously fall short of that completely unified knowledge constituting Philosophy. As they at present stand, the several conclusions we have lately reached appear to be independent,—there is no demonstrated connection between increasing definiteness and increasing heterogeneity, or between both and increasing integration. Still less evidence is there that these laws of the redistribution of matter and motion are necessarily correlated with those laws of the direction of motion and the rhythm of motion previously set forth. But until we see these now separate truths to be implications of one truth, our knowledge remains imperfectly 2 coherent. * * *

¹ Spencer's "First Principles," p. 360. The italies are the author's.

² The italies are the author's.

It has to be shown that the redistribution of matter and motion must everywhere take place in those ways, and produce those traits, which celestial bodies, organisms, societies, alike display. And it has to be shown that this universality of process results from the same necessity which determines each simplest movement around us, down to the accelerated fall of a stone or the recurrent beat of a harp-string. In other words, the phenomena of Evolution have to be deduced from the Persistence of Force. As before said, 'to this an ultimate analysis brings us down, and on this a rational synthesis must build up.' This being the ultimate truth which transcends experience by underlying it, so furnishing a common basis on which the widest generalizations stand, these widest generalizations are to be unified by referring them to this common basis."'

If the widest generalizations result in the conception of evolution, and if the only common basis for these generalizations, as is admitted by Mr. Spencer, is the universal principle which he calls the "persistence of force," surely evolution in its widest sense is a universal principle. Nothing could simplify philosophy more than this identification of evolution as a universal principle.

So serious are the consequences, however, so grand are the results, and withal so simple is the explanation, that the conventional thinker, entrenched behind his dogmatic distinctions without differences, will make many objections. From this conventional reasoner the first objection would be that evolution is a process, not a principle. But a principle is merely a prominent or general fact, and it is clear that the fact or process of evolution is the most general in life. Where under the new light of biology and organic chemistry are we to find the limits of life? Is not the most prominent fact in "all phenomena" a universal fact?

Again it will be objected that the correlative or antithetical term of evolution is *dissolution*, and that all phenomena have these contrasted aspects, which remands the

^{1 &}quot;First Principles," pp. 397, 398.

term evolution to a more subordinate position in the scale of generality than "the persistence of force." This is an objection which needs careful scrutiny, as it seems to mean more than it does. It is impossible to conceive of evolution in the philosophical sense in which the word is used without including the idea of dissolution, in the same way that it is impossible to conceive of the universal principle which we call life without including the idea of death.

Again, the senses in which the word evolution is employed in mathematics and dynamics are entirely distinct from the broad philosophical sense, where it is the equivalent of the serial *development* of all things, "the evolution of ages."

To say that evolution is not used by Spencer as a universal principle because its reverse process is *involution*, would be as sensible as to make the same assertion because *dissolution*, in a certain restricted sense, is the antithesis or correlative of evolution.

Mr. Spencer may not be conscious of the fact that he has defined evolution as a universal principle, but when he builds up a system of philosophy in order to apply the process to all phenomena, that it is in its widest sense a universal fact is an irresistible inference from his words; and the distinction between process and principle when both are facts of universal application becomes invidious. If, as Mr. Spencer says, "evolution is the redistribution of matter and motion," what event in time and space is independent of this cause?

A candid study of the manner in which Mr. Spencer employs and defines the word will convince us that it stands in his mind for the highest generalization of life or existence, and that, as there are no absolute demarcations to life in the universe, evolution is a universal generalization or principle.

And here we come to the theory of perception, which we hold to be the chief feature of every system of philosophy, determining its merit as an original production, its importance as a contribution to knowledge; for it is in the respect of learning the true nature of perception that real progress in philosophy has been made. We see from the above that

the formula of Evolution suggested by Mr. Spencer, which in its simplest expression is "the redistribution of matter and motion," is acknowledged by him to be but a derived law, or, in other words, a complex expression of a simple law or ultimate fact, which he denominates "the persistence of force," and which we submit can find a still more simple expression in the word Motion. Motion is the ultimate term in all the sciences, as well as in philosophy.

When we remember the great principle that facts express themselves, it is apparent that the attempts to form such abstract generalizations as "concentration of matter" and "dissipation of motion," or "Evolution is an integration of matter and concomitant dissipation of motion, during which the matter passes from an indefinite, incoherent homogeneity to a definite, coherent heterogeneity; and during which the retained motion undergoes a parallel transformation," are useless, for the ultimate fact of motion is so obtrusive throughout that nothing is gained by the definition.

As will be evident to any one who follows out Spencer's whole system, these involved formulas of the ultimate process of evolution are, for the most part, but vain attempts to define motion. These definitions depend for the terms in which they are expressed upon the aspects of the ultimate fact, Motion, or upon different names for the fact itself; such as co-existence and sequence, the equivalent terms space and time, or the frequently recurring motion and matter, which is the fact itself and one of its aspects (matter, the equivalent of space). To speak, therefore, of the redistribution of matter and motion as an ultimate law is simply to define motion in terms of its aspects, for the word motion gives us at once the idea of redistribution. I submit that it leads to no advance in knowledge to say that motion redistributes itself and one of its aspects.

To familiarize ourselves with the procedures of nature is the province of science, but scientific analysis, so far as it is successful, stops with the ultimate fact, or divine unity.

^{1 &}quot;First Principles," p. 396.

In so far as Mathematics has tried to analyze this ultimate principle, it has failed, for there are no laws of motion which are not expressed by the term itself.¹

Where Physics has tried to analyze motion, it has failed. The cabalistics, which purport to convey a deeper knowledge of this fact than is given in the simple conception itself, are vanities and deceptions. All knowledge is expressed in terms of the aspects of motion, *i. e.* places and times. All knowledge consists in expressions of motion. The only way in which we can enlarge our horizon of facts is by assimilating new experiences with old ones; the only way in which we can reveal to others these newly discovered facts is by expressing them in terms of more familiar ones.

This Spencer has done throughout his system. We are indebted to his powerful and effective method for some of the clearest and most commanding views of the interdependencies of phenomena which the age affords; but this very power which he has exerted so happily in revealing hidden truths has carried him to the excess, not of attempting impossibilities, for we admit no impossibilities to knowledge, but of creating impossibilities where none exist. This is

¹ Solidity, in the sense in which it is attributed to the atom, is not a fact, but the hypostasis of an abstraction. As M. Cournot observes, an absolutely solid body is unknown to experience. The consistency of the bodies which present themselves to the experimental physicist depends upon the preponderance or balance of forces, such as the forces of cohesion, crystallization, and heat; and the assumption of the absolute solidity of matter results from that superficial and imperfect apprehension of the data of sense (in conjunction with the disregard of the essential relativity of all the properties of things, which is reflected in all the early notions of mankind. * * * Euler states that without the assumption of absolute space and motion there could be no laws of motion, so that all the phenomena of physical action would become uncertain and indeterminable. this argument were well founded, the same consequence would follow a fortiori, from his repeated admissions in the first chapter of his book, to the effect that we have no actual knowledge of rest and motion, except that derived from bodies at rest or in motion in reference to other bodies. Euler's proposition can have no other meaning than this, that the laws of motion cannot be established or verified unless we know its absolute direction and its absolute rate. But such knowledge is by his own showing unattainable. It follows, therefore, that the establishment and verification of the laws of motion are impossible.—Stallo: "Modern Physics," pp. 180, 202.

what all thinkers do who divide when they should multiply, who subtract when they should add, who, having found unity, are not content with it, but turn in quest of other unities, or seek in unity itself variety. These futile attempts, which will never cease until the world at large learns to recognize them as useless, are the outgrowth of a misapprehension of the nature of perception. This we hope duly to demonstrate.

The celebrated definition of life which Spencer offers is without doubt a masterpiece of classification, but by reason of its unnecessary complexity it accomplishes less than it purports to do. It is as follows: "Life is the definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external co-existences and sequences."

Now if the terms employed in this definition are examined, it will be found that the equation which it constitutes can be greatly simplified. To express the conditions of life is to tell the story of the universe; to study different kinds of life is to pursue certain branches of science. The principle of life is activity. All definitions of life, therefore, other than the mere citing of its principle, must be more or less special or limited: they must denote the principle and connote certain manifestations. The above definition denotes the principle of activity, or universal life, and connotes the characteristics of organic life. But the terms in which the connotations are made, when viewed in their full significance, amount to the assertion that organic life consists of motions or activities within an organism, co-ordinated with or adjusted to, or still better, acting and reacting with motions without. The only inference, therefore, in this definition, which has so imposing a sound, is that of an organism. If this inference is dropped, the sense of the definition is lost among the echoes and re-echoes of universal change.

Although it is true that Mr. Spencer traces, practically, all phenomena to an ultimate cause or principle, he fails to establish that harmony in the significance of ultimate terms which should be the aim of a true philosophy. With the means now at hand, is it not evident that in dealing with the great principles, such as Space, Time, Matter, Motion, and Force and the "Persistence of Force" (a term made up of one of these principles and a word meaning virtually the same thing), we should be able to point out their correlation, interdependence, or relative significance? In Chapter III., of the same work, entitled "Space, Time, Matter, Motion, and Force," and in Chapters XIV., XV., and XVI., of the second volume of "Psychology," Spencer vigorously deals with this metaphysical problem. Indeed, so dependent upon this problem is the theory of perception, that it is scarcely possible to discuss the two subjects separately. Chapter III., of "First Principles," and in the chapters on Psychology above referred to, treating respectively of the Perception of Space. Time, and Motion, we find the same arguments, and the same failure to seize what we conceive to be the simplest solution of the two great allied questions of the nature of perception and the unification of the categories of thought. This solution, as I conceive it, is as follows:

If a weight falls to the ground a fact is expressed, for the reason that facts express themselves; wherever a fact is expressed, there is a perception. Perception and expression, using these words in their widest possible sense, are obverse aspects of every fact. Every given change is a response to other changes, and in seeking the ultimate nature of perception we are obliged to recognize this response as equivalent to a perception of the external change. This reduction of the meaning of the word perception to that of change, or motion, is the greatest achievement of psychology. To those who have not familiarized themselves with psychological analysis this proposition, that the deepest meaning in the idea of perception is found in the universal fact of motion, will hardly prove intelligible. This is because perception is generally considered to be exclusively a mental faculty. Many persons are incapable of following the meaning of perception beyond

^{1 &}quot; First Principles."

its anthropomorphic limits; few have ever followed it beyond its sentient limits. No psychological work known to me, not even that of Lewes, has attempted to follow the principle of perception beyond the limits of organic life; and yet I affirm that this principle is plainly to be seen in every phenomenon or change. Every activity is a response to other activities; there is no final difference between the response of the simplest object to its simplest conditions, and the response of the highest mind to the farthest influences.

The manner in which Mr. Spencer deals with these questions can be readily seen by glancing at Chapters IV., V., and VI., of "First Principles." The indestructibility of matter and the continuity of motion are said to be necessary inferences from the Persistence of Force, which he declares to be "the sole truth which transcends experience by underlying it, * * * the cause which transcends our knowledge and conception, * * * that unknowable which is the necessary correlative of the knowable." These are Spencer's explanations of the persistence of force, and from them we must derive his explanation of perception. They postulate a fact which is supposed to be the most general of all facts, the source of reality for both the mind and the universe; a fact to which all physical phenomena can be reduced, the fact with which consciousness itself begins; and yet he says that it is unknowable, that it transcends consciousness.

It will not do to call this language loose or vague. It is Mr. Spencer who employs it. We must content ourselves with trying to glean from it the truth which is intended to be expressed. If by any chance we could suggest definitions of the categories of thought which would do away with the absurdities involved in "an unknowable fact, * * * a principle of consciousness which transcends both conception and experience, * * * an unknowable which is the necessary correlative of the knowable," we must perforce suppress them, because there are many very estimable persons who "cannot understand the universe without an unknowable." Their understanding

^{1 &}quot; First Principles," p. 192.

must be exceedingly delicate to be affected by that of which they know nothing. But perhaps they do know something of the unknowable.

If the nature of perception were not involved in this ultimate fact, the contradiction in declaring the fundamental principle of life and mind unknowable might be less glaring. The philosopher could then baffle his readers by expanding upon a latent consciousness which is anterior to perception. An a priori mind that employs the unknowable as a principle. but which does not know it—this and other extravagances of expression might be employed to cover up the preposterous assertion that an apprehended fact, the most prominent of all facts, is unknowable. But when the issue of the nature of perception is forced, all subterfuges must be laid aside, and we may confront one another upon the simple and honest meaning of words. The believer in the unknowable, for instance, will hardly venture to say that we can perceive the unknowable, or that the unknowable is a factor in perception, and vet Mr. Spencer would deduce perception itself from this mystery.

The indestructibility of matter is now generally admitted to be an axiom, or necessary truth. Of this truth Mr. Spencer says: "Our inability to conceive matter becoming non-existent is immediately consequent on the nature of thought. Thought consists in the establishment of relations. There can be no relation established, and therefore no thought framed, when one of the related terms is absent from consciousness. * * * It most concerns us to observe the nature of the perceptions by which the permanence of Matter is perpetually illustrated to us. These perceptions, under all their forms, amount simply to this—that the force which a given quantity of matter exercises remains always the same. This is the proof upon which common-sense and exact science alike rely. * * * Thus we see that force is our ultimate measure of Matter: * * * by the indestructibility of matter, we really mean the indestructibility of the force with which matter affects us. * * * This truth is made manifest.

not only by analysis of the *a posteriori* cognition, but equally so by analysis of the *a priori* one. And yet before and after these words, the truth, the principle, the fact, which is made manifest to us in so many ways, is declared to be unknowable

Respecting this same truth we are told in the chapter following, entitled the "Continuity of Motion," that "This existence may cease to display itself as translation; but it can do so only by displaying itself as strain. And the principle of activity, now shown by translation, now by strain, and often by the two together, is alone that which in Motion we can call continuous. * * * Hence the principle of activity as known by sight is inferential; visible translation suggests by association the presence of a principle of activity which would be appreciable by our skin and muscles, did we lay hold of the body. Evidently, then, this principle of activity which Motion shows us, is the objective correlate of our subjective sense of effort. By pushing and pulling we get feelings which, generalized and abstracted, yield our ideas of resistance and tension. Now displayed by changing position and now by unchanging strain, this principle of activity is ultimately conceived by us under the single form of its equivalent muscular effort. So that the continuity of Motion, as well as the indestructibility of Matter, is really known to us in terms of Force."2

And yet these terms of *Force* which are so clearly affiliated with all our physical and psychical perceptions, which terms, to use Mr. Spencer's language, are "displayed" and "shown" to us, which are "inferential," appreciable," and "conceivable," are still unknowable. This principle of activity from which, Spencer tells us, our perceptions are built up, which discloses itself to us by the most general and familiar facts of life, is unknown to us. Or perhaps this is saying too much, it may be termed the unknowable and still be known to us. The term unknowable may have nothing to do with

¹ "First Principles," pp. 177, 178. ² Ibid., pp. 187, 188.

our perception, or knowledge, or appreciation of the principle. It may be simply a name which the old-school philosophers insist upon giving this principle in order to conform to the ancient canons of skepticism, or the modern rules of agnosticism, which systems of belief would be completely subverted were there no unknowable.

It will be my purpose as we proceed to show that this term *unknowable* cannot be made to harmonize with a true psychology. All will agree that the analysis of every possible perception discloses what are known as the *ultimate realities*, or the commonly conceded elements of thought. If the elements of thought are also the elements of all reality, is it not clear that the principle which these elements disclose, namely, *Motion*, must explain all thought and all perception?

In analyzing any phenomenon or change, such as a weight falling to the ground, the conventional result, found in all current systems of philosophy, is to discover in the change these elements, Space, Time, Matter, Force, and Motion. Thus far philosophy has gone, and no farther; and we find Spencer no exception to the general rule, for how are we to deduce from his definitions of these categories the one fact which he calls the Persistence of Force, and to show how the phenomenon of perception arises from this one fact? What are the definitions which Mr. Spencer offers of these elements, and what is the relation which he establishes between them and the central fact in the phenomenon of perception? "Our conception of Matter," says Mr. Spencer, "reduced to its simplest shape, is that of co-existent positions that offer resistance; as contrasted with our conception of Space, in which the co-existent positions offer no resistance. * * * Hence the necessity we are under of representing to ourselves the ultimate elements of Matter as being at once extended and resistent: this, being the universal form of our sensible experiences of Matter, becomes the form which our conception of it cannot transcend, however minute the fragments which imaginary subdivisions produce. Of these

two inseparable elements the resistance 1 is primary, and the extension secondary. Occupied extension, or Body, being distinguished in consciousness from unoccupied extension. or Space, by its resistance, this attribute must clearly have precedence in the genesis of the idea. Such a conclusion is. indeed, an obvious corollary from that at which we arrived in the foregoing section. If, as was there contended, our consciousness of Space is a product of accumulated experiences, partly our own but chiefly ancestral,—if, as was pointed out, the experience from which our consciousness of Space is abstracted can be received only through impressions of resistance made upon the organism, the necessary inference is, that experiences of resistance being those from which the conception of Space is generated, the resistanceattribute of Matter must be regarded as primordial and the space-attribute as derivative. Whence it becomes manifest that our experience of force is that out of which the idea of Matter is built. Matter as opposing our muscular energies. being immediately present to consciousness in terms of force: and its occupancy of Space being known by an abstract of experiences originally given in terms of force, it follows that forces, standing in certain correlations, form the whole content of our idea of Matter." 2

Space is admitted to be but an inference from Matter, or an aspect of it; Force is admitted to be the source of our idea of Matter, which means the same thing as that Matter is an inference from Force, or an aspect of it. Now substitute the word motion for force and we have our definition of Space—an aspect of Motion; and our definition of Matter, i. e. that Matter and Space are the same thing.

To get at Spencer's definition of Time and Space we quote from a previous part of the same work:

"That relation is the universal form of thought, is a truth which all kinds of demonstration unite in proving. * * * Now, relations are of two orders—relations of sequence and relations of co-existence, of which the one is original and

¹ The italics are the author's. ² "First Principles," pp. 166, 167.

the other derivative. The relation of sequence is given in every change of consciousness. The relation of co-existence, which cannot be originally given in a consciousness of which the states are serial, becomes distinguished only when it is found that certain relations of sequence have their terms presented in consciousness in either order with equal facility; while the others are presented only in one order. Relations of which the terms are not reversible become recognized as sequences proper, while relations of which the terms occur indifferently in both directions become recognized as co-existences. Endless experiences, which from moment to moment present both orders of these relations, render the distinction between them perfectly definite, and at the same time generate an abstract conception of each. The abstract of all sequences is Time; the abstract of all co-existences is Space. From the fact that in thought Time is inseparable from sequence, and Space from co-existence, we do not here infer that Time and Space are original conditions of consciousness under which sequences and co-existences are known; but we infer that our conceptions of Time and Space are generated, as other abstracts are generated from other concretes; the only difference being that the organization of experiences has, in these cases, been going on throughout the entire evolution of Intelligence. * * * It remains only to point out, as a thing which we must not forget, that the experiences from which the consciousness of Space arises, are experiences of force. A certain correlation of the muscular forces which we ourselves exercise is the index of each position as originally disclosed to us; and the resistance which makes us aware of something existing in that position is an equivalent of the pressure which we consciously exert. Thus experiences of forces variously correlated are those from which our consciousness of Space is abstracted." 1

In reading the above, it is difficult to believe that Spencer was not fully aware of the existence of an ultimate Reality, of which all other facts are but more or less remote aspects. It is hard to understand how so penetrating a mind could declare that Force is the origin of all ideas and all facts: "that Relation is the universal form of thought,"—"that Relations are of two orders, relations of sequence and relations of co-existence,"—without seeing that the ultimate relation is the universal fact of motion, having for its terms, or aspects, the primordial inferences known as Space and Time.

A little farther on we find the following, which is a very clear portrayal of the difference between the simple solution of the metaphysical problem which we offer and that offered by Mr. Spencer:—" Is Space in itself a form or condition of

^{1 &}quot;First Principles," pp. 163, 165.

absolute existence, producing in our minds a corresponding form or condition of relative existence? This is an unanswerable question. Our conception of Space is produced by some mode of the Unknowable; and the complete unchangeableness of our conception of it simply implies a complete uniformity in the effects wrought by this mode of the Unknowable upon us.2 But therefore to call it a necessary mode of the Unknowable is illegitimate. All we can assert is, that Space is a relative reality: that our consciousness of this unchanging relative reality implies an absolute reality equally unchanging, in so far as we are concerned; and that the relative reality may be unhesitatingly accepted in thought as a valid basis for our reasonings; which, when rightly carried on, will bring us to truths that have a like relative reality.—the only truths which concern us or can possibly be known to us. Concerning Time, relative and absolute, a parallel argument leads to parallel conclusions. These are too obvious to need specifying in detail."

Again, in contrast with the above notion of Space, as an "unchangeable," "fixed form," mark the following, taken from the chapter on the Perception of Space, in which it is distinctly denied that Space is a fixed form or unchangeable conception:- "And now mark that while these several peculiarities in our space-perceptions harmonize with, and receive their interpretations from, the experience-hypothesis, taken in that expanded form implied by the doctrine of Evolution, they are not interpretable by, and are quite incongruous with, the Kantian hypothesis. Without insisting on the fact that our sensations of sound and odor do not originally carry with them the consciousness of space at all, there is the fact that, along with those sensations of taste, touch, and sight, which do carry this consciousness with them, it is carried in extremely different degrees,-a fact quite unaccountable if space is given before all experience as a form of intuition. That our consciousness of adjacent

¹ The term Absolute Existence is a contradiction in terms.

² The italics are the author's. ³ "First Principles," p. 165.

space is far more complete than our consciousness of remote space, is also at variance with the hypothesis; which, for aught that appears to the contrary, implies homogeneity. Similarly with that variation in the distinctness of surrounding parts of space which occurs as we turn our eyes now to one point and now to another: were space a subjective form not derived from experience, there should be no such variation. Again: the contrast between the spontaneous consciousness of space within a room and the consciousness of the space beyond its walls, which does not come spontaneously, is a contrast for which there seems no reason if space is a fixed form." This hardly harmonizes with "the complete unchangeableness of our conception of Space produced by some mode of the unknowable upon us," but if we remove the theory of the unknowable the incongruity between the two conceptions of Space at once disappears.

In making these close comparisons of passages occurring widely apart in a great system, and written at considerable intervals of time and study, every allowance should be made. I would especially disclaim any intent of captious criticism. It is my desire only to show the futility of all attempts to account for Space and Time in any other way than as aspects of Motion; to show how the greatest minds become lost in the labyrinth of error which lies outside of this simple and direct solution. The above contrasted passages also help to show the intimate connection between the metaphysical problem and the problem of perception which we are studying.

To return to the first of the above quotations, we would simply repeat that the term *unknowable* is self-contradictory; nothing can be unknowable. If we know the universal principle, we *could* know any form of it, were it presented to us. In its nature, at least, the field of knowledge is infinite. Our knowledge is limited by our lives—that is to say, there is, and always will be, to limited beings, a vast *unknown*; but the antithesis of known is *unknown*, not unknowable.

^{1 &}quot;Psychology," vol. II., pp. 200, 201.

Life is a universal principle with which knowledge in its widest sense can be identified, therefore knowable has no meaning, and *unknowable* has none. If life is a universal principle, what sense would there be in the word livable? If knowledge is a universal principle, what sense is there in the word knowable? There are no *unanswerable* questions, there are only *unanswered* questions.

In the note 1 below will be found a transcript of the best

¹ SPENCER'S ANALYSIS OF THE PERCEPTION OF SPACE AND TIME.

[&]quot;Whether visual or tactual, every perception of the space-attributes of body is decomposable into perceptions of relative position; that all perceptions of relative position are decomposable into perceptions of the relative position of subject and object; and that these relations of position are knowable only through motion. Such being now our data, the first question that arises is, How, through experiences of occupied extension, or body, can we ever gain the notion of unoccupied extension, or space? How, from the perception of a relation between resistant positions, do we progress to the perception of a relation between non-resistant positions? If all the space-attributes of a body are resolvable into relations of position between subject and object, disclosed in the act of touch—if originally, relative position is only thus knowable—if, therefore, position is, to the nascent intelligence, incognizable except as the position of something that produces an impression on the organism,—how is it possible for the idea of position ever to be dissociated from that of body?

[&]quot;This problem, difficult of solution as it appears, is really a very easy one. If, after some particular motion of a limb, there invariably came a sensation of softness; after some other, one of roughness; after some other, one of hardness-or if, after those movements of the eye needed for some special act of vision, there always came a sensation of redness; after some others, a sensation of blueness; and so on; -it is manifest that, in conformity with the laws of association, there would be established constant relations between such motions and such sensations. If positions were conceived at all, they would be conceived as invariably occupied by things producing special impressions; and it would be impossible to dissociate the positions from the things. But as we find that a certain movement of the hand, which once brought it in contact with something hot, now brings it in contact with something sharp, and now with nothing at all; and as we find that a certain movement of the eye, which once was followed by the sight of a black object, is now followed by the sight of a white object, and now by the sight of no object; it results that the idea of the particular position accompanying each one of these movements is, by accumulated experiences, dissociated from objects and impressions. It results, too, that as there are endless such movements, there come to be endless such positions conceived as existing apart from body. And it results, further, that as in the first and in every subsequent act of perception, each position is known as

analysis of the perception of Space and Time which occurs in the work of Mr. Spencer. This analysis is given to show that his study of the perception of these categories from the physical or organic side has been most successful. It is the manner in which he deals with the relations between the categories themselves that we find so confusing and unsatisfactory. To the habitual student of these subjects this analysis will be a pleasant and profitable review, and to

co-existent with the subject, there arises a consciousness of countless such co-existent positions; that is—of Space. This is not offered as an ultimate interpretation; for, as before admitted, the difficulty is to account for our notion of relative position. All that is here attempted is, partially to explain how, from that primitive notion, our consciousness of Space in its totality is built up.

"Carrying with us this idea, calling to mind the structure of the retina, and remembering the mode in which the relations among its elements are established, it will, I think, become possible to conceive how that wonderful perception we have of visible space is generated. It is a peculiarity of sight that makes us partially conscious of many things at once. On now raising my head, I take in at a glance, desk, papers, table, books, chairs, walls, carpet, window, and sundry objects outside: all of them simultaneously impressing me with various details of color, suggesting surface and structure. True, I am not equally conscious of all these things at the same time. I find that some one object at which I am looking is more distinctly present to my mind than any other, and that the one point in this object on which the visual axes converge is more vividly perceived than the rest. In fact, I have a perfect perception of scarcely more than an infinitesimal portion of the whole visual area. Nevertheless, even while concentrating my attention on this infinitesimal portion, I am in some degree aware of the whole. My complete consciousness of a particular letter on the back of a book does not exclude a consciousness that there are accompanying letters—does not exclude a consciousness of the book—does not exclude a consciousness of the table on which the book lies, -nay, does not exclude even a consciousness of the wall against which the table stands. All these things are present to me in different degrees of intensity-degrees that become less, partly in proportion as the things are unobtrusive in color and size, and partly in proportion as they recede from the centre of the visual field. Not that these many surrounding things are definitely known as such or such; for, while keeping my eyes fixed on one object, I cannot make that assertory judgment respecting any adjacent object which a real cognition of it implies, without becoming, for the moment, imperfectly conscious of the object on which my eyes are fixed. But notwithstanding all this, it remains true that these various objects are in some sense present to my mind—are incipiently perceived -are severally tending to fill the consciousness-are each of them partially exciting the mental states that would arise were it to be distinctly perceived.

those to whom it may be new we recommend it as a specimen of Spencer's best work,—an example of that careful and exhaustive study of obscure phenomena which has given to his writings so high a place in the estimation of scholars.

In this analysis is illustrated our complete dependence upon the primordial fact of Motion for our ideas of Space and Time; for it is the same thing to say that we derive our

[&]quot;This peculiarity in the faculty of sight (to which there is nothing analogous in the faculties of taste and smell; which, in the faculty of hearing, is vaguely represented by our appreciation of harmony; and which is but very imperfectly paralleled in the tactual faculty by the ability we have to discern irregularities in a surface on which the hand is laid) is clearly due to the structure of the retina. Consisting of multitudinous sensitive elements, each capable of independent stimulation, it results that when an image is received by the retina, each of those sensitive elements on which the variously-modified rays of light fall, is thrown into a state of greater or less excitement. Each of them as it were touches some particular part of the image, and sends inwards to the central nervous system the impressions produced by the touch. But now observe that, as before explained, each retinal element has come to have a known relation to every one of those around it—a relation such that their synchronous excitation serves to represent their serial excitation. Lest this symbolism should not have been fully understood, I will endeavor further to elucidate it. Suppose a minute dot to be looked at-a dot so small that its image, cast on the retina, covers only one of the sensitive elements, A. Now suppose the eye to be so slightly moved that the image of this dot falls on the adjacent element B. What results? Two slight changes of consciousness: the one proceeding from the new retinal element affected; the other, from the muscles producing the motion. Let there be another motion, such as will transfer the image of the dot to the next element, C. Two other changes of consciousness result. And so on continuously; the consequence being that the relative positions in consciousness of A and B, A and C, A and D, A and E, etc., are known by the number of intervening states. Imagine now that, instead of these small motions separately made, the eye is moved with ordinary rapidity; so that the image of the dot sweeps over the whole series A to Z in an extremely short time. What results? It is a familiar fact that all impressions on the senses, and visual ones among the number, continue for a certain brief period after they are made. Hence, when the retinal elements forming the series A to Z are excited in rapid succession, the excitation of Z commences before that of A has ceased; and for a moment the whole series A to Z remains in a state of excitement together. This being understood, suppose the eye is turned upon a line of such length that its image covers the whole series A to Z. What results? There is a simultaneous excitation of the series A to Z, differing from

ideas of Space and Time from Motion as to say that Space and Time are inferences from, or aspects of, this fact. The analysis of sensible perception given below also illustrates how far beyond us, whatever may be our penetration into the intricacies of phenomena, is this principle of activity, and how it eludes all efforts at division or classification. Now that we have followed out Mr. Spencer's analysis of our conception of Space and Time, it will be interesting to

the last in this—that it is persistent, and that it is unaccompanied by sensations of motion. But does it not follow from the known laws of association, that as the simultaneous excitation is common to both cases, it will, in the last case, tend to arouse in consciousness that series of states which accompanied it in the first? Will it not tend to consolidate the entire series of such states into one state? And will it not thus come to be taken as the equivalent of such series? There cannot, I think, be a doubt of it. And if not, then we may see how an excitement of consciousness, by the coexistent positions constituting a line, serves as the representative of that serial excitement of it which accompanies. motion along that line. Let us return now to the above-described state of the retina as occupied by an image or by a cluster of images. Relations of coexistent position, like those we have here considered in respect to a particular linear series, are established throughout countless such series in all directions over the retina; so putting each element in relation with every other. Further, by a process analogous to that described, the state of consciousness produced by the focal adjustment and convergence of the eyes to each particular point, has been made a symbol of the series of coexistent positions between the eyes and that point. After dwelling awhile on these facts, the genesis of our visual perception of space will begin to be comprehensible. Every one of the retinal elements simultaneously thrown into a state of partial excitement, arousing as it does not only a partial consciousness of the sensation answering to its own excitement, but also a partial consciousness of the many relations of coexistent position established between it and the rest, which are all of them similarly excited and similarly suggestive, there results a consciousness of a whole area of coexistent positions. Meanwhile the particular consciousness that accompanies adjustment of the eyes, calling up as it does the line of coexistent positions lying between the subject and the object specially contemplated; and each of the things, and parts of things, not in the centre of the field, exciting by its more or less definite image an incipient consciousness of its distance, that is, of the coexistent positions lying between the eye and it; there is awakened a consciousness of a whole volume of coexistent positions—of Space in three dimensions. Along with a complete consciousness of the one position to which the visual axes converge, arises a nascent consciousness of an infinity of other positions-a consciousness that is nascent in the same sense that our consciousness of the various objects out of the centre of the visual field is nascent. One

note the propositions in regard to the "ultimate realities" with which he originally sets out. These propositions declare him to be an agnostic or, in better language, a skeptic, or a disbeliever in the integrity of human knowledge. For what faith can we have in a knowledge which has its deepest foundations in impenetrable mysteries? If we cannot understand the first principles of knowledge, how are we really to know any thing? If we cannot grasp the deepest

addition must be made. As the innumerable relations subsisting among these coexistent positions were originally established by motion; as each of these relations came by habit to stand for the series of mental states accompanying the motion which measured IT; as every one of such relations must, when presented to consciousness, still tend to call up in an indistinct way that train of feelings accompanying motion, which it represents; and as the simultaneous presentation of an infinity of such relations will tend to suggest an infinity of such experiences of motion, which, as being in all directions, must so neutralize one another as to prevent any particular motion from being thought of; there will arise, as their common resultant, that sense of ability to move, that sense of freedom for MOTION, which forms the remaining constituent in our notion of Space.

"Any one who finds it difficult to conceive how, by so elaborate a process as this, there should be reached a notion apparently so simple, so homogeneous, as that which we have of Space, will feel the difficulty diminished on recalling these several facts:-First, that the experiences out of which the notion is framed and consolidated are in their essentials the same for ourselves and for the ancestral races of creatures from which we inherit our organizations, and that these uniform ancestral experiences, potentially present in the nervous structures bequeathed to us, constitute a partially-innate preparedness for the notion; second, that the individual experiences which repeat these ancestral experiences commence at birth, and serve to aid the development of the correlative structures while they give them their ultimate definiteness; third, that every day throughout our lives, and throughout the whole of each day, we are repeating our experiences of these innumerable coexistences of position and their several equivalences to the serial states of feeling accompanying motions; and fourth, that after development is complete these experiences invariably agree—that these relations of coexistent positions are unchangeable—are ever the same toward each other and the subject-are ever equivalent to the same motions. On bearing in mind this inheritance of latent experiences, this early commencement of the experiences that verify and complete them, this infinite repetition of them, and their absolute uniformity; and on further remembering the power which, in virtue of its structure, the eye possesses of partially suggesting to the mind countless such experiences at the same moment; it will become possible to conceive how we acquire that consolidated idea of Space in its totality, which at first seems so inexplicable."

meaning of life, how are we really to live? We would not be understood to infer that this demoralizing skepticism, known as the belief in the unknowable, is not thrown off in the better portions of Mr. Spencer's teachings. No one who carefully examines his analysis of our conceptions of Space and Time given below can fail to see that Mr. Spencer at times

Upon the Perception of Time,-" The reciprocity between our cognitions of Space and Time, alike in their primitive and most developed forms, being understood; and the consequent impossibility of considering either of them entirely alone, being inferred: let us go on to deal more particularly with Time. As the notions of Space and Coexistence are inseparable, so are the notions of Time and Sequence. It is impossible to think of Time without thinking of some succession; and it is equally impossible to think of any succession without thinking of Time. * * * The doctrine that Time is knowable only by the succession of our mental states calls for little exposition, it is so well established a doctrine. All that seems here necessary is to restate it in a way which will bring out its harmony with the foregoing doctrine. * * * As any relation of coexistent positions—any portion of space—is conceived by us as such or such, according to the number of other positions that intervene; so any relation of sequent positions—any portion of time—is conceived by us as such or such, according to the number of other positions that intervene. Thus, a particular time is a relation of position between some two states in the series of states of consciousness. And Time in general, as known to us, is the abstract of all relations of position among successive states of consciousness. Or, using other words, we may say that it is the blank form in which these successive states are presented and represented; and which, serving alike for each, is not dependent on any. * * * The consciousness of Time must vary with size, with structure, and with functional activity; since the scale of time proper to each creature is composed primarily of the marks made in its consciousness by the rhythms of its vital functions, and secondarily of the marks made in its consciousness by the rhythms of its locomotive functions: both which sets of rhythms are immensely different in different species. Consequently the constitution derived from ancestry settles the general character of the consciousness within approximate limits. In our own case, for example, it is clear that there are certain extremes within which our units of measure for time must fall. The heart-beats and respiratory actions, serving as primitive measures, can have their rates varied within moderate ranges only. The alternating movements of the legs have a certain degree of slowness below which we cannot be conscious of them, and a certain degree of rapidity beyond which we cannot push them. Similarly with measures of time furnished by sensible motions outside of us. There are motions too rapid for our perceptions, as well as motions too slow for our perceptions; and such consciousness of Time as we get from watching objective motions must fall between these extremes."-"Psychology," vol. II., ch. xv.

completely rises above the level of agnosticism. But this fact only renders more confusing the system as a whole.

For instance, when we find such plain declarations of our utter inability to understand the principles of knowledge as occur in Spencer's opening volume we naturally look with distrust upon all subsequent attempts to explain these principles. In a word, why should Mr. Spencer expect us to put faith in his analysis of those facts which in the very outset of his work he tells us it is impossible to understand? Thus in the Chapter on Ultimate Scientific Ideas we have the following declarations:

"It results, therefore, that Space and Time are wholly incomprehensible. The immediate knowledge which we seem to have of them proves, when examined, to be total ignorance. While our belief in their objective reality is insurmountable, we are unable to give any rational account of it. And to posit the alternative belief (possible to state but impossible to realize) is merely to multiply irrationalities."

"Matter, then, in its ultimate nature, is as absolutely incomprehensible as Space and Time. Frame what suppositions we may, we find, on tracing out their implications, that they leave us nothing but a choice between opposite absurdities."

"Thus neither when considered in connection with Space, nor when considered in connection with Matter, nor when considered in connection with Rest, do we find that Motion is truly cognizable. All efforts to understand its essential nature do but bring us to alternative impossibilities of thought."

"While, then, it is impossible to form any idea of Force in itself, it is equally impossible to comprehend its mode of exercise."

And lastly: "Hence, while we are unable either to believe or to conceive that the duration of consciousness is infinite, we are equally unable either to know it as finite, or to conceive it as finite."

^{1 &}quot; First Principles," ch. iii.

Here is, indeed, a cheerful prospect at the beginning of a study of perception! All those principles which are acknowledged by writers upon metaphysics to be "ultimate realities," or fundamental ideas, are declared to be utterly incomprehensible; and, in way of reassurance, we are told that to try to understand consciousness itself can but lead to "absurdities." If agnosticism is an aggravated form of skepticism, surely this is a high type of agnosticism!

The first requisite in forming a true conception of Knowledge is to understand that the word, in its widest application, means the same thing as life; and that life is coextensive in fact, and therefore in meaning, with the universal principle, Motion. All activities are expressions of this principle, whether they display the structure and function of consciousness (the subjective world) or the statical and dynamical aspects of nature (the objective world). Structure and function are but the obverse aspects of every activity; they correspond to the more abstract or general terms Matter and Force, using the word force, as is so often done, to signify motion considered apart from its space-aspect. The more acceptable terms Space and Time are also the equivalents of structure and function. Bearing these truths in mind, the difficulty of forming a rational theory of perception, or thought, disappears.

If thought is an activity, to comprehend it we have but to state its conditions. The theory that thought is the expression of an absolute or unconditioned principle has but to be reduced to its simplest terms in order to expose its absurdity. The word absolute, or unconditioned, is a muchabused term in metaphysical writings; it is an outgrowth of our conception of Time, which, when regarded as a principle in itself, certainly seems to move, independently of any imaginable conditions. If whenever the word absolute occurs its equivalent Time is understood, we cannot be misled. To call thought an entity, or an absolute principle in itself, is but to block the progress of analysis by clinging to one of the aspects of the phenomenon and disregarding

the other. If thought is an activity, it must have structure as well as function; it must have a space-aspect as well as a time-aspect; it must be an expression of the universal principle, Motion. If there are two great opposite spheres of existence, known as the subjective and the objective, the ego and the non-ego, the conscious and the unconscious, they are not absolutely different spheres, but are interdependent, or related; they act and react upon each other, and are expressions of a fundamental fact which underlies them both. What becomes of the charge that such a theory as this is materialistic, when we remember that the attributes of this principle are those which are universally ascribed to God? This, however, is but an ultimate analysis, it is not the living synthesis, of life.

The theory of Evolution is, that every phenomenon or change is the *product*, or *function*, of its conditions. Every phenomenon is a relation, or the joint expression of its terms. The ultimate relation is Motion, and its terms are Space and Time. The relation or fact called consciousness has for its terms the objective and the subjective worlds. The study of consciousness or perception (they are, in their widest sense, equivalent terms) is the study of the conditions of mental life, which are only relatively separable from the conditions of general life, or the universe. If we would single out from this plexus of relations an *ultimate relation*, or from this vast array of conditions *ultimate conditions*, we have for result the ultimate relation, Motion; the ultimate conditions, Space and Time.

CHAPTER X.

HERBERT SPENCER (CONTINUED).

An Independent Study of the Relation of Perception to Organic Life—The Interdependence of Thought, Feeling, and Action.

THE study of psychology is fast becoming a definite science. Little by little its ontological superstitions are giving way to the more rational method of approaching the mind through the medium of its functions and structures. The old system of taking for granted the existence of a psychical principle as the only means of explaining thought, is vielding to the belief in a universal principle in which all lines of cause and effect converge, whether they describe physical, mental, or moral phenomena. Speaking on this subject, Lewes says: "Psychology investigates the Human Mind, not an individual's thoughts and feelings; and has to consider it as the product of the Human Organism, not only in relation to the Cosmos, but also in relation to Society. For man is distinctively a social being; his animal impulses are profoundly modified by social influences, and his higher faculties are evolved through social needs. By this recognition of the social factor as the complement to the biological factor, this recognition of the Mind as an expression of organic and social conditions, the first step is taken toward the constitution of our science. * * * An organism when in action is only to be understood by understanding both it and the medium from which it draws its materials, and on which it reacts. Its conditions of existence are, first, the structural mechanism, and, secondly, the medium in which it is placed. When we know the part played by the mechanism, and the part played by the medium, we have gone as far as analysis

can help us; we have scientifically explained the actions of the organism. This, which is so obvious in reference to vital actions that it is a physiological commonplace, is so little understood in reference to the mental class of vital actions that it may appear a psychological paradox, and a paradox which no explanation can make acceptable so long as the Mind is thought to be an entity inhabiting the organism, using it as an instrument; and so long as Society is thought to be an artificial product of man's mind,—in which case it cannot be one of the conditions of mental evolution."

What is known, then, as the social factor in the study of psychology is that feature of the science which is by far the most difficult to comprehend. A theory of perception which neglects the influence of this factor is thereby apparently simplified, but it is incomplete; for it is from the relations of man to society that the bewildering complexities of mental phenomena arise. The rudimentary communications of sentient beings gave birth to intelligence, or the representative faculty. and by the continued development of this faculty language came into existence. Language, which is the condensing or grouping of thoughts into symbols, has attained to such perfection that a climax in its development has been reached in the creation of a single word to express the interdependencies of the universe. In studying mental phenomena, in tracing the connections of cause and effect throughout the labyrinths of sentiency, we have to view human intelligence, as a whole, in the light of an achievement or superstructure of organic evolution. This is what is meant by taking into account the social factor, the combined influences of life upon life, of mind upon mind. The simplest definition of organic life is the adjustment of the organism to its environment. Society, as a whole, is an important part of the environment of each human organism, for the response of each organism to humanity marks the degree of development—the quality of The counterpart of this view of the social factor is what might be called the individual factor, the other term of

¹ Lewes: "The Study of Psychology," ch. i.

the relation known as psychical life. In every perception, however simple, the perceiving individual, as a whole, has a determining influence. This view of the individual factor of psychical life, the part played by the whole personality of the perceiving individual in the phenomena of perception, is if any thing more obscure than the influence of the social factor. Perhaps the most direct way of explaining it is to recite a passage, quoted in the foregoing chapter, from Spencer's explanation of the genesis of our idea of time. Time is a fundamental element of perception. If the individual, as a whole, is shown to be a prominent factor in the formation of our conception of time, it will follow that the individual, as a whole, is an important factor in perception.

"The consciousness of Time must vary with size, with structure, and with functional activity; since the scale of time proper to each creature is composed primarily of the marks made in its consciousness by the rhythms of its vital functions, and secondarily of the marks made in its consciousness by the rhythms of its locomotive functions, both which sets of rhythms are immensely different in different species. Consequently, the constitution derived from ancestry settles the general character of the consciousness within approximate limits. In our own case, for example, it is clear that there are certain extremes within which our units of measure for time must fall. The heart-beats and respiratory actions, serving as primitive measures, can have their rates varied within moderate ranges only. The alternating movements of the legs have a certain degree of slowness below which we cannot be conscious of them, and a certain degree of rapidity beyond which we cannot push them. Similarly with measures of time furnished by sensible motions outside of us. There are motions too rapid for our perceptions, as well as motions too slow for our perceptions; and such consciousness of time as we get from watching objective motions must fall between these extremes." 1

It is clear that the same argument applies to the genesis

^{1 &}quot; Psychology," vol. II., pp. 213, 214.

of our idea of space, namely, that consciousness of space is generated by the experiences of the perceiving organism, and is plainly governed by its size. Our ideas of the large and the small, the infinite and the infinitesimal, the near and the distant, have our individual space relationships as everpresent factors. In a word, we have no absolute unit of space or time, but depend upon the space and time aspects of our own organisms for our estimates and conceptions of these elements of all existence. Now, if we remember that the word element is used in the sense of phase or appearance, and that the indivisible fact which presents to us these phases, both of our own existence and of external existence, is motion, we shall perceive the significance of the familiar dictum that life, both mental and physical, is an adjustment of inner to outer relations.

These primordial inferences of existence called space and time, which are so fundamental in their nature as to have beguiled many into supposing them inscrutable, are plainly functions or products of our individuality. Our ideas of these two elements of thought are fashioned by our experiences; our estimates of quantity or size, and of durations, are measured by ourselves: and we can never escape from these personal units, as they are factors in the conceptions themselves. Thus we have in the study of psychology what might be called a personal relation, the two terms of which are the individual and humanity; and it is in the elaborations of this relation that we have all those perceptions known as the world of thought. To get at the true meaning of perception, however, it will be necessary to dispense, for a time, with the use of this word thought. If it be admitted that to think is to act, the difficulty is at once removed; but the manifest difference between what are known as actions and thoughts must be explained before we can hope to make clear the community of meaning between these two words, which is the chief aim of modern psychology.

In the restricted sense in which the word feeling is used

we have another difficulty. There are no absolute demarcations between the meanings of the words feelings, thoughts, and actions. Let us examine the first and last of these terms, with a view to discovering the true meaning of the word thought.

Feelings and thoughts are what we know of our own lives: actions are what we know of the lives of others. For the sake of convenience, let the word feeling represent all the changes that take place within us, which are, of course, without number: they include all thoughts and dreams, all emotions of every degree of intensity—to say nothing of that vast complexity of internal changes making up the sum of our physical existence, of which we are for the most part unconscious. Only a very small proportion of the changes which take place within us ever occupy the attention. Our bodies and minds are teeming with energies which we do not even suspect, and which never cease from the beginning to the end of our lives. Whenever we move a muscle or experience a thought. there are disturbances which disperse throughout the whole system. These disturbances or changes, which have their expressions in heat and sound, and other forms of motion. only attract the attention when they are sufficiently abrupt to shock us in some degree; thus every form of feeling or consciousness is an excitement. In fact, attention consists of the ebb and flow of these internal changes. Attention or consciousness is itself a disturbance or change, but it is an aggregate or co-ordination of changes, a moving equilibrium with certain well-defined conditions, as is illustrated by the severe limits to which consciousness is subjected by the laws of health, and the degrees of activity and inactivity of the sensorium.

Thus we see that the word feeling has a much wider meaning than is generally given to it, and it is only by a recent feat of science that we are enabled to classify feelings, thoughts, and actions under the one great heading of

¹ This incessant internal activity is said, by a great physiologist, to produce a tone of which we are unconscious.

internal or subjective changes of the same fundamental nature but differing widely in their processes. Perception, therefore, does not necessitate a belief in a psychical principle or any ultimate fact, other than that which is disclosed through the study of the structures and the functions of the human organism, and the faculties which arise from the actions and reactions ever going on between the individual and its physical and social environment.

Now that we have agreed upon a word to stand for that great class of changes called internal or subjective, what shall we call those changes which occur around us, or externally to us, known as objective? It is understood that the word feeling shall represent all subjective changes or phenomena, and that these changes viewed from without, or by others, are actions. It will not do to separate feelings from actions, excepting in a logical sense, as they are only names respectively for the internal and external aspects of the same thing. This fact becomes clearer when we remember that in trying to find a name for all changes external to us we are obliged to include in objective or external phenomena the actions of others: for these actions are a very important part of our surroundings. Using the word feeling in its broadest sense (as signifying all those changes which take place within us), it is clear that what are feelings to us are viewed as actions by others, or what are feelings subjectively are actions objectively. In a word, we are compelled to classify the feelings of humanity, or society, among the activities which constitute the environment of each individual.

When light strikes the eye and produces within us the phenomenon called sight, the sensorium, or the most active part of our organism, is said to *react* in response to the stimulus. The same term is used with regard to all the responses which we make to stimulations from without; such as in the cases of hearing to sound, sensitiveness to temperature, and resistance to strains. Again: when a bar of iron is struck with force sufficient to produce perceptible heat, the heat is said to be a reaction of the iron to the blow.

When we place certain chemical substances, in definite proportions and temperatures, in juxtaposition, the changes we observe are called reactions; and in a wider but not less exact sense all the changes which we observe around us, from the subtle relations called electric and magnetic to cosmical evolutions: from the energy which we call vegetable and animal life to the great panorama of social and moral phenomena known as human history; from the convulsions which are registered in the physical structure of our planet, and which are repeated upon so much grander scales in the sun and in distant stars, to the comparatively gentle changes of the seasons and daily variations in temperature:—all are expressions of the fundamental law or fact of action and reaction. This law has many names: it is known in philosophy as evolution; physicists write about it as the conservation and correlation, or the equivalence, of forces; mathematicians portray it as motion; but of one thing we may be sure, that the word action brings its essential nature truly before us, and what we know as actions constitute its universal expression. This law means that every change is the exact result of its circumstances; otherwise expressed, that every phenomenon is the function of its conditions. Cause and effect are simply the opposite appearances of each event, changes viewed from different standpoints in their succession; and these two factors, cause and effect, can never be more than logically separated from each other; they are merely phases of the event. This law means that the universe is a plenum of interdependent changes; each change we perceive being the consequence of other changes, and that the great procession of events in which our lives appear and disappear is the expression of one universal principle, law, or relation.

Is it not apparent, therefore, that it is alone in viewing humanity as an active aggregate that its influence upon the individual can be distinguished from that of nature in general? For if the actions of men and of nature are fundamentally the same, if the one is the product of the other, and they are both the expression of one fact, is not the en-

vironment of each individual both cosmical and social, an empire of interdependent activities united in allegiance to a single power?

But we have said that psychical life or thought is a relation having for its terms the individual, on the one hand, and the "social factor" otherwise known as the aggregate intelligence of the race, on the other. What, then, is it that separates mind from nature,—that gives human intelligence an existence of its own, distinguished from general existence? What forms intelligence into a whole, demarcating the conscious from the unconscious world? Is it not Language? Each human organism, by slow progressions of development,—actions and reactions between itself and its surroundings, beginning with the rude comparisons of a rude life, and growing into the complex relations which we call social life.—has slowly developed that vast organon of transcribed thought which we call language or literature. individual organism has become gradually modified until we find ourselves in possession of the faculty of responding to the meaning of words. Through this delicate medium of intelligence the comprehensive adjustments of human life are made possible. The structural aspect of this intelligence is language; its functional aspect is thought. Viewing thought from within, we classify it as internal change (or feeling used in its widest sense); viewing it from without, it is action; and its community of nature with universal change thus becomes apparent.

And now we are confronted with the profoundest question of philosophy, the initial inquiry of psychology, the stumbling block of metaphysics. This is the vexed question of subject and object; this is where the idealist and the nominalist disagree, where the spiritualist and the materialist part company. Upon the solution of this question depends the success of psychology, the understanding of the true nature of thought. If motion is the universal principle, having for its aspects space and time, it is important to know what constitutes this ever-present difference between space and

time? Why are we powerless to merge these ideas in one? Why are we compelled to oscillate between these two terms of the deepest of all differences, in order to form the conception of motion or universality?

The reply is this: that as our existence is individual, all our knowledge is the function or consequence of this individuality. The difference, or relation, between ourselves and our surroundings, between subject and object, self and not-self, viewed in all its phases, gives us the sum of our existence. Time is the most abstract view possible of general existence; it is the consciousness of existence separated from the events which fill it; it is the subjective view of life. Space is the objective or external view of general life, separated from all particulars. Thus the aspects of motion, space and time, are merely the natural products of the difference between subject and object; and in this fundamental difference we have the explanation of psychical life, or thought traced to the relatively simple adjustments of primitive organisms to their environment.

Now it may be objected that this fundamental difference, or relation, between self and not-self, between the creature and its environment, is precisely the mystery of life and thought, and that it is none the less a mystery because of the simplification of its terms.

The reply to this is, that if by the term mystery is meant a point or principle which defies analysis, I cordially consent that life is a mystery; but I deny that life is one mystery and that thought is another, or that human life presents us with a different mystery from that of universal life, or that organic changes are either more or less mysterious than cosmical or inorganic changes.

If that unity in all things can be established which culminates in the conception of God,—a universal principle whose aspects or attributes are the infinite and the absolute, or space and time,—philosophy will be fully satisfied. No theory of providence which is built upon so commanding a view of nature as this will shock the finest logical sensibilities.

No teleology which can spring from such a conception as this will appear narrow or anthropomorphic, or suffer by comparison with the most dignified and resplendent achievements of thought.

To recapitulate, we have the following important results. The first or primordial difference, or relation, from which the great phenomenon called thought is evolved, is the difference between subject and object, self and not-self. This difference is the same as that which exists between time and space.

Thinking is relationing, multiplying, or grouping differences. Every thought is expressed in terms of time and space, and declares an action of which these are the aspects. When we compare two existences, or become conscious of external coexistences, we contrast the objective terms of two distinct relations by dropping, or not attending to, the subjective terms. When we estimate durations, or become conscious of abstract sequences or time, we contrast the subjective terms of two or more distinct relations by dropping, or not attending to, the objective terms. Hence we have space or coexistences considered as objective conceptions, relatively

¹ In case any objection should be raised to the use of the words relation and difference as synonyms, we quote the following as one of many authorities for the statement that these words are practically identical in meaning: "Suppose an incipient intelligence to receive two equal impressions of the color red. No other experiences having been received, the relation between these two impressions cannot be thought of in any way; because there exists no other relation with which it can be classed, or from which it can be distinguished. Suppose two other equal impressions of red are received. There can still exist no idea of the relation between them. For though there is a repetition of the previously-experienced relation, yet since no thing can be cognized save as of some kind; and since, by its very nature, kind implies the establishment of difference; there cannot, while only one order of relation has been experienced, be any knowledge of it-any thought about it. Now suppose that two unequal impressions of red are received. There is experienced a second species of relation. And if there are afterward presented many such pairs of impressions, the members of which are severally equal and unequal, it becomes possible for the constituents of each new pair to be vaguely thought of as like or unlike, and as standing in relations like or unlike previous ones."-Spencer's "Psychology," vol. II., p. 212,

distinguished from time or abstract sequences considered as subjective conceptions. From these personal relations, or differences, the great organon of thought is constructed. From the primordial adjustments of an organism to its environment are evolved the adjustments of the organism of humanity to the universe, through the co-ordinations of language which give to the individual the social factor, or its intellectual environment, enlarging the terms of this relation by insensible progressions from those of an individual and its species to those of a species and its cosmical surroundings. From this simple theory of perception we are enabled to deduce the inestimable truth that morality, which is simply the vastly extended sympathy of an individual for its race, is made possible by intelligence, and that it is the natural result of human progress.

The chief point of divergence between this theory of perception and that taught by such writers as Lewes and Spencer, is, that it stigmatizes the unknowable as involving a contradiction in terms. Since knowledge is the product or expression of a universal principle, from which perception is seen to spring, to postulate an unknowable is to deny the source of knowledge. But there is a deeper incongruity in this term unknowable than can be deduced by comparing it with any group of facts. As has already been explained, every possible conception is an elaboration of the difference between subject and object, self and not-self; to postulate a deeper existence than that of which life and knowledge are the expression is to say that a relation is not the expression of its terms, that thought is possible in the absence of its factors.

In the light of the preceding argument, it is unnecessary to say that metaphysical discussions are merely comparisons of the meanings of words; once in possession of the fundamental fact of the universe, or the ultimate analysis, no possible combination of terms can disturb us. Amid the fiercest conflicts of opinion this truth remains secure. It is in the pessession of a multitude of minds who feel its power and

express its meaning in their lives. Its language is action; its law is morality; its sentiment is the sympathy which we call humanity. Far from being an innovation, its light has burned through the long ages of the beginnings of our race; no human life has been without its influence. The brightest promise which the future offers is, that this truth shall gain universal sway; that the actions of men shall express that principle of harmony which the mind naturally imbibes from nature.

In the widest meaning of the word thought, therefore, we find a reconciliation between the contrasted terms *feeling* and *action*,—a contrast which springs from the first condition of organic life, the difference between self and not-self, the subjective and the objective, the creature and its environment. These are the factors of the phenomenon which we call thought. This reconciliation gives us a complete psychology without a psychical principle, a religion without a revelation, a philosophy without an unknowable.

Let us now consider the advantages which accrue from an understanding of the nature of Perception.

In the opening of the chapter entitled "Function," in the first volume of Mr. Spencer's work on "Biology," we find this extraordinary problem: "Does Structure originate Function, or does Function originate Structure? is a question about which there has been disagreement. Using the word Function in its widest signification, as the totality of all vital actions, the question amounts to this: Does Life produce Organization, or does Organization produce Life?" And Mr. Spencer seriously applies himself to solving this problem. The fundamental error of Mr. Spencer's system of philosophy, as we have before pointed out, is in the incompleteness of its ultimate analysis. An ultimate analysis leads us to a single fact. This fact we do not find clearly stated: the relationships between its many names and the many names of its aspects are not explained, and the student is left in doubt as to what this fact really Spencer's philosophy is termed by its author synthetic. It purports to give us a synthesis of life, a commanding view of reality. This word synthesis springs from a fact of perception. The physical or objective side of the phenomenon of perception, it will be remembered, is in itself a vast synthesis, or building up of parts into a whole. The outposts of the understanding, known as the senses, are merely channels of agitation leading to the great central structure of the nervous system, called the brain. Light, heat, the effluences known as odors, the relative rigidities called resistances, are simply different kinds of agitations of the nervous system centring in the brain. Du Bois-Reymond tells us that the chief distinction between the two substances known as the muscles and the nerves. and hence between body and mind, lies in the amount of activity of which each is capable. Again Lewes, in a study of the relations of physiology to psychology, and the incidental examination of the nervous system, has removed many of the superstitions which have crept into these sciences under the guise of the arbitrary localization of functions, and has demonstrated the inseparable nature of the two aspects of physiological phenomena known as structure and function. From the simple organic substance known as protoplasm, which, under analysis, discloses a very high molecular multiplicity, to the synthesis of organic life instanced in the individual of our own species, structure and function are shown to be but obverse aspects of each group of facts, which again are merged in the larger fact of organic life. Hence the co-ordination of activities is another name for organic life. When we use the word life in a wider sense than that indicated by this co-ordination or organization, it becomes applicable to that wider range of activities known as mechanical or chemical, usually regarded as distinct from vital.

Again: the science of organic chemistry, which is yet in its infancy, has placed beyond dispute the great fact that the distinction between vital and chemical activities is but superficial. This discovery points to the conclusion, illustrated

by Lewes, that the structures or substances of the human organism, as of all organisms, are directly accountable for the type of activity which each organism displays. This gives us the startling fact that the four organic elements, oxygen, hydrogen, nitrogen, and carbon, simply assert their natures in all the phenomena of organic life; in other words, that the affinities or activities of these and allied elements account for all vital functions, from the primordial assimilation, growth, and reproduction observed in the structureless speck of protoplasm to the moral sentiments and the most extended perceptions of man.

It is in the light of this fact that I object to Spencer's definition of Life. For if organic life is accounted for by those activities which outside of the vital sphere we call chemical and mechanical, then the word life, in its broadest sense, means activity; organic life means organized activity; and no definition of organization, however extended, can illuminate the meaning of the general principle which we call Life. To say, therefore, that "Life is the definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external coexistences and sequences," is to say that an organism is an instance of the adjustment of its internal activities to its external related activities, and that organic life is organic life. Again: to ask the question. Does life produce organization, or does organization produce life? is equivalent to asking whether cause produces effect, or whether effect produces cause. The only answer that can be given is to be found in the nature of perception, which proceeds inevitably from simplicity to complexity, from unity to variety, from the one to the many, from cause to effect, from the principle of activity, or motion, to the facts or realities of life.

That this metaphysical incompleteness of Spencer's philosophy vitiates his whole system, is true only in a limited sense. When so vast a body of data is organized into a picture of life and its surroundings, the failure to strike the key-note of the nature of perception is certainly pro-

ductive of minor discords, of unnecessarily involved explanations which lead to no useful results. But these lesser defects are overwhelmed by the comprehensive plan, the consummate skill, the tireless research, and the earnestness and noble purpose, of the work. Spencer's philosophy constitutes an education in itself. No one can really study it without feeling its elevating influence, and being benefited by the splendid intellectual discipline which it imparts. But it is further to be remarked: The tenor of Spencer's system is sociological; his illustrations are continually rising to the level of social phenomena, and his originality is to be found almost exclusively in this field.

Before looking on this bright side, however, it is incumbent upon us to examine the psychological department of his work, which, we are compelled to admit, has the disadvantage of demanding the most study and yielding the least in return of any of his writings. The scope of this subject of psychology has been outlined, from an independent standpoint, in the preceding part of this chapter, and in the one which follows we propose to examine carefully the method of treatment which it receives at the hands of our author.

CHAPTER XI.

HERBERT SPENCER (CONTINUED).

The Analysis of Reason—The Fundamental Intuition—The Contrasted
Theories of Perception.

In the second volume of Spencer's "Principles of Psychology," the author apologizes for the abstruseness of the opening portions of the work, and explains that the method which he adopts, namely, that of a systematic analysis, requires that it should begin with the most complex and special forms of intellectual activity, and progress in stages to the simplest or most general. He further says that this method will tax the powers of even the habitual student; and to those who are unaccustomed to introspection (or the study of the operations of the mind) he recommends patience, and holds out the reward of an ultimate comprehension of the subject if they will but persevere.

The first words of the second chapter are these: "Of intellectual acts, the highest are those which constitute Conscious Reasoning—[or] called conscious to distinguish it from the unconscious or automatic reasoning that forms so large an element in ordinary perception. Of conscious reasoning, the kind containing the greatest number of components definitely combined is *Quantitative Reasoning*. And of this, again, there is a division, more highly involved than the rest, which we may class apart as *Compound Quantitative Reasoning*. ** * Even in Compound Quantitative Reasoning itself there are degrees of composition, and to initiate our analysis rightly we must take first the most composite type. Let us contemplate an example."

The example given is the method of reasoning pursued

by an engineer in estimating the comparative strength of bridges of different sizes. The vast amount of experience, or special knowledge, concerning the comparative strength of different materials, which the ability to solve such a problem would pre-suppose, is reduced to a minimum by taking, for example, an iron bridge, and the problems of strain are simplified by limiting the example to the tubular class of bridges. By these means the whole bearing of the example, which is made to represent, as the foregoing quotation shows, the most complex form of "Compound Quantitative Reasoning," is the joint application of two problems in mechanics to the building of bridges. The first of the propositions can be stated as follows: The bulks of similar masses of matter are to each other as the cubes of their linear dimensions, and consequently when the masses are of the same material their weights are also to each other as the cubes of their linear dimensions. This proposition, stated and explained in language familiar to all, is this: to determine the differences between masses, agree upon a unit of mass, the most convenient form of which has been found to be a cube, or a solid of equal linear dimensions. Since the length, breadth, and thickness of this unit of mass are equal, its edges or lines are equal, so that a comparison between the total number of the cubic-shaped units in each mass can be made by comparing the linear dimensions, providing the number of linear units in the linear dimensions is first made to agree with the number of cubic units in the respective masses. The problem states that the number of linear units in the three dimensions multiplied together (or cubed in case the dimensions are equal) will equal the number of cubic units in the respective masses, or that the masses are to each other as the cubes of the linear dimensions. The stages, therefore. in this first of the two problems, the joint use of which is cited as furnishing an example of the most complex order of "Compound Quantitative Reasoning," are progressions of equations, or equalities. All mathematical progressions are steps from one equality to another, beginning always with those simple equalities which are evident to the senses, or sensible equations. Some savages who are unable to count, form very good ideas of the comparative bulks of masses; but until they learn to count and measure they cannot understand that numbers can be made to represent bulk. It requires no mathematical mind, however, to see that they can; and the foregoing problem, stated in terms which the unmathematical reader can at once understand, would be simply this: By multiplying together the length, breadth, and thickness of a mass, we get a number which expresses the volume of the mass in any desired units. This is the extent of the question; for it goes without saying, that if numbers are made to express the exact volumes of masses, variations in volume imply variations in numbers, and comparisons of numbers are comparisons of masses.

The second problem is not so easy to reduce to its steps of equivalence, or the equations by which its conclusions are reached. It is stated as follows: In similar masses of matter which are subject to compression or tension, or, as in this case, to the transverse strain, the power of resistance varies as the squares of the (like) linear dimensions. Here we have two things made to represent each other, or equalized, or brought to an equation, which are widely different in nature, namely, the power of resistance in a mass and a superficial measurement. For if things vary with other things, they must represent them, or be equal to them, at least in the property which forms the base of the compari-In this case, the squares of the linear dimensions of two masses are said to vary with the power of resistance of the masses. Therefore the squares of the linear dimensions must in some way be made equal to the power of resistance of the respective masses. How is this done? There is a law in mechanics, called the law of least resistance, which locates the greatest strain in a structure in a plane. This law or rule reduced to its simplest form is, that if a tube of iron of uniform size and strength be subjected to the transverse strain of (say) its own weight, the place at which it would

break, if the strain exceeded its strength, would be a transverse section of the tube, or the plane of fracture. This transverse section, or plane of fracture, is naturally two of the linear dimensions of the tube, or mass, multiplied together, and in the case of transverse strains it would be the two transverse linear dimensions which would be multiplied together to represent this transverse section in units of squares. Here, then, the equality of nature is established between the results of the two problems. In the first a number was made to represent the bulk and also the weight of compared masses. Since every mass has three linear dimensions, if it is desired to express these masses in common multiples, or divisions of their masses, of course these divisions of mass, or units, must have three linear dimensions: and if we would compare the aggregates of units in each mass, the calculations, or process by which these aggregates are arrived at, must be compared. Now the calculations in cases of solids or masses are cubic, or three lines multiplied together, and in cases of surfaces they are squares, or two lines multiplied together. The power of resistance of a structure to a transverse strain has been simulated in the foregoing problem by a surface, and the weight of masses by solids, so that the final comparison between the results of the two problems is simply a comparison between the methods of estimating the number of superficial units in a surface and the number of solid units in a solid: one is done by multiplying together the linear units contained in two straight lines, and the other is done by multiplying together the linear units contained in three straight lines. Now if a certain operation is performed twice to accomplish a certain purpose, and the same operation is performed three times to accomplish another purpose, it is plain that the result of the operation in the latter case will be larger than that in the former, in proportion to the size of the original operation. In other words, three times a given quantity will be more than twice the same quantity, and the difference between the results will increase in exact proportion to the

size or power of the unit employed. This is equivalent to saving that the difference between three feet and two feet is greater than the difference between three inches and two inches, or simpler still, that three is greater than two. From this simple difference, the perception of which is not an intuition, because it is a sensible fact which can be demonstrated mechanically, we can build up, by retracing the steps of the above analysis, the complex problems that homogeneous masses, and therefore their weights, are to each other as the cubes of their linear dimensions, and that the power of homogeneous masses of like proportional dimensions to resist transverse strains varies as the square of the like linear dimensions. The whole comparison grows out of the fact that the operation by which the weight is estimated is performed three times, and in the case of estimating the power it is performed but twice; and this gives us the startling result that three is greater than two!

Speaking of the above problems, Mr. Spencer says:

"But now, leaving out of sight the various acts by which the premises are reached and the final inference is drawn, let us consider the nature of the cognition that the ratio between the sustaining forces in the two tubes must differ from the ratio between the destroying forces; for this cognition it is which here concerns us, as exemplifying the most complex ratiocination. There is, be it observed, no direct comparison between these two ratios. How, then, are they known to be unlike? Their unlikeness is known through the intermediation of two other ratios to which they are severally equal.

"The ratio between the sustaining forces equals the ratio $1^2:2^2$. The ratio between the destroying forces equals the ratio $1^3:2^3$. And, as it is seen that the ratio $1^2:2^2$ is unequal to the ratio $1^3:2^3$, it is by implication seen that the ratio between the sustaining forces is unequal to the ratio between the destroying forces. What is the nature of this implication? or, rather, What is the mental act by which this implication is perceived? It is manifestly not decomposable

into steps. Though involving many elements, it is a single intuition, and, if expressed in an abstract form, amounts to the axiom: Ratios which are severally equal to certain other ratios that are unequal to each other are themselves unequal."²

We submit that there is a direct comparison between two simple quantities to which the compared ratios are reduced by analysis. This perception of difference, which is so simple and mechanical in its nature that it can be viewed as a sensation, is the fundamental activity of every perception, and to it every mathematical problem can be reduced. Its origin can be shown to be in the difference between self and not-self, between the consciousness of a single serial existence, or time, and of many existences,—coexistences, or space. The statement that this final difference is only relative, expressing the obverse terms of the ultimate relation which we call motion, is merely the completion of the conception, the illumination of the principle, of perception.

That this principle is not taught by Mr. Spencer, those who will carefully study the first ten chapters of the second volume of "Psychology" will have good reason to believe; and yet a deep study of these chapters reveals abundant materials from which this principle can be drawn.

Following the problems of weight and resistance, Proposition XI. of the fifth book of Euclid is cited. After the demonstration of this problem, the following remarks occur:

"What are here the premises and inference? It is argued that the first relation being like the second in a certain particular (the superiority of its first magnitude); and the third relation being also like the second in this particular; the first relation must be like the third in this particular. The same argument is applicable to any other particular, and therefore to all particulars. Whence the implication is, that relations that are like the same rela-

¹ Intuition according to Spencer is an undecomposable cognition.

² "Principles of Psychology," vol. II., ch. ii.

tion in all particulars, or are equal to it, are like each other in all particulars, or are equal.

"Thus the general truth that relations which are equal to the same relation are equal to each other—a truth of which the foregoing proposition concerning ratios is simply one of the more concrete forms—must be regarded as an axiom. Like its analogue—things that are equal to the same thing are equal to each other—it is incapable of proof. Seeing how closely, indeed, the two are allied, some may contend that the one is but a particular form of the other, and should be included under it. They may say that a relation considered quantitatively is a species of thing; and that what is true of all things is, by implication, true of relations. Even were this satisfactorily shown, however, it would be needful, as will presently be seen, to enunciate this general law in respect to relations. **

"The truth, relations that are equal to the same relation are equal to each other-which we thus find is known by an intuition (an undecomposable mental act), and can only so be known,—underlies important parts of geometry. examination of the first proposition in the sixth book of Euclid, and of the deductions made from it in succeeding propositions, will show that many theorems have this axiom for their basis. But on this axiom are built far wider and far more important conclusions. It is the foundation of all mathematical analysis. Alike in working out the simplest algebraical question and in performing those higher analytical processes of which algebra is the root, it is the one thing taken for granted at every step. The successive transformations of an equation are linked together by acts of thought of which this axiom expresses the most general form." 1

This citation is given for the purpose of showing the great importance which Spencer attaches to this complex rule or axiom that "Relations which are equal to the same relation are equal to each other"; also, how he clings to the word

^{1 &}quot; Principles of Psychology," vol. II., ch. II.

relation as preferable to thing or fact; although it is the more abstruse term, and how decided he is in saving that this rule is an intuition, a word which he interprets as "cognition reached by an undecomposable mental act." It is manifestly a part of our theory of perception to deny the existence of intuitions when the term is used in the above sense: for that sense presupposes an unknowable. "Intuition" is a very useful word in describing mental procedures, but it can never have a deeper meaning than that of a rapid perception, so rapid as to appear to be undecomposable. But the principle of perception explains every possible intuition. Notwithstanding that the mental organism of man has reached such perfection that thought is able to cover vast areas as by a flash of light, the operation is composite, and can be traced step by step to the primordial difference between subject and object, the primeval inference from which all thought is elaborated. Far from this rule, "that relations which are equal to the same relation are equal to each other," being an undecomposable intuition, it is a manifest complexity of the perception of difference which is involved in every mathematical equation.

The reason for using the word relations instead of things in the so-called axiomatic intuition is thus given by Mr. Spencer: "It should be noted that the relations thus far dealt with are relations of magnitudes, and, properly speaking, relations of homogeneous magnitudes; or in other words, ratios. In the geometrical reasoning quoted from the fifth book of Euclid this fact is definitely expressed. In the algebraical reasoning, homogeneity of the magnitudes dealt with seems, at first, not implied; since the same equation often includes at once magnitudes of space, time, force, value. But on remembering that these magnitudes can be treated algebraically only by reducing them to the common denomination of number, and considering them as abstract magnitudes of the same order, we see that the relations dealt with are really those between homogeneous magni-

^{1 &}quot; Psychology," vol. II, p. 12, foot-note.

tudes—are really ratios. The motive for constantly speaking of them under the general name relations, of which ratios are but one species, is that only when they are so classed can the intellectual processes by which they are co-ordinated be brought under the same category with other acts of reasoning." The word ratio means proportion, the comparison of numbers or quantities. The terms of the comparison may be things, or other ratios, or relations indifferently, for things are merely complexities of numbers and quantities.

The fact that all acts of reasoning spring from or can be explained by a perception, or sensation, of difference, is opposed to the statement that it is necessary to speak of the terms of an equation as *Relations*, in order to bring the intellectual process represented "under the same category with other acts of reasoning"; for equations are merely comparisons. The sign of equality does not mean identity. but equivalence. There is always a difference implied in every statement of equality. The primordial difference. which is to be found between the conceptions of time and space, or between the facts known as subject and object, the self and the not-self, the creature and its surroundings, accounts for this difference, which is implied in the most complete possible equations. If "quantitative reasoning" is the most exact, quantitative equalities express the finest possible shade of difference; and this difference is that of position or space, which means the same thing as quantity, for the word quantity never signifies more than an aspect of any phenomenon. To equalize homogeneous things in their quantitative aspect is to reduce their difference to that of position, or only space; but this difference of position remains so long as comparison is possible.

Straight lines are generated by points in *motion*. The most abstract terms of comparison possible are two straight lines, because their difference can be expressed in the simplest imaginable *motion*. Two equal straight lines give us the ideal equation. If these straight lines are merged in one,

^{1 &}quot;Psychology," vol. II., ch. ii.

equality disappears in identity, and we have remaining the fact known as the simplest possible motion—a straight line.

But, it will be asked, if the primordial or simplest difference is that between object and subject (the function of individuality), if this simplest difference has its source in the contracted aspects of motion, known as time and space, why is it said that the faintest possible shade of difference, which is detected at the bottom of every equation, is that of position, or space? Why does not the other factor of the ultimate relation, known as time, stand for an equally fine shade of difference? Why does not the factor of time also appear in the ultimate analysis of equations? It has been said above that the ideal equation was to be found in two equal straight lines: "Two equal mathematical lines placed one upon the other merge into identity, and alone exhibit that species of coexistence which can lapse into single existence." A straight line is generated by a point in motion. Two equal straight lines compared exhibit the simplest of all possible relations, excepting the ultimate relation, which is motion. A glance at the genesis of the conception of an equation of two equal straight lines shows how absolutely dependent we are, for every step of reasoning composing it, upon the fundamental fact of motion. But in this fact of motion is not the element of time always implied? Can we generate a straight line without employing the factor time? Can we form an equation without acknowledging the presence of time in the synthesis?

The first coexistence of which the mind becomes conscious, namely, the ego and the non-ego, employs the consciousness of self as a factor. The conception of time is the subjective aspect of that synthesis of motion known to us as personal existence, and springs from the consciousness of serial life considered apart from all conditions. The consciousness of self, therefore, gives rise to our conception of time; and as the subjective is a factor in every coexistence, no equation can be formed without employing time. But we are continually forgetting, or dropping, the subjective

factor of every coexistence. When we observe objects in space, we form the idea of objective coexistence: but it is done by recognizing the relation, or fact, of coexistence between ourselves and each object, and then forgetting, or dropping, the subjective term. In this sense, and only in this sense, is the axiom that things which are equal to the same thing are equal to each other a primordial form of inference. It is the method of all comparisons, but it is manifestly composite and is the union of two distinct comparisons, the establishment of two distinct relations, or facts of equality. In comparisons, or equations which rise above the simple relation of coexistence, the presence of the subjective factor becomes more and more obscure. If, for instance, we would establish equality of magnitude between three objects, we measure them all by one and declare that each of the remaining two, being equal to the one first measured, or selected as a measure, is equal to each other. If the objects were increased to four instead of three, the process would only be repeated, and the axiom would read. All things which are equal to the same thing are equal to one another, or the relation of equality is constant between like terms.

Among homogeneous objects this relation of equality amounts to a declaration that the compared objects are alike excepting in position; or, in other words, the primordial difference of space lasts as long as comparison remains possible, and is the last to give way before identity. In all this, however, the element of time is present, for the very act of reasoning, or comparing, or ratiocination, implies the lapse of time, and the first step beyond the conception of time implies space, or not-self.

But it may be objected, if the faintest possible shade of difference between facts is to be found in the comparison of two equal straight lines, and the source of difference itself, or the primordial or simplest of all differences, is to be found in the comparison of time and space, or subject and object, what is the difference between these differences? The reply

is, that when we compare two straight lines we compare two motions, or two separate facts; and in comparing time and space, we have that contrast between the aspects of motion, as an indivisible fact, which is the function of our individuality, the germ of intelligence, the beginning of life and of perception. Thus we see our utter inability to escape from the primordial fact of motion, which gives birth to every conception, for in the contrasted aspects of this fact we have the source of every inference.

In the sixth and seventh chapters of the same work we find a labored argument, the purpose of which is to review the subject of "perfect" and "imperfect quantitative reasoning," thereby bringing the subject down to the subsequent chapter entitled "Reasoning in General." All through this argument a persistent effort is made to prove that the proposition, "Relations which are equal to the same relation are equal to each other," is what might be termed an irreducible axiom, the initial act of reasoning.

In the chapter entitled "The Final Ouestion," second division of the same volume, Mr. Spencer endeavors to prove that a complete theory of knowledge is impossible at the present stage of human culture. By a complete theory of knowledge he seems to mean a comprehension of the principles of life and mind, the determination of which is the aim of all philosophy. This assertion is thus set forth: "But while a true theory of knowledge is impossible without a true theory of the thing knowing and a theory of the thing known, which is true as far as it goes; and while it follows that advance toward a true theory of any one depends on advances toward true theories of the others; it is, I think, manifest that, since a true theory of knowledge implies a true co-ordination of that which knows with that which is known, the ultimate form of such a theory can be reached only after the theories of that which knows and of that which is known have reached their ultimate forms, * * * That the theories of the known and of the knowing have assumed their finished shapes, and that a finished theory of Knowledge

is now possible, would, of course, be an absurd assumption." Here we have two distinct assertions; the first is, that a true theory of Knowledge can be formed, providing we can form a "true theory of the thing knowing and a theory of the thing known, which is true as far as it goes." The second is, that a true theory of knowledge is impossible as yet, because "the ultimate form of such a theory can be reached only after the theories of that which knows and of that which is known have reached their *ultimate forms*"; and the assumption that this ultimate form of theory has been reached is declared to be an absurdity. This, of course, is equivalent to saying that a true theory of *Knowledge* (using the word in its true sense, to include the knowing and the known) has not been arrived at, and cannot be arrived at in the present state of human culture.

The theory of Knowledge, therefore, which Mr. Spencer offers is admitted by himself to be imperfect, incomplete. less than true. Is not this a rather discouraging admission, when we consider the vast amount of introspective study which his system contains? The degree of this necessary incompleteness of our conception of knowledge is not defined, but it seems to be measured by the incompleteness of our understanding of the principles of knowledge, or the categories of thought. Thus we are told that "Developed intelligence is framed upon certain organized and consolidated conceptions of which it cannot divest itself; and which it can no more stir without using than the body can stir without help of its limbs." This asserts that these "organized and consolidated conceptions" are absolutely essential to the activity of the intelligence. We are not told what kind of activity it is which organizes and consolidates these conceptions, without which the mind is said to be incapable of procedure of any kind. It will be remembered that these conceptions are five in number; they are enumerated in the chapter on "Ultimate Scientific Ideas," in "First Principles," as follows: Space, Time, Matter, Motion, and Force.

^{1 &}quot; Principles of Psychology," vol. II., p. 309.

conceptions were declared to be utterly incomprehensible; any attempt to understand them was said to lead to absurdities. Again: they were aggravated in a sixth conception, called consciousness. This combination of incomprehensibles was also declared to be utterly incomprehensible, which, it must be admitted, was but a fair inference. Now is it surprising, with this combination of inconceivable conceptions aggregated into an incomprehensible consciousness, all being manifestations of the unknowable, to set out with, that we should have a theory of knowledge in some degree incomplete? As a further illustration of the incompleteness of Mr. Spencer's theory of knowledge, we would call attention to his belief in the existence of "organized and consolidated conceptions," which are absolutely essential to intellectual activity.

Conceptions are surely the fruit of intellectual activity, and to postulate conceptions already "organized and consolidated," as a primary condition to intellectual procedures, is correct only in a very limited sense; in a broad sense it is equivalent to saying that the mind can act without acting. Here we have the vital fault of Mr. Spencer's psychology. It teaches distinctly that "reason is absolutely incapable of justifying its assumption. An assumption it is at the outset. An assumption it must remain to the last." From a less careful writer than Spencer these words might be passed over as an inadvertence, but they are too consistent with the rest of his psychological reasoning, and too prominent in themselves, to fail to impress us. It is clearly admitted that all intellectual activity is included under the broadest meaning of the word *reasoning*.

By following out Mr. Spencer's idea of *reasoning*, therefore, in which it is said that the activity of *reasoning* extends in an unbroken chain from those automatic procedures known as reflex action to the highest efforts of the mind, we shall perceive that it is hardly consistent with that theory of knowledge which declares that the activities of the mind

^{1 &}quot; Principles of Psychology," vol. II., p. 317.

depend absolutely upon organized consolidated conceptions which are utterly incomprehensible. "Reasoning, however," says Mr. Spencer, "is nothing more than re-coordinating states of consciousness already co-ordinated in certain simpler ways. * * * Men of science, now as in all past times, subordinate the deliverances of consciousness reached through mediate processes to the deliverances of consciousness reached through immediate processes; or, to speak strictly. they subordinate those deliverances reached through prolonged and conscious reasoning to those deliverances reached through reasoning that has become so nearly automatic as no longer to be called reasoning." In a word, the highest achievements of the mind are submitted to the arbitration of the senses, or those automatic co-ordinations which may be regarded as the natural activities of the physical organism, because so simple that they cannot be classed as mental.

If reasoning is thus traced from the simplest organic co-ordinations or activities to those involved efforts of the mind commonly classed as reasoning, and if it is admitted that the re-coördinations (or higher reasonings) cannot give to the results reached a validity independent of that possessed by the previously co-ordinated states, where is the break in a chain of reasoning reaching from the simplest organic fact to the most complex, or from the first co-ordinations to the most involved co-ordinations? Deductions when correct are but natural effects of certain causes given in the premises from which the deductions are made. Logical deductions are the natural consequences of the meaning of words, the symbolic representations of organic activities.

When Spencer teaches, therefore, that all the activities of the mind can be included under the broadest meaning of the word reasoning, and in the same chapter asserts that "Reasoning is absolutely incapable of justifying its assumption,—an assumption it is at the outset,—an assumption it must remain to the last,"—the contradiction is evident; for after identifying reasoning with all organic activity, it would

^{1 &}quot; Principles of Psychology," vol. II., p. 315.

be just as sensible to say that cause and effect, which are the obverse appearances of every fact, are arbitrary appearances, assumptions which cannot justify themselves, as to say that reasoning cannot justify itself. Facts express and justify themselves, and the deepest fact is the end of analysis and the beginning of synthesis, the principle of perception, or life.

If it is possible to find a rank superstition involved in a flagrant contradiction in terms, it is this theory which assumes that reason is an unjustifiable assumption, that the elements of thought are impenetrable mysteries, that knowledge springs from the unknowable, that perception is the function of the imperceptible, that conceptions are manifestations of the inconceivable, and that they spring armed cap-à-pie into the world of consciousness, the manifest fruits of thought, but denying their origin. Intellectual activity is akin to universal activity, a form of motion. Consciousness, thought, reason, perception, knowledge, are but different names for different aspects of this activity. The prime factors in this activity are the subject and the object, the creature and its environment: and in this dual aspect of the phenomenon of knowledge (for knowledge we hold to be its most comprehensive term) we have that contrast, comparison. expression of difference, or primordial relation, from which the great structure of mind is built up, to which contrast we trace the origin of all thought, and by which we explain Perception. The very word unknowable involves an absurdity. To name a thing is to recognize its existence, to classify it, and therefore to reason about it, and hence, in some degree, to know it. In what degree do we know the "unknowable"? Hear what Mr. Spencer says, in another part of the same volume, in support of this position: "The general community of nature, thus shown in mental acts, called by different names, may be cited as so much confirmation of the several analyses. * * * All orders of Reasoning—Deductive and Inductive, Necessary and Contingent, Quantitative and Qualitative, Axiomatic

and Analogical—come under one general form. Here we see both that classification, naming, and recognition are nearly allied to one another, and that they, too, are severally modifications of that same fundamental intuition out of which all orders of reasoning arise. Nor are classification and naming allied only as being both of inferential nature: for they are otherwise allied as different sides of the same thing. Naming presupposes classification: and classification cannot be carried to any extent without naming. Similarly with recognition and classification, which are also otherwise allied than through their common kinship to ratiocination. They often merge into each other, either from the extreme likeness of different objects, or the changed aspect of the same object: and while recognition is a classing of a present impression with past impressions, classification is a recognition of a particular object as one of a special group of objects. This weakening of conventional distinctions, this reduction of these several operations of the mind, in common with all those hitherto considered, to variations of one operation, is to be expected as the result of analysis."1

This analysis shows all the operations of mind to be of the same order, from the simplest to the highest co-ordinations. and vet all orders of reasoning are said to be but modifications of that fundamental intuition which is elsewhere referred to as the function of the "unknowable," a group of "concrete organized conceptions," which are in themselves incomprehensible, a group of intellectual "entities," "manifestations of the unknowable." In case the reader should suspect that Mr. Spencer makes a difference between the operations of the mind in general and those operations which we call reasoning, we have but to revert to the chapter on "Reasoning in General," where we find it admitted that knowledge gained through the senses, or, as Mr. Spencer terms it, by perception, differs from that gained by the reasoning faculties, not in nature, but only in the directness of the apprehension. If the cognitions gained through sensuous percep-

^{1 &}quot;Principles of Psychology," vol. II., p. 129.

tions are the same in nature as the cognitions gained through the reasoning faculties, at what stage in the development of mind does the "irreducible intuition" make its appearance?

"Let us consider," says Mr. Spencer, "what is the more specific definition of Reasoning. Not only does the kind of proposition called an inference assert a relation; but every proposition, whether expressing mediate or immediate knowledge, asserts a relation. How, then, does knowing a relation by Reason differ from knowing it by Perception? It differs by its *indirectness*. A cognition is distinguishable as of one or the other kind, according as the relation it embodies is disclosed to the mind directly or indirectly. If its terms are so presented that the relation between them is immediately cognized—if their coexistence, or succession, or iuxtaposition, is knowable through the senses, we have a perception. If their coexistence, or sequence, or juxtaposition, is not knowable through the senses,—if the relation between them is mediately cognized, we have a ratiocinative act. Reasoning, then, is the indirect establishment of a definite relation between two things. But now the question arises, By what process can the indirect establishment of a definite relation be effected? There is one process, and only one. If a relation between two things is not directly knowable, it can be disclosed only through the intermediation of relations that are directly knowable, or are already known."1

Reasoning, then, which is admitted to signify, in its widest sense, all intellectual activity, is declared to be the indirect establishment of a definite relation between two things. "If this relation between two things is not directly knowable, it can be disclosed only through the intermediation of relations that are directly knowable, or are already known." Does not the above show conclusively that the genesis of thought is from facts to facts, from definite known relations to definite known relations, and that, in this admission, there is no room for the unknowable? Does it not appear as though, in the analysis above quoted, our author had

^{1 &}quot;Principles of Psychology," vol. II., p. 115.

penetrated so near the truth as to forget that error which, in other parts of his system, is shown to be at the bottom of his theory of perception? Is it not clear, from the position we now hold in this attempt at a Synthesis of Knowledge, that the departure from the true course of reasoning in Mr. Spencer's psychology is caused by the difficulty of accounting, not for the general procedures of the mind, but for our conceptions of those principles known as space, time, matter, force, and motion, and his consequent failure to perform an analysis of perception?

Involved as are the operations of the mind in tracing them out, we encounter no mysteries, no irreducible intuitions, no facts which are not fully comprehensible or which do not justify themselves. If reasoning is an institution of comparisons varying in complexity from the primordial comparison of the subjective and the objective, which gives us the consciousness of personal existence, to the vaguest and most remote analogies, it is manifest that the process is constant in nature, and varies in complexity with the terms compared. In estimating the likeness between homogeneous objects, we establish equality of quantity by a comparison of measurements, or by measuring all by one. We unconsciously employ the subjective factor in each relation of equality established, for we virtually affirm that each object impresses us as the same in all respects excepting position. When quantitative comparisons cease and more complex attributes or qualities are compared, the use of the subjective factor becomes more and more obscured, and we imagine that we are comparing purely objective facts directly together, whereas we are always comparing the impressions which the facts make upon us together; or, in other words, we are comparing relations; but what are these relations between ourselves and objects but facts themselves? They are facts of consciousness having for their terms objective and subjective activities. mind, then, is made up of these simple comparisons, perfectly simple in nature but becoming more and more intricate as they ascend in thought, what becomes of that involved intuition which we are told is so fundamental that it cannot be reduced to any simpler terms? But here we come upon the difference between sensation and thought, between facts of consciousness which have objective factors, and facts of consciousness which are purely subjective. A train of thought is set going within us, and the great machinery of the mind continues to work out its comparisons with apparent independence of the environment. These trains of thought sometimes occupy years in their course, and are silently progressing during waking and sleeping, during all sorts of distracting occupations, and at last complete themselves, in some cases, with scarcely any conscious effort on the part of the thinker. This is certainly a conspicuous instance of the difference between sensation and thought. Sensation has one factor without, thought proceeds within. This distinction, however, is only relative. The sensorium responds to impressions from without, and each impression produces its modification of the sensorium, its memory: impressions repeated become deeper. the modifications become more and more marked. modification of structure implies a modification of function. The physical adjustments which correspond to those comparisons constituting thought are thus far inscrutable, but we have the results in the clearer perceptions which accrue from thinking, or, in other words, the more ready adjustment of the organism to its environment. The difference, therefore, between sensation and thought is, that sensation is the activity of the sensorium which is the more nearly connected with the external causes of excitement, and thought is the activity of the sensorium which is farthest removed from external causes of excitement; and between these two extremes there are all degrees of combinations, varying from what is known as reflex action to the most abstract and involved achievements of reason. The subjective factor in each comparison is ever present throughout all these progressions, and the intuition by which Mr. Spencer places so much store is simply a logical formula in which the repetition of the subjective term in perception, although perfectly discernible, is elided or neglected. In fact, in the light of the above analysis, it is far more difficult to see how the objective factor remains present in abstract thought, for it is clear that in those mental activities which have no direct connection with the environment, which, in other words, draw the terms of their comparisons from the memory, the objective factor is only present through such representation as it has secured by modifications of the sensorium.

Thinking or calculating, therefore, without the aid of direct verification, or practical demonstration, is an intellectual activity which is carried on by a sort of proxy communication with the outer world; and keen indeed must be the memory, deep the impressions made by facts upon the mind, to secure the reliability of the results.

We see, then, that there is an excuse, but not a justification, for the assertion of Mr. Spencer that the simplest type of mental activity is the complex axiom declaring equality between relations having one term in common and the other terms equal (relations which are equal to the same relation are equal to each other); for although it is impossible to compare objects without employing the subjective factor, or without comparing the impressions of the object on ourselves. or the relations between ourselves and each object, the comparisons, or relations, are distinct and complete in themselves, and the presence of a common term is only an abridged way of expressing the repetition of the same term. If the presence of the subjective factor is not the ground on which Mr. Spencer insists upon the above form of axiom, the futility of the argument is the more manifest; for to say that two things are equal because they are each equal to a third is exactly the same as saying that three things are equal because there is no distinguishable difference between them, which repeats the subjective factor in each comparison and makes three distinct assertions of equality.

Should refutation appear unnecessarily elaborate, the extent and intricacy of the argument of which it is a summary should be remembered.

The theory of Knowledge offered in this work, contrasted with that offered by Mr. Spencer, may be set forth as follows: Knowledge is an activity coextensive with organic life; life is an activity which is universal. The activity which we recognize as life in the monad is ultimately indistinguishable in its nature from those expressions of the physical forces known as chemical reactions or affinities acknowledged to be but forms of motion. The activities of organic life become more and more complex or special in their development toward the highest type, which we find in our own species. These co-ordinations still progress through what is known as superorganic, or social, phenomena, through the interactions of the individual and society expressed in language and intelligence, culminating in that most perfect activity known as morality.

In the march of progress, which is the most complete view we can take of the universe, we are not passive spectators, but co-operants. Our perceptions are limited only by ourselves; these limits are the expression of individuality. Now this individuality is so conspicuous an attribute, that even such minds as Descartes and Kant have mistaken it for the most general fact, the one immovable truth. But if we think a moment, we shall see that this truth is not absolute or immovable, that it is moving with the current of events; that it is a part of universal change.

Viewed in their higher developments, thought and action appear entirely distinct; but when we reduce the scale of development to its lowest point, their community of nature readily appears. There is nothing in the life of the monad, in its affinity or attraction for proximately like substances, its consequent increase in size, and falling into pieces, which could suggest such names as assimilation, growth, and reproduction; but the fundamental activities of higher organic life, to which these names are applied, are traced in insensible gradations to this simple origin, and thus the difference between universal activities and the special activities of organic life disappear. So the mental procedures, known

as perception, or thought, are only higher developments of these organic activities, and are plainly traceable through natural sequences to the same simple source. movement of the microscopic speck of protoplasm is the direct function of its chemical constitution and its mechanical adjustment to the environment: and these names, chemical and mechanical, are acknowledged to represent merely special aspects or forms of motion. When the monad acts, however simply, that action expresses a law, or a truth, and constitutes the simplest imaginable form of perception. There is no structure to co-ordinate the action so that it can be reproduced in memory, adjusted in thought, and readjusted in action. The tiny cycle of change set up in this little being is too simple to receive any such classification; but from its motions are built up the activities of the highest life, without the intervention of any new principle. Science having familiarized the mind with all these particulars of development, the seeker after incomprehensibles is forced into the narrow limits of metaphysical terms. Space, time, matter, force, and motion, are found in consciousness, and they are found out of consciousness. One class of thinkers are puzzled with the question how they got into the mind; the other, how they managed to get out of it. former class reason that as they are unknowables they cannot get into the mind as they really are, so they must run the gantlet in the guise of "organized consolidated conceptions"; and it is well understood after they do get in in this guise, they are to be utterly incomprehensible. The other class argue that these mystic principles are absolute entities, independent originals, that are found in the mind; and as they cannot in any way get out, they practically take every thing in with them. These two great classes of thinkers have, of course, displayed all degrees of ingenuity in expounding their theories. Some of them, in order to protect these precious fallacies, have built up intellectual fortifications which bid fair to last, at least as imposing ruins, throughout the existence of our race. No amount of subtility on the

part of these metaphysicians, however, seems to prevent the above simple classification of their systems, although, in the course of their arguments they have sounded the key-note of thought over and over again. The ultimate analysis declares these so-called incomprehensible principles to be but phases of a fact which is in the highest degree comprehensible; for to this fact perception and thought are directly traceable.

This is the distinguishing feature of the theory of Knowledge which I would here offer, and this it is which marks its contrast with all theories postulating an unknowable as taking part in any form, or through any manifestation, in the constitution of Knowledge. With regard to perception, the present theory teaches that the direction of perception is the direction of organic life, that its source and procedures are organic, and that the moving limits of individuality are its only circumscriptions. Thus mind has no proscriptions in nature. The vistas of consciousness are unlimited: the universe holds nothing back from thought. Throughout the receding simplifications of analysis, or the advancing constructions of synthesis, we meet with no fact or principle, however general, which the individual cannot assimilate, and which is not in itself an advancement and enlargement of our existence.

CHAPTER XII.

HERBERT SPENCER (CONCLUDED).

Sociology an Instrument in Determining Ultimate Beliefs.

WE have now before us the more grateful task of describing the merits of Spencer's system of philosophy. In "First Principles." which is an epitome of the whole, and in the succeeding four volumes, two of "Biology" and two of "Psychology," we find a masterly picture of the related stages of progression from the simplest to the most complex type of organic life. In the first book of the above series, the changes expressed in this progressive organic development are more or less clearly affiliated to those changes broadly described as inorganic. In the last book we find an attempt to explain the organic side of mental life, and to apply to the highest of all phenomena the formula of evolution. The march from the simple to the complex is shown to be the direction of universal activity. This idea is further elaborated in a definition of life, to which we demurred because it merely adds to the conception of universal activity the characteristics of the activity of individual or organic life, and should, therefore, be called a definition, not of life in general, but of organic life. The principle so laboriously expounded, that "Function makes Structure," which has a fuller expression in the theory of "the direct adaptation of the creature to its environment,"-a prominent feature of Spencer's biological studies,—was objected to on the ground that function and structure are but obverse sides of every phenomenon, and neither, therefore, can have precedence over the other as a cause.

In constructing this system of thought, Mr. Spencer has

presented to the world a philosophy admirably articulated and constituting an organon of scientific truth of inestimable His best original work does not appear, however, in the first five books of the system. Beneath the imposing array of scientific knowledge we find an undercurrent of ontological speculation, a persistent effort at an ultimate analysis, which produces as its result, from crisis to crisis throughout the work, the conception of the so-called "deepest knowable truth," denominated The Persistence of Force. is true that at times this "deepest knowable truth" is declared to be unknowable, but for the most part, with remarkable consistency of purpose, he avoids placing this conception among the weird group of ultimates fully described in the last chapter, which are declared to be inconceivables: but the logical difficulty which this omission might be supposed to avoid is only thereby enhanced, for Force, according to Mr. Spencer, is a prominent name among the "unknowables." and how it is made to serve as the basis of "the deepest knowable truth" is not explained. We are left to infer, perhaps. that the depth attributed to this conception is solely a property of the attribute persistence; since we are certainly safe in assuming that whatever property an unknowable conception may have, it can lay no claim to a third dimension.

After this deep study of individual or organic life, which forms the principal theme of the first five books above mentioned, we come to the study of what Mr. Spencer denominates super-organic phenomena. This is the science of Sociology, for which he is so justly renowned. Its field is human life; its plan is to view humanity as a great organism, and to study the adjustments of this organism, as an aggregate, to its surroundings; tracing, through the changes of history, the sequences of its existence.

The purpose of this study, as can readily be seen, is to examine the different phases of conduct from the primitive family or tribe to the race viewed as a confederation of nations; the object being to create a science of morality.

Too much cannot be said in praise of such a work; its

very inception is an inspiration. The first volume of "Sociology" is one of the most interesting literary productions of our century. It is the romance of human life viewed from the most commanding position which thought affords. The subject of the Primitive Man is minutely studied: his probable surroundings, and the influence of these surroundings as the *external* factors of his existence, are estimated. The physical, emotional, and intellectual aspects of his nature are respectively considered, as the internal factors of his development, and this development is shown to be the establishment of those permanent relationships between individuals known as social organization. The different questions which the enormous periods of man's prehistoric existence give rise to are considered with the characteristic depth and thoroughness of the author; and in his treatment of them we have a graphic picture of the long and painful struggle for existence which preceded the primitive forms of civilization. The great impetus which co-operation among men has given to human life is depicted, and it is shown that social progress and the perfection of conduct are but obverse aspects of the same development.

In this book we have Mr. Spencer at his best. Sure of his subject and conclusions, his style is clear and comprehensive, his thought deep almost to the emotional. Persuaded by his earnestness, criticism gives way to conviction, and one is content to read and learn. An idea of the method can be gained from the following, which occurs in the chapter on "The Factors of Social Phenomena":

[&]quot;There remains in the group of derived factors one more, the potency of which can scarcely be over-estimated. I mean that accumulation of super-organic products which we commonly distinguish as artificial, but which, philosophically considered, are no less natural than all others resulting from evolution. There are several orders of these.

[&]quot;First come the material appliances, which, beginning with roughly-chipped flints, end in the complex automatic tools of an engine-factory driven by steam; which from boomerangs rise to thirty-five-ton guns; which from huts of branches and grass grow to cities with their palaces and cathedrals. Then we have language, able at first only to eke out gestures in communicating simple ideas, but

eventually becoming capable of expressing highly-complex conceptions with precision. While from that stage in which it conveys thoughts only by sounds to one or a few other persons, we pass through picture-writing up to steamprinting: multiplying indefinitely the numbers communicated with, and making accessible in voluminous literatures the ideas and feelings of innumerable men in various places and times. Concomitantly there goes on the development of knowledge, ending in science. Counting on the fingers grows into far-reaching mathematics; observation of the moon's changes leads at length to a theory of the solar system; and at successive stages there arise sciences of which not even the germs can at first be detected. Meanwhile the once few and simple customs, becoming more numerous, definite, and fixed, end in systems of laws. From a few rude superstitions there grow up elaborate mythologies, theologies, cosmogonies. Opinion getting embodied in creeds, gets embodied, too, in accepted codes of propriety, good conduct, ceremony, and in established social sentiments. And then there gradually evolve also the products we call æsthetic; which of themselves form a highly-complex group. From necklaces of fishbones we advance to dresses, elaborate, gorgeous, and infinitely varied; out of discordant war-chants come symphonies and operas; cairns develop into magnificent temples; in place of caves with rude markings there arise at length galleries of paintings; and the recital of a chief's deeds with mimetic accompaniment gives origin to epics, dramas, lyrics, and the vast mass of poetry, fiction, biography, and history.

"All these various orders of super-organic products, each evolving within itself new genera and species while daily growing into a larger whole, and each acting upon the other orders while being reacted upon by them, form together an immensely voluminous, immensely complicated, and immensely powerful set of influences. During social evolution these influences are ever modifying individuals and modifying society, while being modified by both. They gradually form what we may consider either as a non-vital part of the society itself, or else as an additional environment, which eventually becomes even more important than the original environments,—so much more important that there arises the possibility of carrying on a high type of social life under inorganic and organic conditions which originally would have prevented it. * * * The influences which the society exerts on the natures of its units, and those which the units exert on the nature of the society, incessantly co-operate in creating new elements." 1

To these immediate influences are added others more remote. The physical surroundings of the primitive man are all but impossible to imagine, so meagre are our means of estimating them. "Now that geologists and archæologists are uniting to prove that human existence goes back to a date so remote that 'prehistoric' scarcely expresses it—now that imbedded traces of human handiwork show us that, not only

^{1&}quot; Sociology," vol. I., p. 14.

sedimentary deposits of considerable depths and subsequent extensive denudations, but also immense changes in the distribution of land and sea, have occurred since the rudest social groups were formed; it is clear that the effects of external conditions on social evolution cannot be fully traced."

In the second volume of "Biology" we find a series of studies on morphology, which trace the special forms of plants and animals to natural causes, and find in them an expression of that general law of activity revealed as well in the complex forces displayed in crystallization as in the simple and omnipresent power of gravitation. As a seguel to the results of these studies, the theory of natural social development is unfolded. The origin of the physical contrasts giving rise to the classification of races is pointed out. chony skin of certain tribes of Central Africa and the blanched cheek of the Caucasian are made to tell their tales of slowly operating causes. The Yakut child seen to devour at one meal "three candles, several pounds of sour frozen butter, and a large piece of yellow soap," the adult of the same race who comfortably disposed of "forty pounds of meat in a day," and the brain-worker of our zone and civilization who subsists upon a modicum of highly concentrated nourishment, are made to depict contrasted habitats and types of social development. The theory that the life of an individual from childhood to maturity simulates the development of man from the savage to a higher social state, is explained, and some telling comparisons are drawn between the civilized baby and the primitive man. This theory is made to precede the more general one, that all social as well as individual development is an advance in the number, complexity, and delicacy of the adjustments of the creature to its environment, progressing toward the intellectual through the physical and the emotional. The complete dependence of mental upon social development is then dwelt upon. The remoteness of the higher orders of mental

[&]quot; "Sociology," vol I., p. 17.

action from the relatively simple and automatic *reflex action* of organisms is explained. No stinted citations can give a just idea of the power and faithfulness of these analyses, or of the sweep of the thought which they describe.

"The environment of the primitive man being such that his converse with things is relatively restricted in Space and Time, as well as in variety, it happens that the associations of ideas he forms are little liable to be changed. As experiences (multiplying in number, gathered from a wider area, added to by those which other men record) become more heterogeneous, the narrow notions first framed, fixed in the absence of conflicting experiences, are shaken and made more plastic—there comes greater modifiability of belief. the relative rigidity of belief characterizing undeveloped intelligence, we see less of that representativeness which simultaneously grasps and averages much evidence: and we see a smaller divergence from those lowest mental actions in which impressions cause, irresistibly, the appropriate motions. While the experiences are few and but slightly varied, the concreteness of the corresponding ideas is but little qualified by the growth of abstract ideas. An abstract idea, being one drawn from many concrete ideas, becomes detachable from these concrete ideas only as fast as their multiplicity and variety lead to mutual cancellings of their differences, and leave outstanding that which they have in common. ously an abstract idea so generated implies an increase of the correspondence in range and heterogeneity; it implies increased representativeness in the consciousness of the many concretes whence the idea is abstracted; and it implies greater remoteness from reflex action. It must be added that such abstract ideas as those of property and cause presuppose a still higher stage in this knowledge of objects and actions. For only after many special properties and many special causes have been thus abstracted can there arise the re-abstracted ideas of property in general and cause in general. The conception of uniformity in the order of phenomena develops along with this progress in generalization and abstraction. Not uniformity but multiformity is the dominant trait in the course of things as the primitive man witnesses it. No two places are alike, no two men, no two trees, rivers, stones, days, storms, quarrels. Only along with the use of *measures*, when social advance initiates it, does there grow up the means of ascertaining uniformity; and only after a great accumulation of measured results does the idea of law become possible. In proportion as the mental development is low, the mind merely receives and repeats cannot initiate, has no originality. An imagination which invents shows us an extension of the correspondence from the region of the actual into that of the potential: it shows us a representativeness not limited to combinations which have been or are in the environment, but including nonexisting combinations thereafter made to exist: and it exhibits the extremest remoteness from reflex action, since the stimulus issuing in movement is unlike any that ever before acted."1.

No one can read this part of Spencer's philosophy without perceiving the great power of these sociological illustrations. Facts which it is practically impossible to discern in individual life become clear when viewed through the vastly extended scale of aggregated social life. This question therefore naturally suggests itself: Cannot we employ sociology as an instrument for the discovery of the *nature of perception?* Cannot the growth of consciousness of the race, viewed as a whole, explain to us the genesis of consciousness in the individual?

Religion in its rudest forms, superstitious reasoning with regard to the causes of events, seems to have occupied the larger place among the ideas of primitive men. The study of sociology brings these beginnings of the social consciousness prominently into view. Primitive Ideas—Ideas of the Animate and Inanimate—of Death and Resurrection—of Souls, Ghosts, Spirits, and Demons—of Another Life—of Another World—of Supernatural Agents—Sacred Places,

^{1 &}quot;Principles of Sociology," vol. I., pp. 84-86.

Temples, Altars—Praise—Prayer—Ancestor-Worship—Idoland Fetich-Worship—Animal-, Plant-, and Nature-Worship—Deities—these are the titles of the principal chapters of the "Data of Sociology"; they recite a long and interesting story of the development of the mind of primitive men.

With no definite language or records of the observations and experiences of others, the primitive man groped in utter darkness. Hence, with regard to the natural order of things, as far as they were not appreciable in his simplest sensations he was without a guide. Thought had no materials to work with and produced but vagaries and phantasms. Ideas of supernatural beings came into existence, and as a result we find the ruder forms of ancestor-worship the type of all the early religious beliefs.

Thus the belief in a surviving duplicate, a soul separate from the body, is universal among savages, and was the beginning of our ideas of the supernatural. Those who are interested in the genesis of this belief can trace it step by step through the course of the chapters above referred to. Instead of this savage belief in a surviving duplicate being an authority for our belief in the immortality of the soul: that higher understanding of life, which is the natural product of a developed language, discloses to us the ghost as the primitive type of supernatural being, and the belief in any form of ghostly existence as a primitive superstition. To the savage. who found his most powerful foe in his own species, it is easy to understand how the ghost-chief became the ideal of supreme power. Of course the ideal of supreme power is always the object of worship. The savage and the civilized man alike bow before what they conceive to be the greatest force. The point which we would here emphasize is, that the mind. or sentiency and language, is the instrument by which this power is invariably appreciated, and the degree of appreciation depends entirely upon the quality of the mind. It may be said that all power must be appreciated by the mind, but this is only relatively true. In lower organisms the power which accounts for the life of the individual is only appreciated in the ebb and flow of physical existence. It is not co-ordinated into an ideal or conception which co-ordinates conduct. The apprehension of food, and the escape from danger, are certainly appreciations, and therefore perceptions, of external powers or existences; but there is a vast difference of degree between these humble reactions and the conception, for instance, of a personal God as the cause of all things. The conception of Motion, however, as the ultimate reality, or universal principle, is an effort of sentiency and language which is so much higher than that of a personal God, a militant ancestor, or a fetich, that the comparison can only be one of remote analogy.

By viewing the human race, therefore, as a whole, or by employing the inductions of sociology, which show the dependence of human development upon its farthest surroundings, we are enabled to trace the principles of perception from the simplest organic activities to the highest phases of life; and we are enabled to recognize in the gradual growth of language and intellect the dawning of the moral nature of man. Social life increases the harmony and definiteness of ideas and actions, establishing language and conduct, and we perceive, by studying this phase of life, that mind and morality are concomitant developments.

To harmonize conduct with a true conception of God, to perform an ultimate analysis of life or existence, and to rebuild a synthesis which shall include and explain morality, is the task of sociology. But how, then, can a sociology succeed which does not begin with an understanding of ultimate terms? What have we to hope for from a treatment of this science which regards consciousness or perception as a mystery and the deepest principles of knowledge as unknowable?

Turning from these philosophical inconsistencies to the same order of inconsistency in religious belief it will not do for us to conclude that by the type of ultimate beliefs the type of character or morality is declared. Categorical beliefs depend almost entirely upon the education, and education depends more upon fortuitous circumstances than upon characters.

acter. But this argument is balanced by the fact that there is a kind of ultimate belief, an appreciation of divine unity, which is a true expression of character; its language is that of actions more than of words; it is the genius for truth, the natural integrity of life, which we call instinctive morality.

But instinctive or unenlightened morality has a limited range; it is too contracted, too feeble for a great social life.

The horizon of the unenlightened mind, like that of the primitive man, is full of mysteries and portents: it cannot respond to the more delicate influences of life. On the other hand, the mind which is sensitive to differences and likenesses, which is active in reasoning, naturally revolts against a narrow definition of God. This freedom of thought. however, often asserts itself without seriously interfering with settled religious beliefs, although these beliefs can be clearly identified with primitive superstitions. This is the latitude of belief which results from the vagueness of our conceptions of ultimate terms. Thus we find many seemingly educated persons, who would scorn to believe in a ghost, clinging with pathetic reverence to the archetype of ghosts—the belief in a personal god. These same minds are in possession of scientific truths, classes of facts, which if coordinated, if followed out to their logical consequences, would utterly destroy this superstition; still they not only cherish it but they regard it as in some way connected with the moral integrity of their lives. Hence, although we are able to trace our belief in a personal god to the savage faith in the existence of ancestral ghosts, and our belief in the immortality of the soul to the primitive belief in a surviving duplicate, we are confronted with the strange argument that to surrender these heirlooms of the unenlightened mind would be to endanger the moral order of society. Thus philosophy, whose aim it is to illuminate conduct, has to meet the serious charge that by teaching the true meaning of ultimate terms it attacks morality.

Morality is generally conceded to be the consequence of pure conceptions of life. How, may it be asked, can pure conceptions of life perpetuate primitive belief?

To the student of sociology it is clear that our religious beliefs have been slowly evolved from the grossest superstitions. If we would form pure religious conceptions, these superstitions must be subjugated; they must be recognized as methods of the primitive mind.

The question, then, between philosophy and the representatives among us of these earliest beliefs of man, concerns the degree of purification of which our religious beliefs are susceptible.

A critic of undoubted ability, to whom these pages were submitted, objects to the use of the word God for the universal principle Motion. He says that to the truly philosophic mind, to the mind deeply learned in the history of human culture, or the evolution of religious and philosophic beliefs, the word God is an obsolete term; that the divine unity of life and mind is symbolized by the principle *Motion*, and that the word God is too closely connected with idolatry to be used in the same sense. To this argument I would enter the most decided protest, for the reason that philosophy cannot afford to surrender the moral discipline which is the natural inheritance of long ages of religious life, however imperfect that life may have been. Religion, to the savage as to the civilized man, is the type of his most general ideas expressed in the best language that he commands.

Through the aid of that synthesis of facts which we call the science of sociology, we recognize in our ideas of God the lineal descendants of the childish notions of deity to be found in the unformed mind. But on the other hand we see in this development the natural progression of general ideas, the development of the impersonal in thought and feeling, which culminates in an ultimate generalization.

Philosophy would merely develop or purify our conception of God, and our interest in a future life, making the one a divine principle, the other an unselfish solicitude for others. During this transformation of spirit, this amalgamation of one culture with another, we cannot afford to surrender the word which has served in all languages and all ages as the symbol of an ultimate generalization.

In arguing that all worship springs from ancestor-worship, Mr. Spencer reminds us that Negroes, when suffering, go to the woods and cry for help to the spirits of their dead relatives, just as the Iranians in the Khorda-Avesta call upon the souls of their forefathers in prayer: that the sacrifices of the ancient Egyptians, which were commemorated in the three festivals of the seasons, the twelve festivals of the month, and the twelve festivals of the half month. all in honor and propitiation of their dead, have their counterpart in the offerings which the Romans made to their Lares, on the calends, nones, and ides of every month; that the Indian or Veddah asks the ghosts of his relatives for aid when he goes hunting, just as the Roman praved to his Lares for a happy termination to a projected voyage; and that the sanguinary Mexicans, Peruvians, Chibchas, Dahomans, Ashantis, and others who immolate victims at funerals, are but imitators of the Romans who offered up human sacrifices at tombs. It can be imagined with what terrible effect comparisons which bring such revolting customs down to the immediate progenitors of our language and culture are used against us.

By this study of religious evolution, beliefs which appear to us innocent, and even refined, on account of their familiarity and associations, are unmasked and stand out in the hideous forms of savage life. Our very language is shown to be primitive, full of metaphors which lead inevitably to low orders of intelligence. Our puny generalizations, which appear so gorgeous to us dressed in the livery of heaven and hell and spiritual beings, are found to be but efforts of a childish imagination. This incompetence of thought and word naturally extends from the religious to the metaphysical sphere. A theology which is revolting for its inconsistencies is given us for a philosophy, and the jargon of priests and rhapsodists is taken for the highest forms of human thought. The purity and simplicity of truth are profaned by these mummeries, these emotional drivellings, these ecstatic fantasies of the unformed life and mind, which are made to

assume among us the functions of divine light. So long as we look to dealers in mysteries and portents and revelations for our highest generalizations, we shall indeed live in a savage age.

Language is the mind of society, and in its accuracy and integrity are involved the amenities and possibilities of life. The philosophic student of the future will look upon our age as one of insuperable logical difficulties; he will read, with mingled pity and disdain, of men who applied the word God indifferently to a vague idea of human form and feelings possessed of universal power, to a trinity of still more human characteristics, or again, to a universal principle. He will not wonder at the misgovernment, the unnecessary suffering, the general immorality of our age, when he examines the indefiniteness of our ideas, the natural accompaniment of our chaotic speech.

We look upon ages which had no differential calculus, no algebra, no developed arithmetic, as unable to obtain any definite ideas of obscure or involved phenomena. The student of the future will regard the speculative thought of our age in the same light. He will find, in this indefiniteness in the use of ultimate terms, implied immorality, as well as ignorance. What will even the children of the future think of the way we employ such terms as Infinite and Absolute, Space and Time, Matter and Force? I read in the confession of faith of an eminent American divine, recently, these words: "We believe in Christ as infinite within infinite limits"; which, being translated, means, We believe in unlimited limits, or in limits that are not limits! This is like those learned theologians of the middle ages who reasoned about the ultimate difference between material and spiritual substances, or, still worse, of existences which transcend Space and Time. What can be more immoral in its influence than such confusion of ideas as this?

The philosophy of Herbert Spencer can be charged with a full share of these untruths. The theory of perception which it promulgates is but a modern form of mysticism.

And yet in its errors it is fathered by men who hold the highest position in English thought. Not only in its general form but in the minutest particulars can Spencer's theory of perception be traced to the philosophy of John Stuart Mill, and this in turn to the long line of mysticism and skepticism that gave it birth.

In the introduction to John Stuart Mill's "System of Logic" we find a frank statement of the difficulties of the problem of perception. Such candor in a writer inspires a wish to agree with him. In this spirit let us consider Mill's assertion that there are certain ideas in the mind which belong to it, and are of a different nature from those ideas which are known as inferences. The first class of ideas Mill calls intuitive, and says the inferential ideas are drawn from this original stock of the mind, and without this primordial store of (intuitive) truth we could build up no inferences, and could have no knowledge.

"With the original data, or ultimate premises of our knowledge," says Mill, "with their number or nature, the mode in which they are obtained, or the tests by which they may be distinguished, logic, in a direct way at least, has, in the sense in which I conceive the science, nothing to do. These questions are partly not a subject of science at all. partly that of a very different science. * * * Of the science. therefore, which expounds the operations of the human understanding in the pursuit of truth, one essential part is the inquiry. What are the facts which are the objects of intuition or consciousness, and what are those which we merely infer? But this inquiry has never been considered a portion of logic. Its place is in another and a perfectly distinct department of science, to which the name metaphysics more particularly belongs: that portion of mental philosophy which attempts to determine what part of the furniture of the mind belongs to it originally, and what part is constructed out of materials furnished to it from without. science appertain the great and much debated questions of the existence of matter; the existence of spirit, and of a

distinction between it and matter; the reality of time and space, as things without the mind, and distinguishable from the objects which are said to exist *in* them. For in the present state of the discussion on these topics, it is almost universally allowed that the existence of matter or of spirit, of space or of time, is, in its nature, unsusceptible of being proved; and that if any thing is known of them, it must be by immediate intuition. To the same science belong the inquiries into the nature of Conception, Perception, Memory, and Belief; all of which are operations of the understanding in the pursuit of truth; but with which, as phenomena of the mind or with the possibility which may or may not exist of analyzing any of them into simpler phenomena, the logician as such has no concern."

From the above it is clear that Mill thinks that there are certain principles of truth in the mind which are not susceptible of being examined by the reason; that by some mysterious and unknowable combination these principles are co-ordinated into certain primordial truths (called intuitive), and that these truths, which, be it observed, are independent of reason, form the major premise of every conclusion, the source of every fact.

The theory of perception which we advocate as distinguished from that of Mill and Spencer is simply that the ultimate fact is Motion; that its aspects are Space and Time. It will be seen at a glance that the fact of Motion is ultimate, and that its aspects Space and Time are inferences drawn from this fact. To follow out the process of thought from these first inferences to the combinations of which all knowledge is built up, is to establish the nature of perception. The great simplicity of this undertaking is its greatest difficulty.

Mill tells us that "to define is to select from among the properties of a thing those which shall be understood to be declared and designated by its name." A name is an abridged definition; a definition is an enlarged name. The

¹ Mill's " System of Logic," vol. I., pp. 6, 7.

description, name, or definition, therefore, of any thing depends upon the functions, properties, or activities of the thing named. When we would define mind, we describe its properties, functions, or activities. The definition of the retentive part, or aspect, of mental action is condensed or abridged in the word memory: the persistent and spontaneous aspect of mind is called the will; that aspect of the mental procedure which is a view of its reception of impressions is designated perception: but there are no demarcations in the activity of the mind which correspond to this classification of its different aspects—that is to sav. this enumeration of faculties is a superficial analysis or separation into parts of the fact of mind. To imagine that these intellectual faculties represent separate functional principles is the same order of belief as that there are certain primal intuitions, unknowable in their origin and nature, from which knowledge is made up; for if the principles of thought are shrouded in impenetrable mysteries, what wonder that the faculties of the mind should assume the character of apparitions? Apart from the limited and human sense in which the word knowledge is employed in this mysterious doctrine of the mind, there is an evident contradiction in saying that intelligence springs from the unintelligible, which is the initial error in the theory of perception offered alike by Mill and Spencer. This theory builds the whole fabric of knowledge upon principles which are said to be intuitional or subconscious, and at the same time unknowable.

Every system of philosophy must offer an analysis of the nature of perception as the foundation of a Religious Synthesis.

The claims which Mr. Spencer can make to success in this particular have been carefully considered, his metaphysical beliefs have been followed out, and we are enabled to judge of the completeness of his ultimate analysis.

We would now turn to the culminations of his philosophy. From the beginning of Spencer's system the promise is made to establish a scientific basis for morality, but before the realization of this promise, which has been partially fulfilled in the "Data of Ethics," our author builds up a

gigantic theory of society.

The plan of this sociology is to show the interdependencies of organic and superorganic phenomena and to trace their combined effects to the common principle which he denominates the *persistence of force*. The subject of Ethics is then introduced, the object still being to show that morality is relative, and that its laws are to be found in the human faculties, the submission of the individual to the general mind. Nothing can be more profound than this theory. In the persistency with which Mr. Spencer has labored to establish it, from the articles he wrote when a young man, now republished under the title of "Social Statics," a continuous thread of reasoning can be traced, a single purpose recognized.

We have seen that the intellectual faculties are merely names for the different phases of intellectual activity. A great memory, a great reason, or a great perception, means a mind that has acquired special powers by special circumstances. Balanced circumstances lead to balanced faculties: special circumstances, to special faculties, needs of war produce heroes; the needs of society produce special casts of mind. The decay of Greek manhood produced Socrates; the irreligion of the Jews and the sufferings of humanity produced the prophets and Christ. The anarchy of European thought in the sixteenth century produced Bacon and Descartes, and the popular longing to unite pure reason with the love of God produced Spinoza. The need of vindicating reason against skepticism produced Kant and the German idealists, and the reaction of sentiment and common-sense produced the French and English psychologists. What, then, are faculties but the leaven of human character working out social developments?

As no deeper incentive to morality can be found than the symmetrical activity of our whole natures,' the balancing of

¹ See argument on Morality, ch. xxiii.

human faculties which have their sources deep down in organic life, the principle of activity added to the fact of individual life comes to us as the result of the most careful analysis of our existence. Every synthesis begins with this principle of universal activity and brings us to the facts of social life. What limit does this suggest to perception but the moving limits of personal existence?

Sociology teaches us that there is an aggregate human life and mind which springs from and is determined by the lives of individuals; that the atmosphere of this life is language. The quality of language determines the quality of the general mind, and reflects its influences upon every individual. Thus the world at large has a direct interest in the meaning of words, and this interest is proportionate to the range of their significance. Metaphysics, therefore, is closely associated with the science of Sociology; its object is to familiarize the general mind with the meaning of ultimate terms. In the success of this science over the errors of agnosticism and idealism, morality is deeply concerned, and the future will wonder at our slowness in reaching so important a result.

CHAPTER XIII.

GEORGE HENRY LEWES.

Belief in the Unknowable—Its Influence upon the Study of Psychology.

THE philosophic system of George Henry Lewes has the general title of "Problems of Life and Mind." The first two volumes are entitled "Foundations of a Creed"; the third deals with the problem of "Mind as a Function of the Organism"; and the last two are posthumous publications,—one being a comprehensive treatise on the "Physical Basis of Mind," and the other a comparatively short review of the author's favorite subject, "The Study of Psychology." In the preface to the opening volume Lewes says:

"In 1862 I began the investigation of the physiological mechanism of Feeling and Thought, and from that time forward have sought assistance in a wide range of research. Anatomy, Physiology, Pathology, Insanity, and the Science of Language, have supplied facts and suggestions to enlarge and direct my own meditations, and to confirm and correct the many valuable indications furnished by previous psychological investigators. * * * When I began to organize these materials into a book, I intended it to be only a series of essays treating certain problems of Life and Mind; but out of this arose two results little contemplated. The first result was such a mutual illumination from the various principles arrived at separately, that I began to feel confident of having something like a clear vision of the fundamental inductions necessary to the constitution of Psychology; hence, although I do not propose to write a complete treatise. I hope to establish a firm groundwork for future labors. The second result, which was independent of the first, arose

thus: Finding the exposition obstructed by the existence of unsolved metaphysical problems, and by the too frequent employment of the metaphysical method, and knowing that there was no chance of general recognition of the scientific method and its inductions while the rival method was tolerated, and the conceptions of Force, Cause, Matter, Mind, were vacillating and contradictory, I imagined that it would be practicable in an introductory chapter, not indeed to clear the path of these obstacles, but at least to give such precise indications of the principles adopted throughout the exposition as would enable the reader to follow it untroubled by metaphysical difficulties." Here, then, is the great metaphysical problem confronted at the very outset.

In the beginning of the first chapter, we have this significant quotation from Mill: "England's thinkers are again beginning to see, what they had only temporarily forgotten, that the difficulties of Metaphysics lie at the root of all Science; that those difficulties can be quieted only by being resolved, and that until they are resolved, positively whenever possible, but at any rate negatively, we are never assured that any knowledge, even physical, stands on solid foundations."

By this we are given in advance an idea of the direction of Lewes' thought: he is going to offer a negative, not a positive, solution of the Metaphysical problem; he is going to acknowledge the "existence of an unknowable" (which, be it remembered, is a distinct contradiction in terms; for to acknowledge an existence is to know it in some degree, and to know the unknowable in any degree is an absurdity). Notwithstanding this he is going to extend the known, the scope of definite knowledge, by means of a masterly physiological and psychological analysis, until it embraces the beginnings of organic life and shows a perfect interdependence between what are known as the physical and vital activities. His mind, however, is too sensitive to feel perfectly contented with this achievement; he is still haunted with the

^{1 &}quot;Problems of Life and Mind," vol. I., Preface.

idea that there is something yet to be done to complete an ultimate analysis, to establish the divine unity; and he expresses his unrest in these words:

"Science itself is also in travail. Assuredly some mighty new birth is at hand. Solid as the ground appears, and fixed as are our present landmarks, we cannot but feel the strange tremors of subterranean agitation which must erelong be followed by upheavals disturbing those landmarks. Not only do we see Physics on the eve of a reconstruction through Molecular Dynamics, we also see Metaphysics strangely agitated, and showing symptoms of a reawakened life. After a long period of neglect and contempt, its problems are once more reasserting their claims. And whatever we may think of those claims, we have only to reflect on the important part played by Metaphysics in sustaining and developing religious conceptions, no less than in thwarting and misdirecting scientific conceptions, to feel assured that before Religion and Science can be reconciled by the reduction of their principles to a common method, it will be necessary to transform Metaphysics or to stamp it out of existence. There is but this alternative. At present Metaphysics is an obstacle in our path: it must be crushed into dust and our chariot-wheels must pass over it; or its forces of resistance must be converted into motive powers. and what is an obstacle become an impulse." 1

This promised conversion of Metaphysics, as will afterward appear, is but partially effected; the question is, whether, even as far as it goes, anything is accomplished by it. Lewes adopts the ingenious method of inventing another name for the science to which he attempts to attach all but the vital and reasonable part of Metaphysics, and thus effects for the old word Metaphysics a regeneration by freeing it from the superstitions which have so long been attached to it.² This

^{1 &}quot; Problems of Life and Mind," vol. I., p. 4.

³ "By way of preliminary, I will ask permission to coin a term that will clearly designate the aspect of Metaphysics which renders the inquiry objectionable to scientific thinkers, no less than to ordinary minds, because it implies a

new name suggested by Lewes is Metempirics—or beyond experience. That this term means identically the same thing as metaphysics—or beyond the physical—is manifest. For what is the physical world to us but the world of sensible experiences? And what is beyond the world of sensible experiences but the world of logical, mental, ideal, or spiritual experiences? Spiritual or ideal can mean nothing more than logical or mental, and this is precisely the field of metaphysics. The merit of Lewes' philosophy is therefore to be found in his physiological and psychological studies. He does not solve the metaphysical problem, but he furnishes us with many valuable materials to be employed in its solution. He leaves undefined the great ultimate terms which haunt the pages of every philosophy and hover in the background of every religion; but he has performed the great work of eliminating from this group of ultimates one term which all writers up to him, not even excepting Herbert Spencer, have included among them, namely, consciousness. Those who study Lewes' system carefully will have no difficulty in understanding the genesis of mind, and will never have occasion to refer its origin to the unknowable. They will also find abundant reason to drop the term Cause from the list of ultimate realities, as that term is clearly shown to be but one face of every fact or phenomenon, the other or opposite face being Effect. By this achievement Lewes bequeaths to us a clearly defined list of ultimate realities, namely, Space, Time, Matter, Force, and Motion. He removes all confusion between these ultimates and such other terms as Consciousness and Cause, which we find in-

disregard of experience; by isolating this aspect in a technical term we may rescue the other aspect which is acceptable to all. The word Metaphysics is a very old one, and in the course of its history has indicated many very different things. To the vulgar it now stands for whatever is speculative, subtle, abstract, remote from ordinary apprehension; and the pursuit of its inquiries is secretly regarded as an eccentricity, or even a mild form of insanity. To the cultivated it sometimes means Scholastic Ontology, sometimes Psychology, pursued independently of Biology, and sometimes, though more rarely, the highest generalizations of Physics."—" Problems of Life and Mind," vol. I., p. 14.

cluded among the irreducible principles cited by other writers. The terms Consciousness and Cause, therefore, are affiliated with Knowledge, and the five ultimates supposed by Lewes to be irreducible principles, or "manifestations of the unknowable" are boldly and clearly isolated from all other terms. Of Matter and Force, however, we are told over and over again that the one is utterly indistinguishable from Space, and that the other must mean Motion, or, if it mean any thing less, it is Motion considered apart from its material or space aspect; or simply Time.

These assertions are far from being made in distinct terms. but that they are fair inferences from his reasonings upon these subjects the reader will have a full opportunity of judging. An idea of the persistent longing which Lewes evinces all through his work for the repose of a successful ultimate analysis can be gained from these words: "Speculative minds cannot resist the fascination of Metaphysics, even when forced to admit that its inquiries are hopeless. * * * No array of argument, no accumulation of contempt, no historical exhibition of the fruitlessness of its effort, has sufficed to extirpate the tendency toward metaphysical speculation. Although its doctrines have become a scoff (except among the valiant few), its method still survives, still prompts to renewed research, and still misleads some men of science. In vain history points to the unequivocal failure of twenty centuries: the metaphysician admits the fact, but appeals to history in proof of the persistent passion which no failure can dismay; and hence draws confidence in ultimate success. A cause which is vigorous after centuries of defeat is a cause baffled but not hopeless, beaten but not subdued. * * * Few researches can be conducted in any one line of inquiry without sooner or later abutting on some metaphysical problem. were it only that of Force, Matter, or Cause; and since Science will not and Metaphysics can not solve it, the result is a patchwork of demonstration and speculation very pitiable to contemplate. Look where we will, unless we choose to overlook all that we do not understand, we are mostly confronted

with a meshwork of fact and fiction, observation curiously precise beside traditions painfully absurd, a compound of sunlight and mist."

The insistence of Lewes upon the necessity of a double name for Metaphysics is clearly traceable to his belief in an unknowable. The fault in this is, that it confuses the idea of unexplored phenomena, or the unknown, with the fiction called the unknowable.

Bearing in mind that he employs the word Metempirical to signify the unknowable, let us carefully examine the following: "Every physical problem involves metempirical elements beside those which are empirical: but Physics sets them aside, and, dealing only with the empirical, reaches conclusions which are exact, within that sphere. No disturbance in the accuracy of calculation follows from the existence, outside the calculation, of elements which are incalculable. The law of gravitation, for example, is exact, although its transcendental aspect—namely, what gravitation is in itself, whether Attraction, Undulation, or Pressure—is not merely left undetermined, but by the majority of physicists is not even sought. The law of Association of Ideas is equally exact, although not quantitatively expressible. The dependence of Sensation upon Stimulus is not less so, and has received a quantitative expression.² The laws of Causation may be formulated with equal precision. And exact knowledge of Force, Cause, Matter, ought to be attainable, in spite of their transcendental elements, by the one procedure of eliminating these, and operating solely on the empirical. Hence the conclusion: The scientific canon of excluding from calculation all incalculable data places Metaphysics on the same level with Physics." 3

What are these metempirical elements which are said to be involved in every problem? A problem is simply a compari-

^{1 &}quot;Problems of Life and Mind," vol. I., pp. 6-8.

² The ratio of the increase of a sensation to the increase of its stimulus is that of a logarithm to its number. (Fechner, "Psychophysik," Bd. II., p. II, 1860.)

[&]quot;" Problems of Life and Mind," vol. I., p. 54.

son of facts. A comparison of facts must be made with a view to arriving at other more obscure or involved facts. Now the ultimate fact is Motion, the last arrived at in every analysis, the first adopted in every synthesis. If by the incalculable elements in every problem is meant Motion, or its aspects Space and Time, or Matter and Force, it is certainly incorrect to denominate them unknowable, for they are merely appearances of a principle of which knowledge is a consequence. It may be said that this word "metempirical" is used to denote an erroneous method of investigation which has for its object impossibilities of perception. If so, why are metempirical elements said to be present in every proposition, or that there exist, outside of every calculation. elements which are "incalculable"? The words incalculable and metempirical are used as equivalents, and here it is that the error slips in and appears plausible. Gravitation is said to have a "transcendental aspect" which is incalculable or unknowable: but surely gravitation is simply a relation, a form of the ultimate relation. Motion. Here incalculable refers plainly to Motion, and as Lewes has not declared Motion to be the ultimate reality, in so many words, it is easy to see how he felt the need of a word to express this ultimate reality, and its unrecognized aspects, which form the burden of every metaphysical problem.

He was therefore, in a measure, justified in trying to remove what he supposed to be the incalculable elements from metaphysics by consigning them to "metempirics."

But what are we to say of the second illustration in our quotation, which declares that the quantitative expression of the law of Association of Ideas is *incalculable*; and of the third, that the quantitative expression of the dependence of sensation on stimulus is incalculable? Is it not manifest that "incalculable" is here used in a different sense from "unknowable"? For the association of ideas, and the relation between sensation and stimulus, are phenomena which are quite comprehensible, but not quantitatively expressible, because sufficiently exact explorations of mental phenomena

have not vet been made to enable us to express these subtle changes in units of space and time. The whole course of Lewes' subsequent reasoning is against a belief in any transcendental aspect of physiological or psychological phenomena. If, on the other hand, it is claimed that the transcendental aspect of gravitation spoken of simply means the unexplored remainder in problems of celestial dynamics. which are quite possible to know, but are as yet undiscovered: then the metempirical element in each of the three illustrations would be of the same nature, namely, the unknown quantity which is the occasion of every problem, and can be identified with the fact of individual existence. For individual life is simply the movement of an organism, the assimilation of the unknown by the known. If metaphysics is an exalted name for an exalted aspect of this assimilation. what kind of assimilation is designated by the term metempirics? Is it the assimilation of the inassimilable, the perception of the imperceptible, or the thinking of the unthinkable?

If Lewes' object in bringing into the world this new term was to caricature the idea of such a science, and thereby to eliminate the superstitious element from metaphysics, it would be an involved way of accomplishing a good result; but when he says that every physical problem involves metempirical elements,—in other words, when he uses the word metempirical to denote something in which he believes,—it throws the question into hopeless confusion, from which it can only be extricated by removing the direct cause, which is this very term metempirics.

The above shows what insuperable difficulties attend any form of belief in the unknowable, whether it be called the "metempirical," the "transcendental," the "essence," or the "thing-in-itself." To illustrate this, we will select a passage from Lewes in which he completely frees himself from this superstition, and consequently, for the moment, becomes perfectly clear and rational. In trying to show that the same methods of investigation should be pursued in both physical

science and metaphysics, he says: "The reproach, if it be a reproach, conveyed in the term 'ontological,' when applied to Metaphysics, is shared by Science. In both the search is after abstract Being, not after concrete individual fact. Rightly understood, there is truth in saying that a metaphysician may have a knowledge of Being as certain as the mathematician's knowledge of Magnitude, as the chemist's knowledge of Affinity, as the biologist's knowledge of Life, as the sociologist's knowledge of Society; and this knowledge may be gained in the same way."

Again: in pointing out the irrationality of that species of ontology which seeks entities or absolute essences, he says: "A traditional perversion makes the essence of a thing to consist in the relations of that thing to something unknown. unknowable, rather than in its relations to a known or knowable—i. e. assumes that the thing cannot be what it is to us and other known things, but must be something 'in itself,' unrelated, or having quite other relations to other unknowable things. In this contempt of the actual in favor of the vaguely imagined possible, this neglect of reality in favor of a supposed deeper reality, this disregard of light in the search for a light behind the light, metaphysicians have been led to seek the 'thing-in-itself' beyond the region of Experience. * * * But if such questions can receive no answer, because not put in answerable terms, how much more so the questions which avowedly travel quite beyond all range of experience, and ask, What is the thing in its relations to something unknown? To know a thing is to know its relations; it is its relations." And yet, after making these clear and unmistakable distinctions between a rational and an irrational ontology, between a common-sense method of thought and a foolish one, after taking the trouble to invent a special name (metempirics) for the irrational method, in order to purify the conception of metaphysics, he deliberately returns to his idols by avowing that every physical

^{1 &}quot;Problems of Life and Mind," vol. I., p. 60.

^{2 &}quot; Problems of Life and Mind," vol. I., pp. 58, 59.

problem involves metempirical elements besides those which are empirical. If he were to say that every physical problem contained metaphysical elements as well as empirical ones, he would carry out the fine distinction he is endeavoring to make. Then the proposition would simply mean that there are involved in every possible question elements which are beyond the sphere of sensible experience, but are within the sphere of logical experience or perception. In other words, nothing can be unnatural to perception, as the principle of perception has for its aspects the Infinite and the Absolute, or Space and Time. But this would be far too much for Lewes to admit. Although he made a noble effort to throw off the contamination of the unknowable, the conception was too deeply rooted in his vocabulary and in his thought for the feat to be possible. For a man in the closing years of an active literary and scientific career, which had been largely employed in establishing the unknowable as a great philosophic tenet,—a man who had formed the habit of reasoning continually in this direction, making the conception of the unknowable an accompaniment of every analysis,—for such a man to throw off this habit would be equivalent to reforming his whole logical constitution. Had he begun earlier in life, or had he been less active in his reasoning by the old method, reform might have been possible. But he wrote the "Biographical History of Philosophy" in the interest of the unknowable: he devoted an enormous amount of study to interpreting every known system of philosophy in this particular way; and his very language, which, be it remembered, is a constitutional structure of the mind, was cast too firmly to be remodelled. Thus we find this accomplished and powerful thinker involved in the toils of a mistaken belief, and struggling vainly to free himself from the old entanglements. In the more tangible media of science, however, he rises superior to all difficulties and develops truths of the greatest importance.

To further illustrate the belief of Lewes in the unknowable, we quote from the chapter on the "Scientific Method in Metaphysics":

"Kant asks: 'If Metaphysics is a science, how comes it that she cannot boast of the general and enduring approbation bestowed on other sciences? If she is no science, how comes it that she wears this imposing aspect, and fascinates the human understanding with hopes inextinguishable yet never gratified? We must either demonstrate the competency or incompetency; for we cannot longer continue in our present uncertainty.'

"The answers to these questions which Kant gave not having been satisfactory, a new attempt, under more favorable conditions, is made in these pages. To render this attempt satisfactory, we must first clearly understand the conditions of metaphysical inquiry. The initial condition—that of separating the insoluble from the soluble aspects of each problem—would be accepted by all. But the question would everywhere arise: What is insoluble? How is this ascertainable? There are problems which are recognized as insoluble because of their conditions. For example, it is impossible to extract the square root of a number which is not made by multiplication of any whole number or fraction by itself. To all eternity this must be impossible. Yet an approximation is possible which may be made near enough for any practical purpose. There are other problems, again, which do not admit of even approximative solutions. No one really tries to solve what he is already convinced is an insoluble problem. But one man thinks the problem soluble which another pronounces not to be soluble. What, then, is our criterion? We say the metempirical elements must be thrown out of the construction. But what are the metempirical elements?

"Here we find ourselves fronting the great psychological problems of the Limitations of Knowledge, and the Principles of Certitude. To settle these it will be necessary to examine the pretensions of the *a priori* school. Our first labor, then, will be to examine the principles of positive and speculative research, and then to show that the principles of metempirical research must either be unconditionally rejected, or, if accepted, must be isolated from all depart-

ments of Knowledge and restricted solely to the Unknow-

With regard to the impossibility of extracting the square root of a number that is not made by multiplying any whole number or fraction by itself, which is cited as an insoluble problem. I would submit that this is an impossibility only by definition: numbers are entirely arbitrary constructions, and therefore their manipulations are matters of arbitrary definition. The square root of a given number is simply another name for a number which, being added to itself as many times as it contains the units of which it is composed, will equal the given number. The half of four, the third of nine, the fourth of sixteen, meet these requirements, because the process which determines the square root of four, nine, and sixteen can be abbreviated by these divisions; but it is clearly to be seen that the success of the process itself is the cause of the selection of these numbers as examples; and the impossibility of the process is the cause of selecting numbers which will not yield to it, as examples of the impossibility of extracting the square root of certain numbers. If an object weighs one hundred pounds, the impossibility of its weighing two hundred pounds is a matter of definitions; it is the function of its weight. No question can be rationally stated that is insoluble, for every question implies conditions or relations of which its solubility is the result or function; but by changing these conditions and holding on to the result it is very easy to create an imaginary incongruity which may, to a predisposed mind, suggest an unknowable. We would most emphatically assert, however, that an incalculable calculation, an insoluble problem, imply a forced juxtaposition of symbols, an incongruity of relations; and the impossibility which they suggest is the direct function of an initial error. The conception of such problems is of the same order as the inconceivable conceptions, the imperceptible perceptions, the unknowable objects of thought, superstitions which have grown out of the incorrect use of words;

^{1 &}quot; Problems of Life and Mind," vol. I., p. 79.

mythical conceptions which men have endeavored to clothe in the language of sense, producing the opposite of sense. This is the *unknowable*.

If Lewes had not affirmed that there are metempirical elements in every problem, we should be encouraged to think that, by his assertion, "these elements must be thrown out of the construction" of problems, he was about to declare the *unknowable* a vain fiction, a self-destructive term. But we have only to read a few lines farther on to find that he is still dominated, in spite of all he can do, by this great infelicity. As he promises to deal further with the subject in the realm of psychology, let us continue to watch the struggle he makes with facts.

Following the foregoing metaphysical treatise, we find in the volume under consideration a set of so-called Rules of Philosophizing. These rules are fifteen in number, and form a sort of logical code full of merit. They are excellent suggestions, but the amount of training that would be needed to enable one to apply them could hardly be obtained without actually acquiring the knowledge to which they are intended to be a guide. Metaphysics, for instance, is the science of ultimate terms; it deals with the meaning of those words which have the widest possible significance. To tell a student that "Any contradiction of fundamental experiences of sense or intuition is to be taken as evidence of some flaw either in the data or the calculation," which is rule second, would be to give him excellent advice; but to teach him how to apply this rule to the interpretation of (say) the word Matter, would necessitate his taking a course of study which would make him an expert judge of "flaws either in the data or the calculation" of any philosophical problem. To be more explicit, the surpassing difficulty in the application of the above rule would be to know in what a "contradiction of fundamental experiences of sense or intuition" consists. In our opinion, for instance, it is clear that the author of this rule fails to follow it in the interpre-

^{1 &}quot;Problems of Life and Mind," vol. I., p. 82.

tation of Matter and Space; for is it not a "contradiction of fundamental experiences of sense or intuition" to say that Matter and Space are *separately* ultimate or irreducible facts; or, again, to postulate an *unknowable* object of thought. The author himself admits, somewhat naïvely, that "the application of this rule requires great tact and accurate knowledge"; and the question very naturally arises whether the possession of this "tact and accurate knowledge" would not include that of the "rule for philosophizing." We doubt whether Lewes, if teaching philosophy, would begin with abstract rules. ¹ Considered as feats of abstract reasoning, these fifteen rules cannot but be admired; but as it would be difficult to find two persons who would agree on the significance of the terms employed in them, they can hardly be considered as aids to the study of philosophy.

In the treatise on Psychological Principles, which follows the Rules of Philosophizing, Lewes tells us that it would be premature to attempt a systematic treatise on Psychology, as there are important metaphysical and biological questions still open which it is essential first to have settled. In a word, Lewes, who at the time of this writing was perhaps one of the best-prepared men, if not *the* best, to deal with the science of Psychology, frankly admits that he lacks some of the most important materials for the undertaking. This is in contrast with some writers who have built up imposing and complicated systems of psychology in apparent innocence of the fundamental difficulty of the subject.

It is, therefore, with renewed confidence and interest that we approach what Lewes calls a "sketch of the programme of Psychology." He begins with the now familiar assertion that Man is not simply an Animal Organism, he is also a unit in a Social Organism. Then comes a citation of the starting-point of psychology, namely, Consciousness. Psychology, we are told, occupies itself with the study of the

^{1 &}quot;The supreme importance of an education is directed toward the development of aptitudes by their effective exercise rather than by the inculcation of rules."—Lewes, "Problems of Life and Mind," vol. I., p. 109.

factors of Consciousness. Consciousness is a fact beyond which the psychologist is not obliged to look. It is the fact from which he elaborates his science and for which he is not obliged to account.

As the biologist accepts Life as an ultimate fact, or the physicist builds his science on the principle of Force, neither being required to explain what these initial facts of their respective sciences are; as the mathematician does not concern himself with what "Quantity, Space, and Time are"; so the psychologist is not obliged to tell us what Consciousness is. Here in the very beginning is that metaphysical question the settlement of which Lewes so keenly felt the need of: and here we must disagree with him in his assertion that the psychologist is not called upon to explain what Consciousness really is. We can easily imagine a mathematician content to follow the relations of numbers and quantities without being able to explain whence these principles spring; we can imagine a physicist dealing with problems of the correlations of forces without feeling the necessity of knowing the universal principle which these forces declare: we can even understand a biologist spending a lifetime in the study of the interdependencies of organic life without being able to tell how these activities which he witnesses in every organism are affiliated with the same activities which he sees in other directions relatively unorganized; but we cannot imagine a psychologist prosecuting the study of the functions and structure of the mind without feeling the necessity of knowing what Consciousness is, without feeling powerless to proceed in the absence of a knowledge of the nature of Perception. I do not mean to infer that great progress in psychology is not possible without this knowledge, for great progress in this science has already been made; but I deny that any psychologist can make himself clearly understood in the principles of his science without first comprehending the relation of mental to universal activity,—without being able to affiliate the principle involved in intelligence with other known principles, the relation of knowledge to organic

life, and organic to universal life; in a word, without solving at the very outset of his exposition, the metaphysical problem. How can a psychology be clearly understood which teaches that mind is a function of an organism, that the organism is material, and still that matter is an ultimate fact? If matter is an ultimate fact, what is the activity of matter which is called mind? There can be but one ultimate fact. and it must be universal. If, on the contrary, activity, life, or motion, is acknowledged to be the ultimate fact, and matter subordinate to it, a phase or aspect of it, materialism vanishes and life and mind become a living reality, an understood fact. With this simple theory the vexed question of Object and Subject is resolved. The relation called gravitation, suggesting activities which are infinite, those subtle chemical energies, the signatures of the still uncombined elements, the adjustments of the primitive organism to its environment, the evolution of sensibility, feeling, and thought, from these lower orders of activity, rises before us, an unbroken interdependence of cause and effect. Human intelligence, which is taxed to its utmost to comprehend the proportions of this truth, is recognized as an expression of individuality, of the moving limits of personal existence; and a glimpse of the difference between the human and the divine, the anthropomorphic and the universal, is obtained.

It will be interesting, therefore, to follow Lewes through his programme of Psychology, and to observe how he manages to meet the difficulties of his subject without the aid of that ultimate analysis so essential to an understanding of Mind.

CHAPTER XIV.

GEORGE HENRY LEWES (CONTINUED).

The Principles of Psychology.

WE now enter upon the most original and instructive portions of Lewes' philosophy. His deep study of the sensorium of animals and of man has enabled him to carry us dry-shod through that dismal swamp, the analysis of mind from its physical side. Timid and conventional thinkers have systematically avoided this route in their journeyings,—they have looked at the map, heard of the difficulties and dangers of the way, and turned aside. On the whole, they are to be congratulated for their prudence; although it cannot be denied that this prudence has led them to miss some of the deepest and most stirring truths of life.

To explain the wonders of the intellect by a supernatural principle is convenient, but it is not, in the best sense, philosophical. This method may appear satisfying to our ideal nature, but it partakes more of sentiment than of thought; yet like many a sentiment, it has held in view exalted truths until the slow methods of science have reached and verified them.

The intellectual and moral life of man cannot be explained by a biological analysis. The operations of the mind cannot be successfully described as simply the activities of a personal organism, for the meaning of the word organism has to be vastly extended before it can account for the immeasurable difference between mere sentiency, and thought. The wonders of organic development, as the phrase is scientifically used, are utterly incapable of explaining a moral intuition, an intellectual conception, or a reli-

gious sentiment. To fill in this break, however, in the chainof cause and effect by the interposition of a "supernatural principle" is only a makeshift; it lacks all the dignity that belongs to careful thought.

Although analysis is the instrument by which this logical discrepancy has been removed, it has also been the indirect cause of the delay in arriving at a rational solution of the problem of Mind. Impressions, or simple perceptions, are by their nature composite. In ascending a mountain, we measure the distance into steps, but we are at the same time building up a synthesis which we will call an ascension. When we have reached the summit, we view the journey as a single fact; but it was effected by an analysis, and the synthesis was accomplished as the analysis progressed. Thus analysis and synthesis are interdependent processes. The analyst or scientist, disdainfully refusing to be beguiled with the synthetic splendors of the mind, has steadfastly devoted himself to the physical procedures which have made these splendors possible. He has surveyed the route while others have enjoyed the scenery. The scientist has known all along that these intellectual wonders have been reached through sequences with which, in less extended vistas, he is perfectly familiar. He has known all along that sentiency is the activity of an organism, and that thought has depended absolutely upon this foundation for all its achievements. But in his laudable endeavors to extend definite knowledge so that it might encompass the ideal, he has neglected an obscure and involved factor in mental or spiritual development. It is this factor which explains the difference between human and merely animal life. As we accomplish distances by measuring off progressions which are determined by our powers of locomotion, so we apprehend situations by combining partial views, which are determined by our perceptive faculties. The more thorough the analysis, the more truthful is the conception formed, providing we are careful to replace in the synthetic view all the products of the analysis. In proportion to the number of neglected factors our conceptions are imperfect. We are no better off, therefore, in trusting those who insist upon viewing things in their entirety without studying the parts, than in trusting the analyst who clings to certain prominent factors and neglects others. The former class may supply us with more symmetrical ideas, but they are largely *only* ideas instead of realities. Life is not a dream-voyage. Our charts must be the result of actual soundings and observations; and where they describe unexplored regions, they should be distinctly so marked

When we listen, therefore, to the panegyrics of idealists about such theories as "the miraculous inception of divine thought," we should remember that they are merely filling in the interstices in their education with generalities which they are unable to define. These generalities, beautiful as they may sound to the untrained ear, can never be made to take the place of those substantial and hard-earned conceptions which can be obtained only by careful and patient investigation. this class of careful thinkers Lewes pre-eminently belongs, and we may well listen to him when he insists upon a resolution of the great fact of consciousness into its factors or conditions, and upon the reunion of the isolated views thus obtained into a symmetrical whole. The biological factors of consciousness, we are reminded, afford but an incomplete explanation of Mind; they supply us, however, with the fundamental conditions of its theory. These substructures of the intellect Lewes thus describes: "Theoretically taking the organism to pieces to understand its separate parts, we fall into the error of supposing that the organism is a mere assemblage of organs, like a machine which is put together by juxtaposition of different parts. But this is radically to misunderstand its essential nature and the universal solidarity of its parts. The organism is not made, not put together, but evolved; its parts are not juxtaposed, but differentiated; its organs are groups of minor organisms, all sharing in a common life, i. e. all sharing in a common substance constructed through a common process of simultaneous and continuous molecular composition and decomposition; precisely as the great Social Organism is a group of societies, each of which is a group of families, all sharing in a common life,—every family having at once its individual independence and its social dependence through connection with every other. In a machine, the parts are all different, and have mechanical significance only in relation to the whole. In an organism, the parts are all identical in fundamental characters and diverse only in their superadded differentiations: each has its independence, although all cooperate. The synthetical point of view, which should never drop out of sight, however the necessities of investigation may throw us upon analysis, is well expressed by Aristotle somewhere to the effect that all collective life depends on the separation of offices and the concurrence of efforts. In a vital organism, every force is the resultant of *all* the forces: it is a disturbance of equilibrium, and equilibrium is the equivalence of convergent forces. When we speak of Intelligence as a force which determines actions, we ought always to bear in mind that the efficacy of Intelligence depends on the organs which co-operate and are determined: it is not pure Thought which moves a muscle, neither is it the abstraction Contractility, but the muscle which moves a limb."

This luminous exposition of the difference between mechanism and organism (a most important distinction in the study of the physiological basis of mind) is supplemented by an explanation of the metamorphosis which precedes physical assimilation, as a preparation to the understanding of the assimilation of ideas.²

^{1 &}quot; Problems of Life and Mind," vol. I., pp. 103-105.

^{2&}quot; Between the reception of external materials and the assimilation of them by the tissues (plant or animal) there is always an intermediate stage passed through, the inorganic, unvitalized material becoming there transformed into organizable, vitalized material. * * * Until this special change has taken place, the inorganic material is not assimilable; it must enter as a constituent of the bioplasm to form part of what Claude Bernard calls the Physiological Medium before it can become a constituent of the tissues. The supposition that plants are nourished directly by inorganic substances drawn from the soil and atmosphere is now proved to be erroneous: the nutrition of plants takes place

The crisis of the argument then comes in these words: "That Life is Change, and that Consciousness is Change, has always been affirmed. We have only to add that the changes are serial, and convergent through a consensus determined by essential community of structure, and we have characterized the speciality of organic change, demarcated Life and Mind from all inorganic change." Movements not combined are inorganic. Serial and combined movements or activities are organic or vital.

Now, rising above the difference between the most general or inorganic activities, and the special or organic activities known as vital, let us contemplate the difference between organic and *super*organic activities. Biology is the study of

through processes similar to those in animals. The inorganic has in both to pass through the organizable stage, and form proximate principles, before it can become organized into elements of tissue. ***

"Let us now pass from Life to Mind. The vital organism is evolved from the bioplasm, and we may now see how the psychical organism is evolved from what may be analogically called the psychoplasm. The bioplasm is characterized by a continuous and simultaneous movement of molecular composition and decomposition; and out of these arises the whole mechanism, which is also sustained and differentiated by them. If, instead of considering the whole vital organism, we consider solely its sensitive aspects, and confine ourselves to the Nervous System, we may represent the molecular movements of the bioplasm by the neural tremors of the psychoplasm; these tremors are what I term neural units—the raw material of Consciousness; the several neural groups formed by these units represent the organized elements of tissues, the tissues, and the combination of tissues into organs, and of organs into apparatus. The movements of the bioplasm constitute Vitality; the movements of the psychoplasm constitute Sensibility. The forces of the cosmical medium which are transformed in the physiological build up the organic structure, which in the various stages of its evolution reacts according to its statical conditions, themselves the results of preceding reactions. It is the same with what may be called the mental organism. Here also every phenomenon is the product of two factors, external and internal, impersonal and personal, objective and subjective. Viewing the internal factor solely in the light of Feeling, we may say that the sentient material out of which all the forms of Consciousness are evolved is the psychoplasm, incessantly fluctuating, incessantly renewed. Viewing this on the physiological side, it is the succession of neural tremors, variously combining into neural groups."-" Problems of Life and Mind," vol. I., pp. 107-109.

1 " Problems of Life and Mind," vol. I., p. 111.

the history of organic life; it analyzes the organism, both as a fact and as a gradual development; it follows the sequences of growth from primitive organisms to man, and from the germ to the adult in each type. Its field, however, is the organism and its physical environment. The spiritual medium or surrounding of each organism is beyond the sphere of biology. Psychology is the science which investigates this higher or mental environment. The distinction between these two sciences, therefore, can be broadly expressed as follows: Biology studies the relations between the organism and its physical medium; Psychology studies the relations between the organism and its mental medium, or the relations between subject and object. The primary law of biology is: "Every vital phenomenon is the product of the two factors, the Organism and its Medium." And the primary law of psychology is, that "Every psychical (mental or spiritual) phenomenon is the product of the two factors. the Subject and the Object."

These two sciences, therefore, are clearly but studies of different aspects of the single fact of personal existence. Lewes tells us that this law of psychology "replaces the old Dualism, in which Subject and Object were two *independent* and unallied existences, by a Monism, in which only one existence, under different forms, is conceived. The old conception was of Life in *conflict* with the external; the new conception recognizes their *identity*, and founds this recognition on the demonstrable fact that, far from the external forces tending to destroy Life (according to Bichat's view), they are the very materials out of which Life emerges, and by which it is sustained and developed."

It would be impossible in so short a sketch to give any thing like an adequate idea of the factors of psychical life (or mind), for such an undertaking would constitute a complete psychology. It will not do, however, to shirk the responsibility of the metaphysical position which this work has assumed. Lewes declares a true or complete psychology

[&]quot;" Problems of Life and Mind," vol. I., p. 113.

"premature until there is something like a general agreement on many questions of fundamental importance, these being partly metaphysical and partly biological."

Since we assume to have solved the metaphysical problem, we should be able to clear up some of the psychological ambiguities of which Lewes complains. Does not the difference between the fundamental facts of physical and mental life, referred to above, give us the first opportunity to employ the ultimate analysis which constitutes the solution of the metaphysical problem? When we consider that all psychical phenomena spring from a primary contrast, and the terms of that contrast are self and not-self, is not the fundamental nature of Mind revealed by this initial contrast?

When the banks of the southern Mississippi overflow, any object which remains above the water may become the common refuge of animals that are never found together under less trying circumstances. The timid hare or equally defenceless game, the dangerous snake and other reptiles, cling together to some stray raft, dismayed into peaceful and respectful behavior toward one another, and the traveller finds it difficult to realize that any thing could have developed a dominant common nature in such opposite beings. Apparently the principles which are combined in the fact of personal existence, or perception, springing from the contrast of subject and object, are as strange to one another as these frightened animals, and yet their unity of nature, the fact that they represent but one fact, is forced upon us when we view them in the plane of their widest significance. Under no provocation, short of an intellectual deluge, will the old-school metaphysician admit that Matter and Space are synonymous, and that they form but one term of a fundamental contrast, of which Time is the other term; or that, considered in an impersonal light, or objectively, this contrast disappears in a single fact or principle. The ultimate difference between self and not-self, or subject and object, can only be found in the aspects of this single fact.

If we persist in the analysis, even this difference disap-

pears, and we are obliged to confess that there is no ultimate or absolute difference between subject and object; that they are but phases or aspects of the indivisible fact of universal existence, or Motion.

Intelligence, or perception, however, demands an explanation: it insists upon knowing and understanding itself. This intelligence or consciousness is not the ultimate fact, but simply a relative fact: it is the function of individuality, and therefore springs from the contrast of one life with all life, or of subject with object. The difficult part of this theory to understand is, how we identify Time with subject and Space with object. The subject occupies space, and therefore has space-relationships; and the object occupies time, and therefore has time-relationships. The idea of space is generated by marking, or attending to, abstract existences, or other existences, considered simultaneously (or apart from time). The idea of time is generated by considering abstract serial existence, or existence apart from other existences (space). Now it is clear that the only existence that we can consider apart from other existences is our own. Thus we get an idea of how these primordial ideas of Time and Space, or Subject and Object, are formed. But it is only an idea. To form a distinct conception, we shall have to make a complete analysis of the phenomena of thought. In trying to form this idea, we have been employing symbols, or language, and this is the very factor the bearings of which are so involved that it presents us with the most complex problem of psychology.

Language springs from our attempts to communicate images of the mind. The attempts of the child to speak, or still better, of the savage, point to this fact. Upon this subject Lewes says: "It is in Imagination that must be sought the first impulse toward Explanation; and therefore all primitive explanations are so markedly imaginative. Images being the ideal forms of Sensation, the Logic of Images is the first stage of intellectual activity; and is therefore predominant in the early history of individuals

and of nations. The first attempts to explain a phenomenon must be to combine the images of past sensations with the sensations now felt, so as to form a series. In the next stage, words, representative of abstractions, take the places both of images and objects. Thus the Logic of Signs (or language) replaces the Logic of Images, as the Logic of Images replaced the Logic of Sensation."

If the first stages of intellectual activity are to be found in the "Logic of Images," and Language is the vehicle of these images, it is clear that thought and language are interdependent, and develop, or become more definite, together. But if this is the case, why is it that language has to reach an exceedingly high type of development before the categories of thought, or the metaphysical problem, can be stated. as in Greece by Aristotle; and a still higher development, before the ultimate reality can be announced or the problem solved? And yet the aspects of this ultimate reality, namely. Space and Time, are said to be the primordial inference, the first comparison, from which all comparison, or thought, The calculations and thoughts of a mind utterly ignorant of psychology or metaphysics are just as clearly traceable to this same beginning as those of a Spencer or a Lewes; the difference being simply that the untrained mind is unconscious of the great unity or simplicity of thought. It is not necessary that we should understand the fundamental principles of a subject in order to act correctly in its sphere; it is not necessary that we should perform a complete analysis of the mind in order to reason correctly within certain limits. The bank officer may know little or nothing of economics, and still pass upon credits successfully: the priest or minister may know nothing of abstract ethics, and still judge matters of conduct correctly.

In both of these cases intuitions or unconscious mental co-ordinations supply the place of the elaborate synthetic conceptions which result from much special study. The truths which analysis reveals, and which synthesis unites

^{1 &}quot;Problems of Life and Mind," vol. I., p. 155.

into a whole, are abridged and vaguely represented in the mind by intuitions. For instance, the whole science of economics consists in the study of the production and distribution of wealth. The bank officer may be unable to trace the generality, wealth, to its original factors, land, labor, and capital: but he knows the most enduring forms of wealth, and the kinds of men and institutions to entrust it to, and therefore arrives at the practice of economics without performing an analysis of its principles. The horizon of this practical knowledge is occupied by uninvestigated truths, which would easily yield to analysis and assimilate with the truths already possessed; but in the absence of this investigation, intuitions, or vague ideas, take the place of definite conceptions. Again: the priest or minister may not be able to reduce morality to its prime factors, individual, social, and general existence: but pure habits of mind have endowed him with excellent moral intuitions. enabling him to decide correctly in delicate questions of conduct. His mind may be as far from grasping the fundamental principles of conduct as the magnetic needle is from being conscious of the currents of energy which determine its movements; but the needle, in responding to these relations in the simplest possible sense, perceives them, and its tiny adjustments, viewed from another standpoint, are expressions of certain relations or truths. So the pure-minded ecclesiast allows a healthful moral nature to perceive for him the most obscure moral truths. These unconscious perceptions, called intuitions, are the natural or spontaneous inductions, the irresistible, unwilled activities of our nature from which Consciousness itself springs. Would the needle make a better compass if it were conscious; would the clergyman be better fitted for his duties were he more profound? Unquestionably, yes. Given the natural truths which each possesses, higher complexity would insure wider and more delicate adjustments; more knowledge would insure more influence for good. Could we complicate the structure of a mariner's compass so that it would not be deflected by the

proximity of masses of metals, it would be more useful, more reliable, for the purposes of navigation. If we could convince the priest or minister that God is a principle, not a person, he would be made still purer by the conception of this divine unity; his influence would be widened by giving to his teachings the power which comes from a greater command of facts.

Thus we have gradually reviewed the whole field of psychology, the scope of language, and the nature of perception; the difference between the real and the ideal, and the affiliation of the factors of mental with those of physical life, by the discovery of the social factor in psychical development. What is more manifest (if Time and Space are the first inferences, and at the same time the representatives of Subject and Object) than that the universal principle is only divisible into aspects, and that these aspects, or appearances, are discovered, or given, by the fact of individual life.—the natural consequence of that isolation, or separation, from general existence which is implied in a relative or personal existence? What is more manifest than that thought is the complex activity of a sensorium which is a development of an organism, and that language is the structural process of the social mind surrounding the individual mind; the psychoplasm which bathes the tissues of the intellect and carries to them the common fund of ideas in an assimilable condition? What is more manifest than that, as this intellectual medium called language is rendered more soluble. more interdependent in meaning, better co-ordinated by the perfection of higher generalities, it will bring a larger and larger number of minds into communication, and a greater and greater expanse of outlying truth within reach of each individual?

When the highest generalization, the most powerful intellectual solvent, shall have permeated language and thought, the physical, mental, and moral development of the race will be simply a question of vitality, not of method, for the ways and means of this development will be universally understood.

It may be said that thus to bring the activities of a magnet and those of a man under the same category, to call the adjustments of the former to external influences a kind of perception, and to view the manifestations of this adjustment as the expression of a fact or truth, is to give to the terms perception and expression a breadth of meaning which has no warrant in fact, and therefore proves nothing. This, however, is precisely the question in point. We name a fact of sentiency perception. Until we analyze perception we see no resemblance between it and facts immeasurably less complex, although of the same nature. successful and widely accepted analysis of psychical life discloses it to be the adjustments of an organism to its environment, or the adjustment of inner to outer activities, which is also the best definition of physical life. deepest biological studies teach us that the first principle, or condition, of the organism is a limiting membrane, something to define, separate, or contrast it with the surroundings. The deepest psychological studies teach us that the first principle of psychical life, or perception, is a contrast, difference, or demarcation, between two terms, the organism or subject, and its surroundings or object.

"When it is said that animals, however intelligent, have no intellect, the meaning is that they have perceptions and judgments, but no conceptions, no general ideas, no symbols for logical operations. They are intelligent, for we see them guided to action by judgment; they adapt their actions by means of guiding sensations, and adapt things to their ends. Their mechanism is a sentient, intelligent mechanism. But they have not conception, or what we specially designate as Thought,—i. e. that logical function which deals with generalities, ratios, symbols, as feeling deals with particulars and objects,—a function sustained by and subscrutent to impersonal, social ends. Taking intelligence in general as the discrimination of means to ends,—the guidance of the organism toward the satisfaction of its impulses,—we particularize intelligence as a highly differen-

tiated mode of this function, namely, as the discrimination of symbols. * * * Intellect is impossible until animal development has reached the human social stage; and it is at all periods the index of that development; its operations are likewise carried on by means of symbols (Language) which represent real objects, and can at any time be translated into feelings.

"It is obvious that the biological data can only resolve one half of the psychological problem, only present one of the foci of the ellipse, since by no derivation from the purely statical considerations of man's animal organism can we reach the higher dynamical products. Isolate man from the social state, and we have an animal; set going his organism simply in relation to the Cosmos, without involving any relations to other men, and we can get no intellect, no conscience. * * * The language of symbols [is] at once the cause and effect of civilization." ¹

Thus we see that mind cannot be explained without a constant recognition of the relations of organism and social medium. So important is the operation of the social medium in the fact of mind, that the state of education to which the race has attained at any given time is a determinant of the individual mind. The subject must be adjusted to this medium in order to act and to be reacted upon by it.

The absurdity of supposing that any ape, for instance, could, under any normal circumstances, "construct a scientific theory, analyze a fact into its component factors, frame to himself a picture of the life led by his ancestors, or consciously regulate his conduct with a view to the welfare of remote descendants, is so glaring that we need not wonder at profoundly meditative minds having been led to reject with scorn the hypothesis which seeks for an explanation of human intelligence in the functions of the bodily organism common to man and animals, and having had recourse to the hypothesis of a spiritual agent superadded to the organism."

^{1 &}quot;Problems of Life and Mind," vol. I., pp. 142, 143.

This spiritual hypothesis, however, is unscientific. It offers a name for a fact without explaining it—without connecting it with what we know. In a word, instead of solving the question of life and mind, it simply reiterates the old assertion that both of these facts are mysteries, giving us no clue to their hidden relations.

It is these relations, however, that we are seeking, and in this reach of comparisons,—the response of a magnetic needle to physical energies, the adjustment of a monad to its environment, the slow growth of sentiency in ascending organic types, the interposition of a social medium in the surroundings of the highest type, the development of this medium into a world of symbols radiating from a single fact,—we have a serial development which expresses the interdependence, or mutual activity, of the subject and object, the organism and its environment.

Mark, however, the vast difference between the significance of these two pairs of antithetical terms, subject and object, organism and environment. One is an expansion of the meaning of self and not-self into the two great aspects of the universe, Time and Space, the Eternal and the Infinite; the other is the contrast of individual and general physical life. The distinction between the ideal and the real, or the mental and the physical, therefore, is seen to be but relative. The organism is great, not in itself, but in its connection, or joint existence, with the external world; the subject derives its magnificent perspectives, not by drawing absolute boundary-lines between itself and the objective universe, not by affirming that we are immaterial or spiritual, but from the fact that we are an expression of a universal principle.

CHAPTER XV.

GEORGE HENRY LEWES (CONTINUED).

The Unity of the Whole Organism as a Factor of Mind—Lewes' Definitions of Experience and Feeling.

In following Lewes' explanation of the difference between the metaphysical and the metempirical we have well-nigh exhausted the question of the categories of thought. applying the solution of this problem to the principles of psychology as set forth by our author, we have obtained still more light upon the subject, and yet this metaphysical problem continues to confront us with unabated vigor throughout the whole of the remaining portions of Lewes' philosophy, and the same power and skill continue to be fruitlessly exerted toward its determination. Such is the curse of agnosticism. Following psychological principles, we have in the same volume a long treatment of the "Limitations of Knowledge." One might naturally suppose that this subject would have been disposed of in a treatise on the Principles of Psychology; for if the word knowledge is used in the limited sense of the product of mental activity (and it is in this sense alone that Lewes and Spencer employ the word), surely its limitations should be a part of the study of Psychology; and the principle of the "Limitations of Knowledge" should be clearly laid down among psychological principles. But, on the contrary, the subject is begun with as much freshness as if nothing had been said in regard to it. or at least as if the problems which it suggests were entirely unsolved.

In the light of the principle which this work would establish, the question, What are the limitations of knowledge?

can hardly be considered as rational; for Knowledge to us means the same thing as Life or Progress; it is universal. The absence of limits (the infinite) is one of the appearances of this principle by which we apprehend it. The "Limitations of Knowledge." therefore, is an impossible subject to The solution of the metaphysical problem enables us to regard human knowledge as a phase of human life. We admit no limits to human life excepting individual limits, which are purely relative. The limits of human knowledge are to be found in the functions and structures of the human and the social organism. We do not admit. therefore, to the discussion of the "Limitations of Knowledge" such questions as the contradistinctions of Mind and Matter, or the meanings of Cause, Force, and Motion. The solution of these questions depends upon an understanding of the meaning of ultimate principles,—the knowledge that they express but a single fact and certain clearly defined aspects of this fact. Hence the best that Lewes can do with these questions is to push them aside with vague generalities whenever they interfere with his explanations. this he is compelled to do throughout the whole course of his philosophy.

We have before us a closely reasoned essay, forming the greater part of the first volume of "Problems of Life and Mind." Containing as it certainly does more advanced and more clearly expressed views on the subject of human knowledge than perhaps any other work of the kind, this essay nevertheless bears a title which implies a contradiction in terms, and so creates the difficulty which it is the purpose of the author to remove.

One of the best sentences to be found in this essay is, "The certainty of knowledge is not affected by its circumscription." It is immediately followed by one still more suggestive,—"The principle of relativity furnishes a criterion which is coextensive with the domain of intelligence." In these two sentences we have what is in effect the challenge and the defeat of agnosticism,—the utter discomfi-

ture of "The Unknowable"; but the author passes on, apparently unconscious of the significance of his own words; he passes on to endless repetitions of the same questions and the replies to them. In these sentences the question of Certitude, or ultimate Proof, is answered; and yet the first hundred pages of the following volume of the same series ("Problems of Life and Mind") are devoted to the discussion of the "Principles of Certitude"; and even then the question is left undecided.

In the above sentences we have two distinct assertions: the first is, that the circumscriptions of knowledge do not render knowledge itself less certain; and the second, that the principle of relativity is coextensive with intelligence. first simply affirms that human knowledge is subject to human conditions, and that this fact does not affect its integrity, or that knowledge, as we find it, is knowledge, and not illusion. The second assertion means that knowledge, or intelligence, has no absolute limits. For if the principle of relativity, or the ultimate relation, is coextensive with intelligence, and motion is the ultimate relation, the principle of intelligence is universal; or, which is the same thing, there is no absolute distinction between Knowledge, Life, and Motion—that is to say, the ideas which these words represent can be produced to a single logical focus. It follows from this that the principle of Relativity, or Motion, is the criterion of knowledge: for a criterion is a fact by which other facts are measured, or compared. The ultimate fact must be the measure of all things, the criterion of knowledge.

It may be objected that every generalization can be thus dissipated by reduction to the ultimate fact of motion. It is, however, this very admission which it is the aim of philosophy to obtain. As long as ultimate proofs are sought, they must be sought in the ultimate fact, for in the universal principle the proof and the fact merge in one. The principles of certitude, therefore, are to be found in the basis, or source, of all truth, the primordial fact; and the principle of individual certitude, or, as Spencer denominates it, the Uni-

versal Postulate, is to be found in the rule that facts express themselves; which is the simplest way of saying that we believe things when we are unable to disbelieve them;—ultimate proof, or "the universal postulate, consists in the inconceivableness of the negation of a proposition."

Human perception is not a condition of ultimate truth, but a product of it. We appreciate the universe through its motions, or activities; the principle of intelligence is therefore indistinguishable from universal activity. Isolated or individual facts are but the function of individual existence. The quality, or certitude, of an individual fact is but another name for the existence of which the fact is an expression. The idea of quality can be traced directly to the fact of personal existence, disclosing the source of all ethical conceptions; and the companion idea of quantity can be identified with the fact of general existence; thus giving us the remote counterparts of subject and object, i. e. time and space, the two great aspects of life.

Lewes, as will be seen from the following, freely acknowledged the disadvantage he was under in not having determined the relation of subject and object. This occurs in the essay on the "Limitations of Knowledge":

"Metaphysics, in addition to its own obscurities, is overshadowed by the uncertainties hovering around its data. We cannot, for instance, accept Force as the cause of Motion unless Cause and Motion have already been clearly defined; and they are as obscure as the Force they are employed to render intelligible. We cannot stir a step in the exposition of the relation of Object and Subject without presupposing to be already settled fundamental points of Psychology which are still under discussion. No explanation can be given of Matter which does not involve a conception of Force. Thus the interconnections which are potent aids in physical inquiry are so many obstacles in metaphysical research."

In passing on to the further consideration of this essay,

^{1 &}quot;Problems of Life and Mind," vol. I., p. 188.

it would be well to mark the clear explanation of the word *Experience* which Lewes offers, as it is so important in discussions concerning the nature of mind:

"The main question must remain nebulous so long as we are without a precise definition of Experience. The term is very variously and very laxly used. I have defined it 'the Registration of Feeling.' And what is Feeling? It is the reaction of the sentient Organism under stimulus. Observe, it is not the reaction of an organ, but of the Organism,—a most important distinction, and rarely recognized. This reaction is a resultant of two factors,—one factor being the Organism and the other being the Stimulus. We are not to accept every response of an organ as a feeling; nor every feeling as an experience. The secretion of a gland is a response physiologically similar to the response of the eve or ear: but it is not a feeling, although entering as an element into the mass of Systemic Sensation. Nor will the response of a sensory organ, even when a feeling (through its combination with other sentient responses), be an experience, unless it be registered in a modification of structure, and thus be revivable, because a statical condition is requisite for a dynamical manifestation. Rigorously speaking, of course there is no body that can be acted on without being modified: every sunbeam that beats against the wall alters the structure of that wall; every breath of air that cools the brow alters the state of the organism. But such minute alterations are inappreciable for the most part by any means in our possession, and are not here taken into account, because, being annulled by subsequent alterations, they do not become registered in the structure. We see many sights, read many books, hear many wise remarks; but, although each of these has insensibly affected us, changed our mental structures, so that 'we are a part of all that we have met.' yet the registered result, the residuum, has perhaps been very small. While, therefore, no excitation of Feeling is really without some corresponding modification of Structure, it is only the excitations which produce permanent modifications that can be included under Experience. A feeling passed away, and incapable of revival, would never be called an experience by any strict writer. But the feelings registered are psycho-statical elements, so that henceforward when the Organism is stimulated it must react along these lines, and the product will be a feeling more or less resembling the feeling formerly excited." ***

The value of Lewes' study of Mind is not to be lightly estimated. His command of the minutest details of the results of introspection is wonderful. He seems to have summoned all his resources to the solution of the problem of Mind, and to have fairly overridden the enormous obstacle of an entangled metaphysical vocabulary. Thus throughout the succeeding "Problems," although great space is given to unsuccessful discussions of metaphysics, the theme of Life and Mind is developed with an accuracy and thoroughness which places the science of psychology upon a firm footing.

The carelessness observed in the use of the word *mind*, even among the ostensibly learned, is thus dwelt upon:

"Mind is commonly spoken of in oblivion of the fact that it is an abstract term expressing the sum of mental phenomena (with or without an unexplored remainder, according to the point of view); as an abstraction, it comes to be regarded in the light of an entity, or separate source of the phenomena which constitute it. A thought, which as a product is simply an embodied process, comes to be regarded in the light of something distinct from the process; and thus two aspects of one and the same phenomenon are held to be two distinct phenomena. Because we abstract the material of an object from its form, considering each apart, we get into the habit of treating form as if it were in reality separable from material. By a similar illusion we come to regard the process (of thinking) apart from the product (thought), and, generalizing the process, we call it Mind, or Intellect, which then means no longer the mental phenomena condensed into a term, but the source of these phenomena. * * *

^{1 &}quot; Problems of Life and Mind," vol. I., pp. 193, 195.

It is reflection and experiment which convince us that the air is a material object capable of being weighed and measured. It is reflection and experiment which convince us that Thought is an embodied process, which has its conditions in the history of the race no less than in that of the individual." ¹

With this clear definition of *Mind*, let us revert to the question of Experience.

The following lines by George Eliot are a poetical expression of the great psychological truth, that the experiences of the race as well as those of the individual become *embodied* in modifying the mental structure:

"What! shall the trick of nostrils and of lips
Descend through generations, and the soul,
That moves within our frame like God in worlds,
Imprint no record, leave no documents
Of her great history? Shall men bequeath
The fancies of their palates to their sons,
And shall the shudder of restraining awe,
The slow-wept tears of contrite memory,
Faith's prayerful labor, and the food divine
Of fasts ecstatic,—shall these pass away
Like wind upon the waters tracklessly?"

Shall the physical propensities be faithfully recorded and transmitted in the physical structure, and shall all the emotions and thoughts of life fail to modify and shape the mental or nervous structure?

Nothing can be more radically opposed to generally accepted teachings than Lewes' explanation of the interdependence of physical and mental activities. In the analysis of the terms feelings, thoughts, and actions given in the previous review, the artificial nature of the distinctions between the different orders of subjective activity was pointed out. So fixed, however, has become the idea that mind means something wholly separate from body, that too much emphasis cannot be laid upon facts which explain this error. In modern methods of teaching, every thing is

^{1 &}quot; Problems of Life and Mind," vol. I., pp. 199, 202.

prepared for the student of physiology so that he will have no difficulty in becoming acquainted with the wonders and obscurities of the sensorium. The study of the physical activities is carefully demarcated from that of the mind; this division is more than analytical, for the distinctions are made to appear ultimate; they are never removed so as to afford a synthetic view of the whole subject.

The cerebral hemispheres are believed to be the seat of combination for all the senses. In them sensations are said to be transformed into thoughts, emotions into sentiments. Lewes severely criticises this assumption of exclusive functions of the brain:

"The cerebral hemispheres," he says, "considered as organs, are similar in structure and properties to the other nerve-centres: the laws of sensibility are common to both: [and] the processes are alike in both; in a word, the Brain is only one organ [a supremely important organ!] in a complex of organs, whose *united* activities are necessary for the phenomena called mental. * * The assignment of even Thinking to the cerebral hemispheres is purely hypothetical. Whatever may be the evidence on which it rests, it must still be acknowledged to be an hypothesis awaiting verification. This may seem incredible to some readers, accustomed to expositions which do not suggest a doubt,—expositions where the course of an impression is described from the sensitive surface along the sensory nerve to its ganglion, from thence to a particular spot in the Optic Thalamus [where the impression is said to become a sensation, from that spot to cells in the upper layer of the cerebral convolutions [where the sensation becomes an ideal, from thence downward to a lower layer of cells [where the idea is changed into a volitional impulse, and from thence to the motor-ganglia in the spinal cord, where it is reflected on the motor-nerves and muscles.

"Nothing is wanting to the *precision* of this description. Every thing is wanting to its *proof*. The reader might suppose that the course had been followed step by step, at least,

as the trajectory of a cannon-ball or the path of a planet is followed; and that where actual observation is at fault, calculation is ready to fill up the gap. Yet what is the fact? It is that not a single step of this involved process has ever been observed; the description is imaginary from beginning to end." ¹

Lewes goes on to explain that although the imagination has had inductions to work on in constructing these theories, all that the evidence vouches for is, that the integrity of the nervous system is necessary for the manifestation of its mental phenomena.

In the volume entitled "The Physical Basis of Mind" it is abundantly shown that sensations, emotions, volitions, and even instincts, may be manifested after the brain of an animal has been removed. Hence the assertion made by so many physiologists, that the brain is the exclusive organ of the mind, or intelligence, or the Sensorium, or place of feeling, cannot be sustained.

Now when we reflect on the great disturbance to the general mechanism which must result from such an operation as removing the brain, and how easily a comparatively slight disturbance of a mechanism will abolish many of its manifestations, we see decisive proof that the brain can only be one factor—however important—in the production of mental manifestations.

Thus, notwithstanding the endless proofs that Mind means nothing more than an ideal separation of a certain view of individual life from the sum of individual existence, the analysis by which our conceptions of physical and mental phenomena are built up is made of itself an immovable fact, whereas it is but a method of mental procedure, and should be borne in mind as such. The great fact that unconscious states play by far the greater part in mental life forces the conviction that every activity of the body is a more or less remote factor in consciousness. The familiar instances of mental aberration directly traceable to physical disturbances, the frequent occur-

^{1&}quot; Problems of Life and Mind," 3d series, p. 65.

rence of different degrees of moral degeneration resulting from different kinds of disease, are only prominent instances among the great mass of personal experiences which teach us that the operations of the mind are dependent from moment to moment upon physical conditions.

Nothing, however, short of a close study of the sensorium, from the most intelligent standpoint, can reveal the fact that thought, although the function of vastly more complex conditions than those of feeling, contains no ultimate principle which is not expressed in the simplest forms of life, and that there is no organ or tissue in the human body which has not a voice—a direct influence—in its mental and moral determinations.

The brain therefore is not the sole organ of the mind, but only a very important part of the sensorium, and it is needless to say that notwithstanding its vast importance in intellectual phenomena the co-operation of the rest of the nervous system, and indeed of the whole physical system, is at least equally essential to the activity known as thought. Hence we must no longer "isolate the cerebrum from the rest of the nervous system, assigning it as the exclusive seat of sensation, nor suppose that it has laws of grouping which are not at work in the other centres. * * * The soul is a history, and its activities the products of that history. Each mental state is a state of the whole Sensorium; one stroke sets the whole vibrating." 1

The Sensorium, in the broadest sense, is the whole living organism. All attempts to localize the part of the organism which reacts upon a stimulus are vain, so interdependent are all parts of all organisms. Although nerve fibrils, fibres, and cells, forming in different combinations, nerves, and ganglia, are easily distinguished, the nervous system has no exact demarcations from the other tissues. It is impossible to say exactly where the nerve ceases and the muscle begins, so insensible are the structural gradations in the connection. The functions of the nervous system are even less sus-

^{1 &}quot;Problems of Life and Mind," 3d series, pp. 69, 71, 102.

ceptible of a positive separation from those of the rest of the organism.

"The method of composition remains the same throughout the entire fabric of Mind, from the formation of its simplest feelings up to the formation of those immense and complex aggregates of feelings which characterize its highest developments."

The Sensorium, from a functional point of view, can be described in general terms as that part of the organism which is capable of the greatest molecular activity. This idea becomes irresistible when we study the development of nervous systems from their rudimentary forms in the simplest types of animal life to higher grades of complexity.

Reflex action, or the isolation of the nervous arc from the nervous system, considering the reflex act apart from its preceding and succeeding states, is, therefore, but an analytical distinction of organic activity. The discovery that the co-ordination of movements in the extremities and other parts of the body can take place after the removal of the brain, in certain animals, does not prove that were the brain present it would not take part in some degree in the movements. The central fact that "no single organ has a function at all when isolated from the organism," differently expressed, is, that no activity can be separated (otherwise than ideally) from the complex of activities known as individual life.

"The brain is simply one element in a complex mechanism, each element of which is a component of the Sensorium, or Sentient Ego. We may consider the several elements as forming a plexus of sensibilities, the solidarity of which is such that while each may separately be stimulated in a particular way, no one of them can be active without involving the activity of all the others. * * * When, therefore, we reduce the abstract term Mind to its concretes, namely, states of the sentient mechanism, the 'power of the Mind' simply means the stimulative and regulative processes which ensue on sentient excitation.

¹ Herbert Spencer: "Principles of Psychology," vol. I., p. 184.

"We may now formulate a conclusion: Sensibility is the special property of the nervous tissue. Every bit of that tissue is sensitive in so far that it is capable of entering as a sensible component into a group, the resultant of which is a feeling—i. e. a change in the state of the sentient organism. The Sensorium is the whole which reacts on the stimulation of any particular portion of that whole."

There is no doubt, therefore, that the aversion so generally manifested toward the proposition, that all intellectual or spiritual activities have mechanical principles, is simply the result of a cramped and inadequate idea of the scope of those laws or influences known as mechanical.

The most devout person would not object to the assertion that all the activities of nature, from the evolutions of the heavenly bodies to the life of microscopic plants and animals, are guided by the hand of God, and that this same guidance is manifested in every human thought and feeling. And yet these words, translated into more exact terms, simply mean that the universal principle known as Motion is the ultimate fact in all objective and subjective life, uniting, in a single system of interdependent activities, the body and the mind, or nature and consciousness.

If any other point or principle than that of general existence, and through it personal existence, be selected as the focus of thought, our logical perspectives become confused, and no effort can readjust them. It is in the failure to make this adjustment of the perspectives of Knowledge, and to thereby harmonize the principles which we call Knowledge, Life, and Progress, that we have the failures of philosophy. Thus it is easy to see how Lewes fixed upon feeling as the ultimate fact of our existence, for each individual can only appreciate general existence through the medium of the activities of his own life.

We have already seen, in one of the psychological analyses of the preceding review, that feeling is a name which, in its broadest meaning, represents all internal changes; or, what

^{1 &}quot;Problems of Life and Mind," 3d series, pp. 77, 82.

is the same thing, the subjective side of life. To sensible experience is traced the origin of every thought; thus the fact of personal existence is naturally in the line of our view of general existence. The fact that Lewes did not perform an ultimate analysis must explain to us the repetitions which we find in his works. But this we find in all philosophy. It is these repetitions which make philosophy so dull and uninteresting to the majority of readers. In Lewes, however, the repetitions are merely repeated efforts, instituted from different starting-points, to reach a common goal of thought, and the union of these lines of investigation in a single point can only be made by a bold and independent inference from what he has written.

The whole purpose of his Problems entitled the "Limitations of Knowledge," the "Principles of Certitude," and "From the Known to the Unknown," is to establish Feeling as the ultimate fact of life.

Thus the scope of language and the nature of perception are revealed by the genesis of metaphor. Language and perception are purely synthetic. If we would retrace the course of their development to a first cause or ultimate principle, both become dissipated by the ideal analysis (for all analysis is an art, or an ideal procedure), and we come upon the logical or potential source of all things in God, Motion, or Life. Is it not clear that every perception and every thought must be less than this great fact,—must be but a limited expression of it, the natural function of our individuality?

When Lewes, therefore, affirms that Feeling is all in all to us, he simply assigns to humanity the middle term between thought and the lowest forms of sentiency, and extends its meaning in both directions to include all phases of life, from the simplest organic to the highest psychical existence. From the objective side of feeling, which is action, he might have carried on the generalization until it became universal.

That Lewes expresses the above ideas as clearly as it is

possible to express them without employing the instrument of an ultimate analysis, can be seen from his argument on the "Principles of Certitude," where we have the unknowable practically rejected in favor of the unknown.

"I have repeatedly insisted on the memorable fact that Science is no transcript of Reality, but an ideal construction framed out of the analysis of the complex phenomena given synthetically in Feeling, and expressed in abstractions. In all analysis there is abstraction, which rejects much more than is expressed; this rejected remainder may in turn be analyzed, but at each step there is an unexplored remainder. As, in the speculation of Laplace, there are dark stars scattered through space, but hidden from observation because they are dark; so in every phenomenon there are numberless factors at work which are hidden from observation, and only speculatively postulated. Sometimes these speculative inferences, which always have some basis in observation or analogy, suggest the means of objective verification. Thus Newton inferred that bodies at the earth's surface gravitated toward each other; it was an inference from analogy, but was then beyond experimental proof. It has since been experimentally verified, and thus exhibited, not only as an ideal truth, but one having real application.

"It is requisite to bear in mind that no general statement can be real, no ideal truth be a transcript of the actual order in its real complexity. 'Until we know thoroughly the nature of matter, and the forces which produce its motions, it will be utterly impossible to submit to mathematical reasoning the exact conditions of any physical question,' and even then it will only be mathematical relations which will be formulated. The approximate solutions which are reached 'are obtained by a species of abstraction, or rather limitation of the data,' and thus 'the infinite series of forces really acting may be left out of consideration; so that the mathematical investigation deals with a finite (and generally small) number of forces, instead of a practically infinite number.' ²

"If, then, Science is, in its nature, an ideal construction, and its truths are only symbols which approximate to realities, there is an internal necessity of movement in scientific thought which transforms existing theories according to ever-widening experience. We can never reach the finality of Existence, for we are always having fresh experiences, and fresh theories to express them. We also need hypotheses to supplement the deficiencies of observation; and that hypothesis is the best which introduces most congruity among our ascertained truths. Yet throughout this shifting of the limits there is a constant principle of Certitude, and the truth of yesterday is not proved false because it is included in the wider truth of to-day: the two truths express two limits of Experience.

"In conclusion, we may say that various theories are ideal representations of the External Order, and are severally true, in so far as the import of their terms.

¹ Newton: "Principia," III., Prop. VII., Corol. I.

² Thomson and Tait: "Natural Philosophy," vol. I., p. 337.

includes no more than has been verified by the reduction of Inference to Intuition or Sensation; severally false, in so far as their terms include what is inconsistent with such verified import; and severally doubtful, in so far as the terms include what has not been thus verified. To express it in a more abstract phrase: Truth is the equivalence of the terms of a proposition; and the equivalence is tested by the reduction of the terms to an identical proposition."

An identical proposition is only another name for the merging of difference in identity, the aspects of motion in the fact of motion, the subjective and the objective in the principle of life. Thus we see that the vexed question of the principles of certitude can alone be solved by an ultimate analysis, that nothing short of the reduction of the categories of thought to a single principle will remove its difficulties. Mr. Spencer says, the deepest test of truth is negative, i. e. ultimate proof to us is our inability to believe a proposition untrue, or our inability to disbelieve the truth of a proposition. What does this mean but that truth itself is relative, and that our appreciations of relative truths are but adjustments, more or less extended, of individual to general existence? The criterion or measure of these adjustments is the fact of equality, the balancing of forces, the establishment of equivalences: doubt disappears when this balance is reached. Thus our test of truth is negative only in the sense that it is not absolute, for conviction is the result of conditions, the adjustment of internal and external forces. Truth, then, is the equivalence of the terms of a proposition, the meeting of the individual with the general mind through the medium of language. What room is there in this definition of certitude for the unknowable? Of what terms, of what proposition, is the unknowable the equivalence? The unknowable is not the unexplored remainder, for that is merely the outlying region of experience, the background of fact, from which each apprehended truth stands out in relief. The unexplored remainder is the unknown, the unassimilated field of truth. The unknown, therefore, is related to the

^{1 &}quot;Problems of Life and Mind," vol. II., p. 77.

known, its influence is felt in the equilibrium, the balance of forces, which we call conviction.

The unknowable has no influence in truth; it has no voice in any proposition; it is a term in no equivalence; it has no existence in fact.

Who can doubt that Lewes repudiates the unknowable after reading his criticism of Spencer's theory of certitude? "I do not," says he, "quite go along with Mr. Spencer when he argues for the necessity of some unproved truth, as a fundamental postulate; on the contrary, it seems to me that every proved truth is ultimate, requires no foundation. admits of none, though it may receive a logical justification by being thrown into the form of an identical proposition. The finality is Feeling, and a truth of Feeling needs no external support. The same is to be said when the truth of Feeling is expressed in Signs. Mr. Spencer's demand for some unattainable depth to be postulated, but not plumblined, may be compared with Hegel's position that Truth is always infinite, and cannot be expressed in finite terms. But leaving this and one or two minor points out of consideration, I think his arguments are conclusive, and only prefer the proposed formula of Equivalence because it is positive and unambiguous." Hence Lewes sees a resemblance between Mr. Spencer's belief in the unknowable and the skepticism of Hegel, the want of faith in the integrity of human knowledge. To say that truth is infinite and cannot be expressed in finite terms, is the same thing as saying that knowledge springs from the unknowable, that truth or certitude springs from an unattainable fact, or as arguing that mathematical infinity cannot be expressed or discussed in finite terms. This introduces, unnecessarily, the element of mystery into our theory of consciousness, rendering vague and uncertain what should be the simplest and most definite of all solutions.

Lewes says that "all knowledge begins with the discernment of resemblances and differences,—it is necessarily polar, resemblance being impossible except on a background of

difference, and difference also impossible except on a background of resemblance. While knowledge begins here, it ends with equations. What are equations? The resemblances abstracted from all accompanying differences, and reduced to the identity of equivalence."

What is this postulate of Nature's uniformity but the conception of Motion as the ultimate reality? All the scholastic principles of logic, the logical principles expounded by Mill and Bain (i. e. the Uniformity of Nature), the Universal Postulate of Spencer, the principles of Identity and Equivalence of Lewes, lead us to the same fact, compel the same conclusion. Our lives consist of the difference between subject and object, and their quality and extent are elaborations of this difference.

Now we enter upon the great question of the nature of Matter. The philosophic literature of our age teems with discussions on this subject, as though it were our chief logical duty to come to an agreement about the nature of the statical aspect of the universe. Why the dynamical aspect should receive less attention is not clear, unless it is that men have given up trying to define *Force* and have taken up Matter for a change. The dynamical aspect of the universe can best be symbolized by the conception of Time. The moment we add the statical aspect, or space, to time, motion springs into thought.

The chief wonder concerning Lewes' philosophy is, that he could have been so explicit with regard to the nature of matter and force, declaring them to be but phases or aspects of motion, and yet that he should never have hit upon the idea of identifying space with matter, and time with force, thus bringing all these disputed terms into interdependence and harmony. This wonder increases as we read such luminous definitions of Motion as this:

"Here arises a complication which will beset the whole discussion unless we form distinct ideas of the separation of Matter and Force as a purely analytical artifice. The two

^{1 &}quot; Problems of Life and Mind," vol. II., pp. 79, 81, 83.

abstractions are but two aspects of the same thing; a separation rendered inevitable by the polarity of Experience, which everywhere presents Existence under passive and active aspects. Force is not something superadded to Matter, it is Reals viewed in their dynamic aspect; Matter is not something different from Force, but Reals viewed in their statical or passive aspect: either is unthinkable without the other. Force is immanent in Matter, and Matter is immanent in Force. The schoolmen called Matter potentia passiva, and Force virtus activa. Logically distinguished, they require to be considered apart; and throughout the present problem we shall strive to keep up this separation; it cannot be thoroughly accomplished, but we shall endeavor to eliminate Force, as the geometer eliminates every thing but Extension."

Here Lewes clearly recognizes the ultimate fact of Motion, the union of the dynamical and the statical aspects of the universe, the one fact of which time and space are respectively the subjective and objective aspects. Our most advanced physicists recognize this principle, but are far from rendering it in simple and concise terms. Thus we read in the well-known work of Thomson and Tait: "We cannot, of course, give a definition of matter which will satisfy the metaphysician, but the naturalist may be content to know matter as that which can be perceived by the senses, or as that which can be acted upon by, or can exert, force. The latter, and indeed the former also, of these definitions involves the idea of Force." ²

In the treatise of Lewes on the Nature of Matter, in Problem IV., we have an illustration of the lengths to which these discussions are brought. Here the extension, impenetrability, infinite divisibility, indestructibility, gravity, and inertia of matter are considered without coming to any definite result.

A comprehension of the nature of perception, an appreciation of the ultimate analysis, shows the futility of treating Mat-

^{1 &}quot; Problems of Life and Mind," vol. II., p. 206.

² Thomson and Tait: "Natural Philosophy," vol. I., p. 161.

ter as an ultimate fact. Lewes, without treating Matter as an ultimate fact, however, fails to identify it in explicit terms with Space; and yet he considers it the symbol of all objectivity, which is equivalent to its identification with motion; thus giving it alternately too little and too much meaning.

The logical consolation which results from a knowledge of the merely relative significance of these terms, Matter and

Force, can hardly be overestimated.

Problems V. and VI. are respectively "Force and Cause," and "The Absolute in the Correlations of Feeling and Motion." The former explains conclusively that Cause and Effect are simply the different points of view from which we regard every phenomenon or event, and can therefore never be more than ideally separated from the events of which they are the expression. The question—dear to so many,—What is Cause in itself? is shown to be an absurdity, and the enormous quantity of literature which has the solution of this question for its object is rendered useless.

In closing Problem VI., we find Lewes again victorious over all disadvantages. He strikes the key-note of universal truth with a precision which enables us to forget the labored explanations of the preceding chapters concerning disconnected ultimates. His deep knowledge of psychological principles triumphs, and, independently of metaphysics, he performs an ultimate analysis by a comparison of the fact of consciousness with general existence. But his long service in the unsettled disputes of metaphysics has made him the slave of a certain vocabulary, has rendered him powerless to rise above certain habits of expression and to restore order to this chaos of ultimate terms. By another route, however, namely, a scientific analysis of mind and nature, he reaches the coveted result. Witness the closing words of Problem VI.:

"Existence—the Absolute—is known to us in Feeling, which in its most abstract expression is *Change*, external and internal. The external changes are symbolized as Motion, because that is the mode of Feeling into which all others are

translated when objectively considered: objective consideration being the attitude of *looking at* the phenomena, whereas subjective consideration is the attitude of any other sensible response, so that the phenomena are different to the different senses. There is no real break in the continuity of Existence: all its modes are but differentiations. We cannot suppose the physical organism and its functions to be other than integrant parts of the Cosmos from which it is formally differentiated: nor can we suppose the psychical organism and its functions to be other than integrant parts of this physical organism from which it is ideally separated. Out of the infinite modes of Existence a group is segregated, and a planet assumes individual form: out of the infinite modes of this planetary existence smaller groups are segregated in crystals, organisms, societies, nations. Each group is a special system. having forces peculiar to it, although in unbroken continuity with the forces of all other systems. Out of the forces of the animal organism a special group is segregated in the nervous mechanism, which has its own laws. If ideally we contrast any two of these groups,—a planet with an organism, or an organism with a nervous mechanism,—their great unlikeness seems to forbid identification. They are indeed different, but only because they have been differentiated. Yet they are identical, under a more general aspect. In like manner, if we contrast the world of Sensation and Appetites with the world of Conscience and its Moral Ideals, the unlikeness is striking. Yet we have every ground for believing that Conscience is evolved from Sensation, and that Moral Ideals are evolved from Appetites; and thus we connect the highest mental phenomena with vital Sensibility, Sensibility with molecular changes in the organism, and these with changes in the Cosmos.

"This unification of all the modes of Existence by no means obliterates the distinction of modes, nor the necessity of understanding the special characters of each. Mind remains Mind, and is essentially opposed to Matter, in spite of their identity in the Absolute; just as Pain is not Pleas-

ure, nor Color either Heat or Taste, in spite of their identity in Feeling. The logical distinctions represent real differentiations, but not distinct existents. If we recognize the One in the Many, we do not thereby refuse to admit the Many in the One."

Here the term absolute (or time) is used in the place of motion or the ultimate reality, but the great unity of the argument rises above these verbal defects. It is evident that the idea which Lewes seeks to convey is that the most general terms of life and mind point to a single fact and bear a definite relation to it.

For those who may feel inclined to examine deeply into the proposition that Matter and Space mean the same thing, or that the meanings of these two terms converge in a logical point, I insert an essay by Lewes entitled, "Action at a Distance," which is by far the most learned and compact treatment of the question which it has been my good fortune to meet. It occurs as an appendix to the volume under discussion.

ACTION AT A DISTANCE.

In spite of Newton's emphatic disclaimer, his opponents in old days, and many of his followers in our own, have been unable to banish the idea that the relation between bodies called Attraction is a mysterious something *inherent* in Matter, seated among the molecules, so to speak, and stretching forth its grasp to bind them into masses, and distant masses into systems. I do not pretend that this is what any one avows; I only say that it is a paraphrase of what many teach. Few doubt that there is a special Agent symbolized in the term attractive force ("Ce monstre métaphysique si cher à une partie des philosophes modernes, si odieux à l'autre," says Maupertuis), and that this Agent acts across empty space.

"That gravity should be innate, inherent, and essential to matter," writes Newton to Bentley, "so that one body may act upon another at a distance through a vacuum, and without the mediation of any thing else by and through which this action and force may be conveyed from one to another, is to me so great an absurdity that I believe no man who has in philosophical matters a competent faculty of thinking can ever fall into it." Nevertheless, even his own editor, Roger Cotes, declares action at a distance to be one of the primary properties of matter; and many mathematicians and metaphysicians have flouted the scholastic axiom, "A body cannot act where it is not," treating it as

^{1&}quot; Problems of Life and Mind," vol. II., p. 449.

a vulgar error. They urge that astronomical phenomena prove bodies to act at enormous distances; and moreover, that the molecules are never in actual contact even when they act on each other.

The notion of action at a distance contradicts Rule II. It presupposes a body to be moving through the space in which it does not move, existing where it does not exist. Action is dynamic existence. The force or pressure by which, in which a body acts, is ideally, but not really, separable from the active matter, and the coexistent positions named space. Having thus ideally separated the Agency from the Agent, men find it easy to suppose the Force acting where the matter is not; and some men materialize this Force, convert it into an Ether interposed between masses and molecules, so that the matter acts on this ethereal Force, and the Force transmits the action to Matter.

Experience does indeed seem to suggest action at a distance, and thus to contradict the axiom. I am scated in my study, and can certainly act upon my servant, who is distant from me in the kitchen. I have only to touch the bell and she comes up-stairs. She is drawn toward me, as the apple is drawn toward the earth, across a distant space. But the scholastic axiom, "A thing cannot act where it is not," is undisturbed by such a fact, and only seems contradicted by it when we suppress in thought all the intermediate agents whose agency was indispensable. I acted directly on the bell-rope, which was continuous with the bell, and set it vibrating; the vibrations of the bell acted on the air, the air on my servant's auditory organ, that on her intellectual organ, and that in turn upon her muscles. In the fall of an apple the case seems different, because we cannot so readily realize to ourselves all the co-operant conditions; but the phrase by which we express these, when we say the earth attracts the apple, is not less elliptical than the phrase, "I caused my servant to come up-stairs by ringing the bell."

If bodies "attract" each other across empty space, we can only understand this attraction as a moving toward each other in the line of a resultant pressure, not as the dragging by immaterial grappling-irons thrown from one to the other. "Equidem existimo gravitatem," says Copernicus, "non aliud esse quam appetentiam quandam naturalem, partibus inditam a divina providentia opificis universorum." And Euler says: "In attempting to dive into the mysteries of nature, it is of importance to know if the heavenly bodies act upon each other by impulsion or by attraction; if a certain subtile, invisible matter impels them toward each other, or if they are endowed with a secret occult quality by which they are mutually attracted. Those who hold the second view maintain that the quality of mutual attraction is proper to all bodies; that it is as natural to them as magnitude. Had there been but two bodies in the universe, however remote from each other, they would have had from the first a tendency toward each other, by means of which they would in time have approached and united." ²

This fiction respecting two bodies alone in the universe, and their inherent tendency to approach each other, is in open defiance of all experience. Let us

¹ Copernicus: "De Revolutionibus Orbium," I., ch. IX.

² Euler: "Letters to a German Princess," vol. I., p. 211.

grant the existence of only two bodies isolated in space: we must first declare that, according to all the inductions from experience, they would not tend to move toward each other, for they would not move at all; some external motion or pressure would be requisite, since their own internal motions would be in equilibrium; nor would an external force impel them to move toward each other, unless the direction of that force were in this line and no other. Suppose each body to be in motion, each would pursue its own direction, nor would they ever meet, unless some third body in motion redirected them. Of course, if the bodies are assumed to have an *inherent tendency* to rush together like two water-drops, but without the external pressures which blend the water-drops, they would inevitably meet; but what evidence is there for such an assumption?

It is obvious that we cannot explain the phenomena of attraction by the fiction of two isolated bodies in empty space, because that fiction presupposes conditions wholly unlike those of the known universe, which is not an universe of two isolated bodies, but of infinite and variously related bodies.

Mr. Mill is very contemptuous in his notice of Hamilton's reliance on the axiom that one body cannot act directly on another without contact. "In one sense of the word," Mr. Mill says, "a thing is wherever its action is; its power is there, though not its corporeal presence [a singular distinction in the writings of so positive a thinker!]. But to say that a thing can only act where its power is, would be the idlest of mere identical propositions. [An axiom is an identical proposition.] And where is the warrant for asserting that a thing cannot act when it is not locally contiguous to the thing it acts upon? * * * What is the meaning of contiguity? According to the best physical knowledge we possess, things are never actually contiguous. What we term contact between particles, only means that they are in the degree of proximity at which their mutual repulsions are in equilibrium with their attractions. [Are not these repulsions and attractions hypothetic phrases to express the fact that, however closely bodies may be pressed together, their molecules cannot be both made to occupy the same space, each unit, as an unit, having its limit?—a fact also expressed by impenetrability.1] If so, instead of never, things always act on one another at some, though it may be a very small, distance. The belief that a thing can only act where it is, is a common case of inseparable, though not ultimately indissoluble, association. It is an unconscious generalization, of the roughest possible description, from the most familiar cases of the mutual action of bodies superficially considered. The temporary difficulty felt in apprehending any action of body upon body unlike what people were accustomed to, created a natural prejudice which was long a serious impediment to the reception of the Newtonian theory: but it was hoped that the final triumph of that theory had extinguished it [Newton, as we have seen, would have repudiated this conclusion]; that all educated persons were now aware that action at a distance is intrinsically quite as credible as action in contact; and that there is no reason,

^{1 &}quot;Il parâitra par nos méditations," says Leibnitz, "que la substance créée ne reçoit pas d'une autre substance créée la puissance même d'agir, mais seulement une limitation et détermination de son propre effet pré-existant et de la vertu active."

apart from specific experience, to regard the one as in any respect less probable than the other." ¹

The idea that a body like the sun, which is ninety-two millions of miles distant from us, can act directly on us across this distance, assumed to be a vacuum, is absolutely inconceivable, since action involves motion, and the motion through this space must be either the motion of the body itself, or of some body to which it has been transferred. A mere crack in a glass extinguishes its sounding property; that is to say, the waves of molecular motion are no longer propagated because of this solution of continuity; and if between us and the sun there were any solution of material continuity, the waves of ether would not reach us from the molecular agitations of the sun; or—if we suppose them to pass across this gap—it would still be the actual presence of the wave which at each point exerted its pressure. Action at a distance, unless understood in the sense of action through unspecified intermediates, is both logically and physically absurd. Logically, since action involves reaction, and is only conceivable as the combination of forces; physically, since the attraction said to act across the distance is avowedly a function of the distance, which increases as the distance decreases; and this implies that the distance is an Agent. Now, if we assume the space between two bodies to be empty, we make this nothing an effective Agent, which offers resistance to pressure, and causes a decrease of attraction. I therefore ask, with Professor Clerk Maxwell: "If something is transmitted from one particle to another at a distance, what is its condition after it has left the one particle and before it has reached the other? If this something is the potential energy of the two particles, how are we to conceive this energy as existing in a point of space coinciding neither with the one particle nor the other? In fact, whenever energy is transmitted from one body to another in time, there must be a medium or substance in which the energy exists." 2 otherwise there would be energy which was not the active state of matter, but an activity floating through the Nothing,

It should be observed, and the observation is suggestive in many directions, that some of the most eminent physicists have not only adopted the idea of action at a distance, but have constructed on it elaborate and effective theories of electrical action. Gauss, Weber, Riemann, Neumann, and others, have interpreted electro-magnetic actions on this assumption; and the success which has attended their efforts is another among the many examples of the truth we have previously enforced, that no amount of agreement between observed phenomena and an hypothesis is sufficient to prove the truth of the hypothesis. Contrasted with the labors of these mathematicians and physicists, we have the labors of Faraday, Thomson, Tait, Clerk Maxwell, and others, who start from the hypothesis of a material medium. Not only are they able to explain all the observed phenomena on this hypothesis, but they have the immense advantage of not invoking an agency which is without a warrant in experience. Where the mathematicians admitted only the abstraction pure Distance, and centres of force acting on each other across this Distance, Faraday and his followers have

¹ Mill: "Examination of Sir W. Hamilton," p. 531.

² Clerk Maxwell: "Electricity and Magnetism," vol. II. p. 437.

admitted with the Distance its concrete Medium, and with the centres of force, radii or lines of force; where the one class sees the abstract power of action at a distance impressed upon the electric fluids, the other class sees the actions going on in the Medium, and these are the concrete phenomena. The superiority of the second point of view seems to me to consist in its speculative and its practical advantages. Although the two are mathematically equivalent, the second has the speculative superiority of conformity with Experience; and according to Professor Maxwell it has the further practical advantage of leading us to inquire into the nature of the action in each part of the medium.

The conception of a Plenum is simply the unavoidable conclusion from the conception of Existence as continuous; and this continuity is itself the correlative of the impossibility of accepting the pure Nothing otherwise than as a generalization of our negative experiences. But if continuity of Existence is thus necessarily postulated, it does not interfere with the utmost variety in the modes of Existence; and with every variation in mode there is superficial discontinuity. When a feeling changes, it is because another feeling has replaced it. My hand passing over a surface has one mode of feeling until it reaches the boundary, and then a new mode arises to replace the former,—the feeling of solid resistance gives place to one of fluid or aërial resistance. The new mode is unlike the old, discontinuous with it; but it is nevertheless only a new form of the fundamental continuity of Feeling.

The conception of a Plenum is further shown to be unavoidable when we come to inquire into the nature of that void which is supposed to exist in the interstices of molecules, and in the interplanetary spaces. Space is the abstract of coexistent positions; its concretes are bodies in the various relations of position; but in our abstraction we let drop the bodies, and retain only the relations of position; although a moment's consideration suffices to show that were there no bodies, there could be no positions of bodies, consequently no relations of coexistent positions,—in a word, no space. If, therefore, by interspaces between molecules or planets we understand simply the relations of position of these bodies, we may indeed conveniently abstract these relations from their related terms, and treat of spaces irrespective of bodies; but we may not from this artifice conclude that between these related terms there is a solution of the continuity of Existence,—that between the bodies there is a void.

It is held that, were our senses sufficiently magnified, we might see the molecules and atoms distributed throughout what now appears a mass, much as we see the constellations distributed among the vast spaces of the heavens. Perhaps; but even then our magnified senses would discover no solution in the great continuum. Necessarily so, since by no possible exaltation of an organ of sense could the Suprasensible be reached. The void—if it exist—cannot be felt, and the only Existence knowable by us is the Felt.

Hence the idea of action at a distance is absurd, if the distance be taken to represent any solution in the material continuity, which is the continuity of the Agent whose Agency is the action; but the idea is intelligible and true if the distance be taken to represent simply the relative positions of the body from which the action is supposed to originate, and the body in which it is completed.

¹ See his "Electricity and Magnetism," vol. I., pp. 58, 65, and 123.

CHAPTER XVI.

GEORGE HENRY LEWES (CONCLUDED).

The Relation of Universal to Organic Activities-Lewes' Theory of Perception.

To the reader who may have followed thus far the argument here presented, perhaps it will not be too much to say that Metaphysics is a completed study. The problem of the Ultimate Reality, which has puzzled thoughtful humanity from Aristotle to the present day, has, owing to the vast logical movement of this age of Evolution, at last achieved its own solution, and we stand emancipated from the mysteries of idealism and the discouragements of skepticism. with naught to fear for the integrity of human knowledge. The logical position which an ultimate analysis occupies is invulnerable. There is, perhaps, no keener pleasure than to observe the resistance which it offers to the attacks of trained men of science. If they reason from a statical basis. postulating matter as an ultimate fact, "a substance which remains after all properties have been accounted for," they fall into the error of neglecting the very property by which we appreciate facts, namely, their activity. If they postulate this activity and deny to it extension or position, they again involve themselves by first employing a symbol and then withdrawing its meaning; for no fact can be expressed without conceding to it extension or position. The course to be pursued in such a controversy is to watch carefully for terms having the same meaning as Space, such as Infinite, Coexistence, Matter, Substance, Status, Position, etc.; or the equivalents of Time, such as Absolute, Abstract Sequence, Force considered as the cause of motion, or Motion considered apart from its space aspect; or the equivalents of Motion, such as Life, God, Power, First Cause; and, when these terms are used, to insist upon giving them their full significance. Nothing can withstand the force of such an analysis. It is soon perceived that by employing abstractions, we recede from the particulars of life to the first or simplest fact, the initial relation of personal and general existence.

It is therefore with feelings of the utmost relief that we take leave of the abstractions of metaphysics and take up the remaining three volumes of Lewes' philosophic writings purely as a scientific study, neglecting any thing we may find in them pertaining to ontological questions.

Indeed Lewes seems to have written these last volumes in much the same spirit as that in which we would review them, for we find in them, after all, but little that is strictly metaphysical.

The first of these is entitled the "Physical Basis of Mind," and deals with the following problems: "The Nature of Life"; "The Nervous Mechanism"; "Animal Automatism," and "The Reflex Theory." The second contains the problems: "Mind as a Function of the Organism"; "The Sphere of Sense and the Logic of Feeling"; "The Sphere of Intellect and the Logic of Signs." The last is the brief work entitled "The Study of Psychology."

It is our purpose merely to select from the above problems the most striking lessons, so as to convey a general idea of the results to which Lewes has attained, and to define their relations to what has already been indicated as a complete philosophy.

A minute study of the procedures of organic growth shows how difficult it is to avoid the theory of a design in nature. All human efforts are so intimately connected with design, that it is difficult for us to look upon natural sequences in any other light. The great masters in biological research have felt this difficulty, and, for the most part, yielded to it. Thus "Von Baer, in his great work, has a section entitled

'The Nature of the Animal Determines its Development'; and he thus explains himself: 'Although every stage in development is only made possible by its pre-existing condition. nevertheless the entire development is ruled and guided by the nature of the animal which is about to be: and it is not the momentary condition which alone absolutely determines the future, but more general and higher relations." The form that this superstition generally takes is the belief that an organism is determined by its type, or, "as the Germans say, its Idea." "All its parts take shape according to this ruling plan: consequently, when any part is removed, it is reproduced according to the Idea of the whole of which it forms a part. Milne Edwards, in a very interesting and suggestive work, concludes his survey of organic phenomena in these words: 'In the organism every thing seems calculated with a view to a determinate result, and the harmony of the parts does not result from any influence which they can exert upon one another, but from their co-ordination under the empire of a common power, a preconceived plan, a preexisting force." "This," continues Lewes, "is eminently metaphysiological (superstitious). It refuses to acknowledge the operation of immanent properties, refuses to admit that the harmony of a complex structure results from the mutual relation of its parts, and seeks *outside* the organism for some mysterious force, some plan, not otherwise specified, which regulates and shapes the parts. * * * Let us note the logical inconsistencies of a position which, while assuming that every separate stage in development is the necessary sequence of its predecessor, declares the whole of the stages independent of such relations! Such a position is indeed reconcilable on the assumption that animal forms are moulded 'like clay in the hands of the potter.' But this is a theological dogma which leads to very preposterous and impious conclusions; and whether it leads to these conclusions or to others, positive Biology declines theological explanations altogether. * * * The type does not *dominate* the conditions, it *emerges* from them; the animal organism is not cast in a mould, but the

imaginary mould is the form which the polarities of the organic substance assume. It would seem very absurd to suppose that crystals assumed their definite shapes (when the liquid which held their molecules in solution is evaporated) under the determining influence of phantom crystals or Ideas: vet it has not been thought absurd to assume phantom forms The conception of Type as a determining influof organisms. ence arises from that fallacy of taking a resultant for a principle, which has played so conspicuous a part in the history of philosophy. * * * At first, the Type or Idea was regarded as an objective reality, external to the organism it was supposed to rule. Then this notion was replaced by an approach to the more rational interpretation, the Idea was made an internal, not an external, force, and was incorporated with the material elements of the organism, which were said to 'endeavor' to arrange themselves according to the Type. Thus Treveranus declares that the seed 'dreams of the future flower': and 'Henle, when he declares that hair and nails grow in virtue of the Idea, is forced to add that the parts endeavor to arrange themselves according to this Idea.' Even Lotze, who has argued so victoriously against the vitalists, and has made it clear that an organism is a vital mechanism, cannot relinquish this conception of legislative Ideas, though he significantly adds: 'These have no power in themselves, but only in as far as they are grounded in mechanical conditions.' Why, then, superfluously add them to the conditions?"1

The imposing analysis which Lewes makes of organic existence stops not at the latest biological discoveries, but presses on to what, by comparison with the very best previous work on the subject, is a new and vastly extended view of the origins of individual life. Not content with attacking the "superstition of the nerve-cell," upon which is built the theory of peculiar vital forces "wholly unallied with the primary energy of motion," which is in itself an important physiological reform, he addresses himself assiduously

^{1 &}quot; Physical Basis of Mind," pp. 104-107.

to the task of widening the scientific understanding of the whole subject of organic life. Beginning with the analysis of Protoplasm, which discloses the exceedingly high molecular complexity of this basic substance of organisms. he identifies the complex but definite activities which this substance exhibits with the less complex but no less definite activities displayed by what we know as chemical substances. the difference in the activities of the two classes of substances being purely one of degree of complexity, corresponding with their respective degrees of molecular (or structural) complexity. This generalization, the importance of which is not easily appreciated, so far-reaching are its consequences, is made to serve as a basis for the extension of Mr. Darwin's theory of the origin of species by Natural Selection. "The survival of the fittest" is shown to be a very anthropomorphic way of expressing the great truth which Darwin brought to light. The struggle for existence. or the competition and antagonism of organisms, is shown to extend to the "competition and antagonism" of tissues and organs for existence; and for fear that the inconsistency implied in the application of such exclusively mental terms as competition and antagonism to the energies of organic substances (which can only be thought of as contributing to consciousness as remote factors) should be overlooked, he follows up the interdependencies of tissues and organs with such remorseless vigor, that nothing is left but to acknowledge that their potentialities are inherent in their chemical composition. "When a crystalline solution takes shape, it always takes a definite shape, which represents what may be called the direction of its forces, the polarity of its constituent molecules. In like manner, when an organic plasmode takes shape—crystallizes, so to speak—it always assumes a specific shape dependent on the polarity of its molecules. Crystallographers have determined the several forms possible to crystals; histologists have recorded the several forms of Organites, Tissues, and Organs. Owing to the greater variety in elementary composition, there is in organic substance a more various polar distribution than in crystals: nevertheless there are sharply defined limits never overstepped, and these constitute what may be called the specific forms of Organites, Tissues, Organs, Organisms, * * * Natural selection is only the expression of the results of obscure physiological processes: and for a satisfactory theory of such results we must understand the nature of the processes. In other words, to understand Natural Selection we must recognize not only the facts thus expressed, but the factors of these facts.—we must analyze the 'conditions of existence.' As a preliminary analysis we find external conditions, among which are included not only the dependence of the organism on the inorganic medium, but also the dependence of one organism on another,—the competition and antagonism of the whole organic world; and internal conditions, among which are included not only the dependence of the organism on the laws of composition and decomposition whereby each organite and each tissue is formed, but also the dependence of one organite and one tissue on all the others,—the competition and antagonism of all the elements. The changes wrought in an organism by these two kinds of conditions determine Varieties and Species. Although many of the changes are due to the process of Natural Selection, brought about in the struggle with competitors and foes, many other changes have no such relation to the external struggle, but are simply the results of the organic affinities. They may or may not give the organism a greater stability, or a greater advantage over rivals: it is enough that they are no disadvantage to the organism; they will then survive by virtue of the forces which produced them."1

In criticising the theory of the generic development of all living things, which as held by the extreme school is, that all animal life has descended from a single organic point, all the subsequent differences being the result of modifications in the environment or differences in the history of the descendants of this first organism,—the less extreme school holding

^{1 &}quot; Physical Basis of Mind," pp. 101, 102, 124, 125.

that (to use Mr. Darwin's words) "animals have descended from at most only four or five progenitors, and plants from an equal or less number,"-Lewes pleads hard for a deeper and more thorough analysis of the facts than either of these schools offers. Notwithstanding an affectionate reverence for Mr. Darwin, whose great work he acknowledges to be invaluable as an explanation of that aspect of organic development called Natural Selection. Lewes clearly shows that the great theory accounts for but a part of the facts. In it there is no room for any thing approaching an ultimate analysis of existence. The points of resemblance between plants and animals are dwelt upon at length: and striking as these resemblances are, the differences are irreconcilable with a theory of common descent from a single cell at a single point upon the earth's surface. The common chemical conditions of the earth at all stages of its past metamorphosis suggest common organic conditions; and although the theory of evolution teaches that all development is rigidly serial, the simple leading to and making possible the complex, yet no good reason can be given for doubting that organic life was widespread and multifarious in its terrestrial beginnings. The kinship which unites the organic with the inorganic is quite as prominent a fact as the relationship of the plant and animal kingdoms, or the interdependence of organic and superorganic life. The law of organic evolution, which is broad enough to indicate, for instance, the history of the solar system, can surely account for the changes which have taken place upon a single planet; in a word, if we will but take our stand at a sufficiently remote point of view, it will not be necessary to introduce a mysterious beginning to organic life. "Upon what principle are we to pause at the cell or protoplasm? If by a successive elimination of differences we reduce all organisms to the cell, we must go on and reduce the cell itself to the chemical elements out of which it was constructed; and inasmuch as these elements are all common to the inorganic world, the only difference being one of synthesis, we reach a result which is the stultification of all classification, namely, the assertion of a kinship which is universal."

Passing from these generalizations of organic phenomena to the physical aspect of mind, Lewes exposes the superstitions and unwarranted assumptions of many writers on mental physiology; and so vital are the principles involved, that although the explanations are rather technical, for so general a review, we cite some of the most important.

The most abridged expression we have of the action of the sensorium, in which the motor, the sensational, and the intellectual forms of activity are combined, is called the nervous arc. Anatomists observe that the motor nerves issue from the anterior side of the spinal cord (that which in animals is the under side), and that the sensory nerves issue from the posterior side (that which in animals is the upper side). The spinal cord, like the cerebrum, is a double organ, with the difference, however, that the gray structure is mainly external in the cerebrum while it is internal in the cord. Of the development of the nervous system from the embryo, Lewes says: "In the outermost layer of the germinal membrane of the embryo a groove appears, which deepens as its sides grow upward and finally close over and form a canal. Its foremost extremity soon bulges into three well-marked enlargements which are then called the primitive cerebral vesicles. The cavities of these vesicles are continuous. Except in position and size, there are no discernible differences in these vesicles, which are known as the Fore-brain, Middle-brain, and Hind-brain. * * * It appears that the retina and optic nerve are primitive portions of the brain—a detached segment of the general centre, identical in structure with the cerebral vesicle, and not unlike it in form. * * * It thus appears that the primitive membrane forms into a canal, which enlarges at one part into three vesicles, and from these are developed the encephalic (brain) structures. The continuity of the walls and cavities of these vesicles is never obliterated throughout the subsequent changes. It is also traceable throughout the medulla spinalis; and microscopic investigation reveals that underneath all the morphological changes the walls of the whole cerebrospinal axis are composed of similar elements on a similar plan. The conclusions which directly follow from the above are, first, that since the structure of the great axis is everywhere similar, the properties must be similar; secondly, that since there is structural continuity, no one part can be called into activity without at the same time more or less exciting that of all the rest."

Lewes bitterly complains of the analytical tendency in the study of the activities of the sensorium. This tendency, he says, is to disregard the elements which provisionally had been set aside, and not restore them in the reconstruction of a synthetical explanation. Such familiar experiences as that when a stimulus is applied to the skin it is followed by a muscular movement or a glandular secretion (accompanied by all degrees of consciousness as the case may be), are interpreted by the neurologist as exclusively neural processes; all the other processes are provisionally left out of account. But even in the neural process the organs are neglected for the sake of the nervous tissue, and the nervous tissue for the sake of the nerve-cell.

The most abridged statement of the activity of the sensorium, therefore, whether it be a muscular movement, a glandular secretion, an emotion, or a thought, is to be found in the theory of the nervous arc. Of the general form which this theory takes, the conventional description would be about as follows: "The nerve-cell is the supreme element, the origin of the nerve-fibre, and the fountain of nerve-force. The cells are connected one with another by means of fibres, and with muscles, glands, and centres, also by means of fibres, which are merely channels for the nerve-force. A stimulus at the surface is carried by a sensory fibre to a cell in the centre; from that point it is carried by another fibre to another cell; and from that by a third fibre to a muscle; a reflex action results;—this is the elementary nervous arc." The passage of an excitation, therefore, into

the labyrinths of the sensorium and out again (until it emerges in action) is said to describe the nervous arc. It is well known that at some stage in this process, or at some point in this arc, the phenomenon called consciousness mingles in some degree with the excitation; for the structure of the whole nervous system, including the brain, being not only continuous but of the same substances, a wave of excitement set up in any part of it must influence the whole, however imperceptibly. All that we know of the reflex process pictured in the above description of the nervous arc. which pretends to trace the fibre from cell to cell, is, "that one fibre passes into the spinal cord, and that another passes out of it, and that a movement is produced usually preceded by a sensation and sometimes by a thought." The continuity of the nerve-fibre, therefore, from cell to cell, through the spinal cord, which is supposed to demarcate the simpler reflexes from the realm of consciousness, is purely imaginative. Hence, whether the action of the sensorium which we observe be the effort of a frog, whose brain has been removed, to repel the irritating point of the scalpel from one leg by pushing it away with the other, or whether the destinies of a race are being worked out in the mind of some political or moral autocrat through the slow adjustments of a lifetime, the same order of organic structures acts and reacts with the same order of environment, the same potentialities are called into play, and there is nothing to distinguish the two events but the degrees of their complexity, which can be expressed in terms of Space and Time.

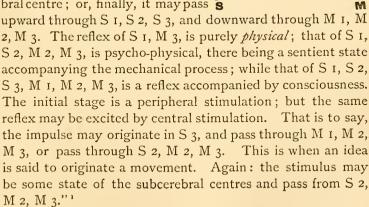
The better informed among physiologists and neurologists are beginning to acknowledge the impossibility of absolutely separating the simplest reflex actions from sensibility and, in turn, from thought.

Assuming that consciousness has its seat in the brain, sensation in the base of the brain, or the medulla oblongata, and the simpler reflexes in the spinal cord, which is a very mechanical way of subdividing the interdependent activities of the sensorium, the manner in which the simpler movements

and sensations mingle with consciousness is thus explained. The most widely accepted theory is, that the wave of excitation must pass onward to the central convolutions of the brain, and that there, in the excitation of the *cells*, it first becomes sensation,—consciousness is first aroused. This theory regards consciousness and sensation as nearly identical, and locates them both in the brain. In all these theories sensation is made the middle term between the most unconscious or simplest reflex actions, and thought, and the theories differ only in the distance said to intervene between the central convolutions of the brain and the supposed seat of *sensation*.

The following diagram and explanation will illustrate that theory which locates both sensation and consciousness in presumably the same neural tract in the brain. "The stimu-

lus wave from the sensitive surface S is carried to the spinal centre S I, which may either transmit it directly to M 3, and thus reach the muscle M, or transmit indirectly through S 2, M 2, in the subcerebral centre; or, finally, it may pass §



All processes are therefore *Reflex processes*, the degree of *centralization*, or dependence on the brain, determining the degree of consciousness or *volition* which accompanies them.

[&]quot;" Problems of Life and Mind," 3d series, vol. II., pp. 431, 432.

Physiologists, however, would distinguish the relatively involuntary as reflex, and are therefore obliged to invent a special mechanism for this class. If physiologists could only agree upon the facts by which they support the Reflex theory, the nath of the student would be smoothed. "Van Deen. for instance, considers that Reflexion takes place without Volition but not without Sensation; and Budge, that it takes place without Perception (Vorstellung)," "According to Marshall Hall, who originated the modern form of this theory. actions are divisible into four distinct classes: the voluntary, dependent on the brain; the involuntary, dependent on the irritability of the muscular fibre; the respiratory, wherein 'the motive influence passes in a direct line from one point of the nervous system to certain muscles'; and the reflex, dependent on the 'true spinal system' of incident-excitor nerves, and of reflex motor nerves. These last-named actions are produced when an impression on the sensitive surface is conveyed by an excitor nerve to the spinal cord and is there reflected back on the muscles by a corresponding motor nerve. In this process no sensation whatever occurs. The action is purely reflex, purely excito-motor, like the action of an ordinary mechanism." Müller also shares this view of the Reflex theory with Hall.' Of all of which Lewes says:

"It is needless nowadays to point out that the existence of a distinct system of excito-motor nerves belongs to imaginary anatomy; but it is not needless to point out that the Imaginary Physiology founded on it still survives. * * * We have already seen that what anatomy positively teaches is totally unlike the Reflex mechanism popularly imagined. The sensory nerve is not seen to enter the spinal cord at one point and pass over to a corresponding point of exit; it is seen to enter the gray substance, which is continuous throughout the spinal cord; it is there lost to view, its course being untraceable." *

¹ Marshall Hall, in "Phys. Trans.," 1883; "Lectures on the Nervous System and its Diseases," 1836; "New Memoir on the Nervous System," 1843.

² Müller: "Physiology," vol. I., p. 721.

^{3 &}quot; Physical Basis of Mind," pp. 480, 481.

With this hasty glance at these brilliant inductions of Lewes, we must close our review of his system. Is it too much to say that to Lewes we owe the most commanding view of organic Perception that has thus far been offered to the world? But perception has a wider base than organic life. It is the function of conditions which are universal. Lewes sought to establish the harmony of the organic and inorganic worlds by the manipulation of ultimate principles, but, as I have already said, his mind had become biassed by a conventional metaphysics which he was unable to overcome. This metaphysics postulated an unknowable, and Lewes never quite discovered that it was the subtle contradiction implied in this term which vitiated his whole system of introspection. He then turned to the study of the functions and structures of organisms, in the hope of leading up to Mind through its organic processes,-of establishing a true psychology. This he has done. The achievement can be expressed in his striking dictum: "Motor perceptions are condensed in intuitions and generalized in conceptions."

This is the pivotal truth of the Nature of Perception, for it discloses the Physical Basis of Mind.



PART III. THE RELIGION OF PHILOSOPHY.



PART III.

THE RELIGION OF PHILOSOPHY.

CHAPTER XVII.

SUPERSTITION AND MYSTERY.

Resemblance between Primitive and Modern Religious Beliefs—Superstition the Negative, Morality the Positive Form of Religion.

RELIGIOUS criticism is wholly a modern art. As language reached a high state of perfection before the manner of its growth was discovered, so the higher human sentiments have grown into bonds of universal sympathy before the race has been able to form any adequate idea of the laws of thought and feeling.

It is the study of the development of language which makes possible an intelligent view of the great subject of Religion. The races of the world have unconsciously written their emotional and moral history in the formation of their speech. The comparative study of languages gives us an insight into the origin of nations, so that we are enabled to classify the races of mankind with far greater accuracy than before the advent of this science.

The different races of men represent different classes of ideas; representative types of thought and feeling which have their expression in certain forms of social organization or Morality, and certain forms of the higher sentiments or Religion. The morals and the religions of the world as we find them are the products of the slow evolution of human-

ity, the results of past conditions, and they can only be accounted for by studying the phases of development through which they have passed.

The foregoing divisions of this work have been devoted to establishing a clear understanding of the fundamental principles of life,—to building up a true conception of We have dealt, not with the circumstances of social life, not with human history, but with the nature of man himself, the interaction of his physical and psychical nature, with a view to explaining the wonderful phenomena of language and perception. We are now, in a measure, prepared to deal with that highest aspect of human existence which we call Morality, and that vast emotional structure known as Religion. As the greatest logical achievements have resulted from the ceaseless energies of metaphysical investigation, notwithstanding the apparent hopelessness and unreality of the pursuit, so our best conceptions of duty and life have sprung from the emotions of religion, notwithstanding the various degrees of degradation and misery to which mistaken religious beliefs have subjected all races and civilizations.

Where the tenets of logic are concerned, men have always been comparatively free to contend without interference or reproach; the populace has taken but little interest in these wars of abstractions; but with the contentions of religious faiths it has been very different, and it is natural that it should have been so. To wantonly assail a religious faith is a very serious matter: it may cause inestimable harm, and it seldom if ever has a good influence.

As will afterward appear, religion and morality are but the obverse aspects of the higher phases of human character. To disturb the one is to disturb the other.

If there is one opinion with regard to the criticism of religion which is universal, it is that we have no right to destroy a faith unless to supplant it with a better one. Proselytism has never been condemned as immoral, however much it has been resisted, for the missionary believes that he is im-

parting a better religion than the one which he opposes. The iconoclast, on the contrary, has always been a dreaded destroyer: he offers nothing to replace the objects of worship which he ruins.

The Religion of Philosophy is the purest of all faiths, the highest of all moralities. Its creed is the ever-brightening zenith of human knowledge; its precepts spring from the deepest principles of our existence; its understanding of human life and destiny has nothing to yield to any existing faith; and its conception of God is so much purer and better than that of any other religion, that a comparison becomes ungenerous. It requires no consecrated temples for its worship, no priests or sacraments, no ritual for its dead. Its followers can worship in any temple, learn of any priest, and, as they honor all forms of religion, none of its ceremonies can be inappropriate to their memory.

Each religion represents the highest or most general conceptions of its believers; for this reason the conventional classification of faiths can give but the merest outline of the actual religious convictions of individuals. Creeds are only partially acquiesced in; the same formulas of belief are interpreted in widely different ways; and there is, after all, an innate independence in religious belief which only gives formal acquiescence to the established forms of faith. The spirit of organization, therefore, which pervades the whole practical world, that strong sense of the necessity of harmony and co-operation as conditions of success, gives to organized religion a dominion which in a logical sense it does not possess.

The difference between the passive believer in any special faith and the conscientious critic of religion may be thus described: The believer holds that there are divine truths which the simple and the learned can alike appreciate; the careful critic holds that all truths are divine in the sense that they are related to universal truth, but that the quality of each mind determines the degree of appreciation of that truth. They both admit the existence of divine truth, but

one believes that it belongs exclusively to a religion, while the other believes it to be coextensive with all existence The chances for disagreement are infinite; for there is clearly no possibility of limiting the scope of a religion so that it may not include all existence, or of limiting existence so that it may not include all religion. The only possible chance for an agreement is to fix, once for all, upon the meaning of divine. and all words signifying God. This being accomplished, the whole question becomes clear. Divine means the highest or most general; God means the Universal Principle. which is the same thing. To say, therefore, that all truths are related to the divine is simply to admit that the universe is an interdependent organon suggesting neither absolute limits nor separations. With this understanding it becomes possible to form some idea of the degree in which each type of mind, from the most simple to the most complex, can appreciate general truths.

It is only by a study of the facts of religious and moral history that we can succeed in the logical attempt which is here announced. Upon nothing less tangible than the framework of these facts can the argument take form and avoid those extreme attenuations which are more apt to confuse than enlighten.

Our first assumption is, that religion and morality are not only interdependent activities, but are the obverse aspects of a single fact of development. The quality of life is but another name for morality. The quality of the mind determines the quality of the religion. Superstitions are but the negative side of religion, while right thinking, feeling, and doing, or morality, constitute all that is real in religious life.

Worship is universally conceded to be a lifting up of the heart to God. When we find the idea of God undeveloped, therefore, we must expect to find no worship, or worship in its most degraded forms. The term atheist (godless one) has a purely relative meaning. If God is the universal fact, if the conception of God is an appreciation of divine unity, what life can be godless? Tylor tells how ancient invading

Aryans described the aboriginal tribes of India as *adeva*, *i. e.* "godless," and the Greeks fixed the corresponding term $u 9 \varepsilon o i$ on the early Christians as unbelievers in the classic gods; also how, in later days, disbelievers in witchcraft and apostolic succession were denounced as atheists; and in our own time, controversalists infer that naturalists who support a theory of development of species are therefore supposed to hold atheistic opinions.

In the same way the great term Religion is narrowed in its meaning by numberless writers until the assertion that such and such tribes and communities "have absolutely no religion," is not to be trusted till we discover what the religion of the writer happens to be. From the dogmatist, who "seems hardly to recognize any thing short of the organized and established theology of the higher races as religion," to such liberal writers as Herbert Spencer, who defines religion as an *a priori* theory of the universe held alike by savages and civilized men, and springing from the need of understanding life, we find a tendency to make all worship the consecration of a fundamental mystery.

If we would trace religious sentiment to its simplest beginnings, we must identify religious with general knowledge, and deny that either is the function of the unknowable. In this investigation we should not allow ourselves to be overawed by the vast complexities of organized faiths, for as the great developments known as language and perception express but the single fact of motion, so all religions, depending as they do entirely upon language and perception, express but the attitude of man to the Universal Principle, or God. In the dark mind of the savage, where undeveloped

[&]quot;Leaving out the accompanying moral code, which is in all cases a supplementary growth, a religious creed is definable as an a priori theory of the universe. * * * Religions diametrically opposed in their overt dogmas are yet perfectly at one in their conviction that the existence of the world with all it contains and all that surrounds it is a mystery ever pressing for interpretation. On this point, if on no other, there is entire unanimity."—HERBERT SPENCER: "First Principles," pp. 43, 44.

language permits of no extended thought, there is no visible approach to the idea of the divine unity of life. Objects and sensations fill the mind, instead of sentiments and thoughts.

No race seems too degraded to escape, no language too inadequate to express, the belief in a divine mystery. In all the length and breadth of human culture, from the poor Fuegians and Andamans to the philosophers of England, the idea of "an all-pervading mystery" seems to be a constant principle; yet, instead of admitting that this belief is a positive religious principle, we affirm that it is a purely negative phenomenon, or, in other words, the measure of the incapacity alike of the primitive and the civilized man, to form a true conception of God. There can be no safer measure of intellectual and moral development than the extent to which the play of the mind in forming generalizations is interfered with by the belief in mystery. Thus from the Andamans, who alone among the lowest tribes are said to be so degraded as to have scarcely any superstitions, to such intellects as Mill and Spencer, whose only superstition is a belief that the mind is a mystery, we have the greatest extremes of mental development, and also the striking fact that what is commonly called religion has not vet appeared in the former and has practically disappeared in the latter. The intermediate conditions of mind, viewed from our standpoint, are simply different degrees of superstition.

In defining belief with a view to tracing out its beginnings in the race, Mr. C. F. Keary says: "Belief is something besides the recognition of what exists in outward sensation. It is the answering voice of human consciousness, or conscience, to the call of something behind [nature]. ** For what I have only called the recognition of something behind the physical object is, in reality, a worship of the something (or Some One) behind it. ** Perhaps, therefore, if we were pressed for a single and concise definition of that human faculty called belief, which we have taken for our study here,

we could hardly find a better one than this, that it is the 'capacity for worship.' For if you will consider the nature of man you will find that with him it always has been and still is true, that that thing in all his inward or outward world which he sees worthy of worship is essentially the thing in which he believes."

According to this, belief is capacity for worship, and is at the same time a faith in a mystery, or "something behind nature." When in this connection we recall the well-known agnosticism of Mr. Spencer, we have no choice but to conclude that both he and Mr. Keary agree in believing that all worship and therefore all religion, all belief and therefore all knowledge, depend upon a superstition.

The religion of philosophy acknowledges no mystery; it advances a conception of God which declares all mystery to be a species of immorality, an impediment to the appreciation of divine unity. It ranks the superstitions of the lowest races with the belief in an unknowable entertained by so many enlightened minds of the present day, and finds in

both conceptions the same principle of irreligion.

When we find that the poor Fuegians believed in "powers of sorcery, in demons, and in dreams"; that their notion of a future life was confined to an aversion to mentioning the dead; that they had a notion of an actively malevolent power identified probably with "a great black man," supposed to influence the weather according to men's conduct: we deny that these mysterious beliefs constituted their religion any more than the same beliefs which are so general among modern Christians-if we will substitute for the "great black man" a personal God—can be called in the true sense of the word the religion of Christians. For the religion of all men, whatever their condition, is the form which their most general conceptions assume. The question for us then to decide is whether such morality, such right thought and action, as we find in any civilization is not a truer index of its spiritual development, of the growth of

^{1 &}quot;Outlines of Primitive Belief."

true and pure conceptions, than those superstitions which we are accustomed to classify as religious?

This assertion that Religion is the form which the most general conceptions of an individual or a race assume, has been objected to on the ground that by a large class of thinkers science or definite knowledge is the name given to the most general conceptions, and religious conceptions are considered too vague for classification under the head of knowledge. This objection brings up the important question: Can there be any ultimate difference between religious and scientific knowledge?

Knowledge in its broadest sense means life. Human knowledge means human life. There are many who suppose that divine knowledge is entirely distinct from human knowledge, whereas we protest that divine means most general, and that divine knowledge means our most extended generalizations or conceptions. If the man of science denominates all his superstitions, all his vague ideas of origin and destiny, Religion; and all clear and definite conceptions, those of human duty as well as those of other classes of facts, Science; he will, no doubt, object to the statement that Religion is the form which our most general conceptions assume. In fact, he will lose all respect for the word religion; and would, no doubt, define it as the science of mystery, or the unknowable.

But religion, to us, represents something so real, so practical, so elevating, that we would rescue the word from its connection with the supernatural, the mysterious, the unreal; we would have it represent what it really is, the highest phase of human knowledge.

A true philosophy must show that all phases of life and mind are but parts of a whole, it must establish the unification of knowledge.

The zenith of human knowledge is our religion (using the word in its true sense); it is our appreciation of the divine, or the most general.

What we wish to prove, therefore, is that the thoughts

and emotions which accompany right conduct are higher and more general than those conceptions which we call superstitions; that, in a word, a just conception of God is approached more nearly through right action than through the undisciplined efforts of the imagination, however legitimate custom may have made them appear.

We find nothing in the superstitions of the lower races. such as the Fuegians, Andamans, Veddahs, and Australians, which can justify the name of religion, although almost all Christian superstitions have their counterpart in the beliefs of these most degraded of human beings. We see much. however, in the virtues ascribed to these savages, that suggests religious life. Are not the emotions which accompany the chastity, the honesty, and the kindliness found among the lowest savages higher than those emotions which accompany their ignorant dreads? If superstition, or belief in mystery, is but the negative side of religion, is it not in its gradual disappearance that we find true religious development? Has not real religion more to do with conduct than with merely formal beliefs, if a choice must be made? If, as can be demonstrated, Morality increases as superstition disappears, why should we not define religion as morality in its widest sense (i. e. right thought as well as right action), and seek the dawning of religious sentiment in the dawning of moral life?

We have a wealth of data to support the assertion that the religion of each nation is to be estimated by the rectitude of its action and thought. Let us begin with the relation of language to morality. "Philologists may continue long to dispute over the precise origin of language; but philology has brought us so far that there can be now no question that the primitive speech of mankind was of the rudest character, devoid almost utterly of abstract words, unfit for the use of any kind of men save such as were in the earliest stage of thought. It is probably true that the mental and moral attainment of any people, all that shows their progress along the path of civilization, is (in mathematical phrase) in

a direct ratio with the number of their abstract words. If, therefore, the history of language points back to a time when man had no abstractions, what could have been his mental condition then? * * * It belongs to our mental constitution that, without any distinct names for them, we can entertain no clear ideas. Without language to give it form, we can have at the best only the rudiments of thought." 1

Again, it is a well-understood principle in ethics, that our conceptions of right and wrong are limited by the scope of human life; that right means in its deepest sense human, and wrong inhuman. No generalization, however extended, can relieve us from this limitation of duty. Thus our ideals of Justice and Mercy have no appeal from humanity. When an issue arises between the good of our race and any other order of creation, our inability to form ethical conceptions which are independent of humanity becomes apparent.

The scope of language brings us inevitably to the same conclusion; for words all spring at first from physical facts or sensations, and the process of sublimation by which they become abstractions is merely the addition to their original simple meaning of larger and larger applications of the same fact. The word Right, for instance, which is one of our highest abstractions, "had once its place in the physical body, and without the need of any deep philological knowledge we can see what its first meaning was. We at once connect the Latin rectus with porrectus, meaning stretched out or straight. This brings us back to the German recken. to stretch. We therefore get upon the scent of right as meaning first straight, and earlier still stretched,—stretched and straight being originally really the same words,—the straight string being the stretched string. We have further proof, if further proof were wanted, a Greek root, όρεγ ορέγνυσι, ορέγει, with the same significance of stretched or straight: and, finally, we find that all these words are connected with a Sanskrit ari, which means 'to stretch.' What is stretched, then, is straight, and the straight way is the

¹ Keary: "Outlines of Primitive Belief," pp. 6, 9.

right way. (Again) Will (Latin volo, voluntas) is a word which seems remote enough from any physical thing; yet this, too, may be shown to be grounded in sensation. In the first place, will is only the more instantaneous wish, and is connected with the German wählen, to choose, and ultimately with the Sanskrit var, to choose, 'to place, or draw out first.' With this root we must connect the Latin verus, veritas, the Lithuanian and Sclavonic vëpà, věra, 'belief.' Verus, or veritas, is, therefore, what is credible, or, earlier still, the thing chosen; and the old Latin proverb, reduced to its simplest terms, stands thus: 'Great is the thing chosen; it will prevail.'"

In thus tracing to the simplest physical experiences the origin of moral ideas, the favorite theory of a mysterious and inexplicable conscience or moral intuition is removed; and the interdependent development of language and thought is shown to be the first condition of true religious life.

We must, of course, choose, at the very outset of the inquiry, between ceremony and right conduct as the measure of religion, or we shall have no criterion to go by.

We are told that the ancient Mexicans were "most devoted to their religion and persistent in their superstitions." They had numberless deities and a complicated mythology. There were "gods of provinces, classes, trades, vices, etc. *** The chief gods of the main tribes of Mexico appear to be deified men. *** With the Zapotecs, worship of a dead chief is positively ascertained." Worship of animals, elements, and objects in nature, was common, as well as a belief in three distinct heavens and four previous worlds and mankinds. These most elaborate beliefs were accompanied by a vast ecclesiastical organization. "The number of priests among the Mexicans corresponded with the multitude of gods and temples." The priests in the great temple, some historians estimate, were over five thousand, and "there could not have been less than a million priests in the

¹ Keary: "Outlines of Primitive Belief," p. 11.

Mexican Empire." As a counterpart to this vast religioceremonial life, in which human sacrifice was one of the principal features, we find a low grade of morality and mind, an undeveloped language, no thought, no literature. The people were abjectly submissive and very indolent. "They had been accustomed to act only from fear of punishment." They were cruel in war and practised cannibalism (though upon members of other tribes only). "The influence of religion (?) upon their life seems, on the whole, notwith-standing many moral injunctions, to have been a pernicious one, on account of human sacrifices, confessions, and fatalistic doctrines; while apart from religion, the wish to have the good opinion of the tribe was productive of noble deeds." "

The Veddahs of Ceylon, supposed to be the descendants of the aboriginal inhabitants of that island, and who are said to have preserved the same mode of life for thousands of years, are thus described: "They have no idols, offer no sacrifices, pour no libations." They have no knowledge of God, no temples, prayers, or charms; in short, no instinct of worship, except, it is reported, some addiction to ceremonies in order to avert storms and lightning. The only evidence of worship among them is the vague belief in the guardianship of the spirits of the dead. "Every near relative becomes a spirit after death and watches over the welfare of those who are left behind." This belief seems to be universal among savages, and has by no means disappeared among civilized men.

The only religious ceremony which the Veddah performs is to invoke the "shade of the departed." The spirits of children are most frequently called upon. "The most common form of this ceremony is to fix an arrow upright in the ground and dance slowly around it chanting the following invocation, which is almost musical in its rhythm:

" 'Mâ miya, mâ miy, mâ deyâ'!
Topang koyihetti mittigan yandâ'h?'

¹ How much more nearly correct it would be to use the word *superstition* instead of religion!

'My departed one, my departed one, my God!
Where art thou wandering?'"

And yet these benighted wild men are said to be temperate. fond of their children, gentle, mild, and affectionate to one another, rarely guilty of grave crimes. Their conjugal fidelity is remarkable (the more so as their neighbors, the Singhalese, are very loose in this respect); they resent with indignation any reflection on the honor of their women. They are proverbially truthful and honest, and grateful for favors. Murder is almost unknown among them. But we are told they have no language properly so called. communications with one another are made by signs, grimaces, and guttural sounds which bear little or no resemblance to distinct words or systematical language. * * * As may be supposed, the vocabulary of such a barbarous race is very limited. It contains only such phrases as are required to describe the most striking objects of nature, and those which enter into the daily life of the people themselves. So rude and primitive is their dialect, that the most ordinary objects and actions of life are described by quaint paraphrases. As, for example, to walk is 'to beat the ground with hammers'; a child is 'a bud'; the grains of rice are 'round things'; an elephant is not inappropriately termed 'a beast like a mountain."

Thus we are warned against forming any hasty generalizations concerning the interdependence of moral and intellectual development; for we find many savage tribes singularly virtuous and yet entirely without definite speech. But as virtue cannot exist without at least some definiteness of ideas, it would be interesting to know what amount of reasoning is necessary to fix such principles as conjugal fidelity, truthfulness, and honesty in the mind. It is plain that the most primitive language admits of the necessary amount of reasoning, for none of the savage dialects are adequate to express with accuracy any ideas beyond the monotonous details of daily life, and few of them are equal

¹ Spencer's "Descriptive Sociology," Chart No. 3.

even to this. Of the language of the Dyaks it is said: "At a village of the Ida'an, North Borneo, we found the villagers very careless of their pronunciation; for instance, the word 'heavy' was at different times written down magat, bagat, wagat, and ogat; for 'rice,' wagas and ogas; for 'to bathe,' padshu, padsiu, and madsiu, and indifferently pronounced in these various ways by the same people." And yet the fundamental moral sentiments of this tribe seem to be quite definite. The Dyaks "are mainly hospitable, honest, kindly, humane to a degree which well might shame ourselves." Chastity and private morality stand high among them; "infidelity to marriage is an almost unheard-of crime." "Adultery is a crime unknown, and no Dyak (Land) ever recollected an instance of its occurrence."

We may read the history of the Christian nations in vain for such an assertion; and yet how can we compare the complexity, the definiteness, and the beauty of the languages of Europe with the dialects of the Malays or the lowest races?

Guizot tells us that the great distinguishing feature of European civilization is its vast complexity of motives, its juxtaposition of many and different types of a political, social, moral, and religious character; and that this cauldron of conflicting activities has been seething and bubbling through the dark ages, the crusades, the revival of learning, the wars of the Reformation, and the French and the English revolutions, until something morally great will yet result from it.

Does the present attitude which the nations of Europe preserve toward one another warrant this prediction? Is there any thing in the relations of the great Christian nations which promises a cessation of the discords of our civilization, which promises that equanimity, that balance of forces, which alone can secure human happiness? Let it be our aim to discover in what degree the imperfections of language account for the confusion in beliefs and sentiments which we see about us. We cannot consider ourselves

¹ See Boyle's "Borneo."

² Low's "Sarawak,"

much above savages until we put aside savage imperfections of thought and feeling, and at least agree upon a definition of Life and of God.

No one can read the chapters on Animism in Tylor's "Primitive Culture" without being convinced that all savages and almost all civilized men believe in some form of spiritual apparition or ghostly existence. From the negroes of South Guinea, who are such dreamers and believers in dreams that they have no control over their imaginations, uttering falsehoods without intention and being unable to distinguish the real from the ideal, to the German philosopher who declares that the real is the ideal: from the Tagals of Luzon, who object to waking a sleeper on account of the absence of his soul during sleep, to the Christian Father St. Augustine, who devoutly believed in the reality of the phantastic images of his dreams; we have in our habits of thought and in our language a clear inheritance of this childish and savage belief in the existence of another self. The doctrine of the immortality of the soul is but another form of this same belief, and it so clings to us that those who reject it on the highest philosophical and moral grounds are regarded as unable to appreciate the full importance and significance of life: as though to postulate a *super*natural existence could magnify or ennoble in any degree the facts of actual life.

The savage belief in ghosts or shades is carefully taught in all our theological seminaries, not excepting the Unitarian seats of learning. It takes the form of a faith in the reality of the hosts of heaven, which, as nearly as we can learn, are supposed to be the surviving spirits of mortals of diverse ages and civilizations who dwell in the cosmical vicinity of a personal God.

To revert to other nations for a counterpart of this superstition about the impossible subdivisions of personality, we have "the distinction which the ancient Egyptians seem to have made in the Ritual of the Dead between the man's ba, akh, ka, khaba, translated by Mr. Birch as his 'soul,' 'mind,' 'existence,' 'shade'; or the Rabbinical division into what may be roughly described as the bodily, spiritual, and celestial souls; or the distinction between the emanative and genetic souls in Hindu philosophy; or the distribution of life, apparition, ancestral spirit, among the three souls of the Chinese; or the demarcations of the nous, psyche, and pneuma, or of the anima and animus; or the famous classic and mediæval theories of the vegetal, sensitive, and rational souls."

We notice in the Sociological Charts containing the compilations of facts of this order, classified by Herbert Spencer, that the columns devoted to what are commonly called the religious ideas of the lower races, the Malayo-Polynesian, the North and the South American, the African, and the Asiatic races, are all headed by the word "Superstitions," while the columns of similar data belonging to the ancient Mexicans, the Central Americans, the Peruvians, the Hebrews, the Phænicians, the English, and the French races are dignified by the name of "Religious Ideas." In this distinction we see the universal tendency to call those superstitions *religious* which most resemble our own religion.

The writing of these lines was interrupted by a visit to a Unitarian church, whose pastor is famed for his scientific acquirements. He is widely acknowledged to be a man of liberal attainments and fine moral perceptions. He preaches from a pulpit which is supposed to be entirely untrammelled by dogma of any kind. His discourse was upon the parentage and life of Jesus. He declared his belief that the great moral reformer of Galilee was born naturally; and enlarged beautifully upon the sanctity and purity of the marital relation, against which all the asceticism of Christianity is a direct attack. He then spoke of the interest that the heavenly hosts took in the birth of Jesus; and continued fluently to discourse about the angels, who, he said, take an interest in our lives and actually rejoice when we do right and weep when we sin. He spoke of God as hearing and seeing us

¹ Tylor's "Primitive Culture," vol. I., p. 435.

and enjoying all the advantages of the human senses and emotions. He said, Jesus was not asleep in Nazareth, but looking upon us with open eyes and taking an active interest in our daily existence.

In listening to this sermon I could not help wondering what sort of immortals the poor Veddahs and Dyaks were, and whether their uncultivated morality was appreciated in paradise: whether the twenty thousand human victims sacrificed in the ancient Mexican Empire in a single year had, by virtue of their death, any privileges in heaven; and above all, whether the knowledge of God which the angels enjoy depended upon an earthly or a seraphic dialect for its development. I could not help thinking that if, in America, in this century, cultivated and liberal people are satisfied with such logical co-ordinations as a discourse upon angels and a distinctly human God, our language, with all its resources, is little better than the drivelling speech of the Veddahs and the Dyaks, and that little more can be expected from its use in the way of morality than from the inarticulate mumblings of these degraded races. Should not a reform in the higher functions of language, or the use of general terms, which would be sufficiently deep to insure any visible moral improvement in our nation, be of necessity so widespread that our little children would be able to classify a discourse on angels and a personal God with the stories of giants and invisible princes with which they are so harmlessly entertained?

How is truth to be acted until it is more perfectly thought? How can logical crimes be detected while our speech is so slovenly that such distinct principles as general and individual existence can be hopelessly entangled without exciting the attention of minds that rank far above the average?

The "Religious Ideas" of the Hebrews of the pre-Egyptian and Egyptian periods are described as follows: "They believed in revelations by way of dreams. The dead were supposed to meet their kindred in the grave. A plural form

(Elohim) indicates a polytheistic belief. El Shadâi ('the powerful') revealed himself to Abraham." There were "sacred stones, trees, and groves. Teraphim ('the enriching ones') were a sort of household gods. Many gods (probably those of the several Semitic tribes assembled in Goshen) were worshipped. Yahveh (a name of doubtful etymological meaning) revealed himself as the God of Israel to Moses. * * In the period of wanderings, a motley variety of religious phenomena prevailed. There were tribes, but no nation. The names of tribal deities are perhaps preserved in the names of some tribes. Moses conceived Yahveh in a moral spirit; he objected to the bull worship, yet he made a brazen serpent (nehushtan). * * * After the establishment in Palestine the Israelitish tribes adopted Canaanitish ideas and practices (Baal, Ashera). Yet Yahveh was regarded as the God of Israel and Israel as the people of Yahveh (i. e. he was supposed to be one of many gods)."

It was during the period of the Two Kingdoms that the belief in hosts of angels seems to have grown up in Israel; and, strange to say, it was about this time that the notion of Satan, "a special evil spirit set apart," "the accuser of mankind," gained possession of the popular mind. The belief in ghosts, spectres, and powerful men, and the worship of ancestors, are abundantly instanced in the Hebrew Scriptures, and show us how faithfully all the lower orders of superstition were reproduced in the Hebrew mind. "Down to the exile it evidently was quite common to conjure the dead chiefs, and to imitate by ventriloquistic tricks the chirping voice of the dwellers of the air, and the groaning one of those residing in the underworld."

"And when they say unto you, 'Consult the ghost-seers and the wizards, that chirp and that mutter; should not people consult their gods, even the dead (métîm), on behalf of the living?' Hearken not unto them."

"Nor did the Hebrews remain strangers to the belief in demons and spectres; they professed their faith in the existence of *Shedim*, that is, *lords* or *masters*, implying various

kinds of foreign deities or evil spirits; and to them they not only offered sacrifices (Deut. xxxii., 17), but slaughtered their children (Ps. cvi., 37); they attributed reality to the *Lilith*, a night-spectre, dwelling in desolate ruins (Isa. xxxiv., 14), and, according to Eastern legends, rushing forth in the dead of the night, in the form of a beautiful woman, to seize children and to tear them to pieces."

We have no difficulty, therefore, in tracing back to the Hebrews many of the absurd superstitions which lurk in the Christian faith. But we have good reason to feel discouraged when we find a prominent minister of the only Christian sect which makes any pretensions to a true literary spirit (a true appreciation of human history), discoursing about the angels in heaven and a personal God, and actually worshipping the shade of a Hebrew prophet.

. We are also at a loss to know why the "Religious Ideas" of the Hebrews should not be classed with the "Superstitions" of other nations, unless it be that their accompanying ecclesiastical organization entitles them to rank with the established religions of the Asiatics, the Egyptians, and the ancient Mexicans

We look in vain among the superstitions of the Asiatic tribes for any thing more gross than the religious ideas of the Hebrews contained. That universal ancestor-worship unconsciously carried on by Christians is everywhere apparent. The dead chief has given way to the personal God of Abraham, of Isaac, and of Jacob, or the Yahveh of Moses; fetich worship has risen from the familiar earth to heaven, where our dead ancestors and children live praising the Lord of Hosts. We do not lay food and arms on the graves of the departed, but we preserve the generic descendant of this ceremony in the Eucharist. Instead of sacrificing upon tombs we build altars in churches, and bury our dead around the sacred edifice. Hardly a bell tolls in the Christian world but we simulate to ourselves a human sacri-

¹ For above quotations see Spencer's "Descriptive Sociology," book VII., part 2. B. Hebrews and Phoenicians.

fice, "Christ shedding his blood for the redemption of mankind"; and we wonder at the ancient Mexicans, who merely carried the same idea into practice.

We teach our children all sorts of distorted ideas about nature, which would be childish if they were not criminal; we pervert their natural intuitions of justice and humanity by absurd doctrines of mystical retribution, unnatural pardon and cancellation of sin; the most savage notions of a great spirit are perpetuated in the doctrine of a special providence whose purposes are past judgment. Then we classify the idolatrous and blood-thirsty Hebrews and ourselves as *religious*; we extend the courtesy of the same classification, with certain reservations, to the ancient Mexicans, and to some of the Asiatics and the Egyptians; but all the other ancestor-worshippers, to whom we owe almost every religious notion which we possess, we relegate to the baser level of *superstition*.

With all our railroads, steamships, and telegraphs, our schools and universities, our halls of justice and legislation,—to say nothing of our priests and churches,—we do not possess the average morality of the Dyaks or the humanity of the Veddahs. With all our boasted intelligence, language, and religion, we are unable to bring the individual up to as high a level of chastity, of honesty, and of general virtue, as that occupied by these pitiable tribes of primitive men and women. The reason is, that we are unwilling to believe that there can be any real progress which does not rest upon morality, any justice which does not point to the divine unity of life, any humanity or religion which does not rise above the conception of a personal God.

We are puzzled to define the term civilization, because we find in the midst of our vaunted progress the lowest orders of superstition, the most primitive conceptions of life and duty; and we are thus unable to distinguish that religion which should be our most glorious achievement from the childish beliefs of savages. Until we have so developed our language as to place beyond the pale of possibility a return to these barbarisms of thought and feeling, are we not in danger of handing down the vast structures of our civilization as mere monuments of failure to the races to come?

Thus we see that the darkness in which the primitive man groped yields nothing to modern research excepting the picture of his feeble generalizations, his first efforts to understand himself and nature, which are given in his rude virtues and his ruder superstitions.

Upon the supposition that the religion of a people is the portraval of their most general conceptions can be built up a complete theory of Knowledge; but it is important to remember that language is the mind of society, and that in relatively advanced nations there can be found what might be called a high-water mark of induction, a highest logical achievement, to which the tides of humanity make but a distant approach. Until the researches of Sir William Iones. in the year 1783, and of those who followed him in the study of Sanskrit, the religious thought of ancient India was a Through the insensible growth blank to the modern world. of language the venerable philosophy, the best thought and feeling, of an ancient people has been safely conveyed over the boundaries of race and language into the very heart of The translations of Sanskrit seemed like a flood of new light to Christendom, but it was only the uncovering of an old mine which humanity had worked out ages before, and whose glittering gems have been worn ever since, descending as heirlooms through long generations. A great truth, a refined sentiment, can be expressed in any civilized tongue; languages may be forgotten and rediscovered; but these facts of existence live on through the changes of race and speech, each age reproducing them with unfailing accuracy. Observe, in proof of this, the dreadful monotony of metaphysics. Read Plato, the writings of the Alexandrians. the Christian theologians from the time of the Scholastics to the present day, decipher Kant and Hegel; then turn to the oldest Indian philosophy, the oldest Egyptian speculations, as they appear in the religions of these countries; and we

find the same struggle over being and non-being, spiritual essence and material form; the same attempted difference between time and eternity; the same divine unity, one and eternal, contrasted with the changing variety of the senses. The communication of these thoughts from one nation to another has been an insensible process, which has in nowise waited for the rediscovery of languages or the new literary criticism of our day. But if language has preserved all these truths and subjected them to that development which can alone come from the general progress of knowledge, or the growth of morality, how are we to account for the apparently fixed and unyielding form which the higher speculations have assumed? Why is it that German, French, and English speculations have not surpassed in metaphysical insight the best thought of Egypt, India, and Greece? Are the people who embody the teachings of Kant, Descartes, and Spencer to be compared to those who designed the pyramids, wrote the Vedas, or questioned the Delphic Oracle? these nations to be compared?

The difference between civilizations is best portrayed by a comparison of the KNOWLEDGE of the respective races; but when the term knowledge is identified with life, the comparison is lost in receding equations. When, however, we put the proposition in a religious form, it will readily gain acceptance; for the assertion that races and civilizations are to be measured by the spread of the divine spirit among them, by the quality and extent of their knowledge of God, is a truism for all devout minds.

Our proposition, then, is, that the completeness and symmetry with which a nation has performed that great induction which leads from particulars to generals, from the lowest forms of sentiency to the highest generalizations, is the only true measure of its life.

If we would rise above the past, therefore, if we would place a permanent distinction between our civilization and that of the lowest savages, or the great intermediate races, we must improve our language so that its most general terms will cease to be employed as the vehicle of superstition and mysteries. The question then arises: Can such an understanding of language be made to harmonize with any existing religion? Will not such light as this prove fatal to Christianity? In order to answer this question, it will be necessary to glance at the most prominent facts of general religious history with a view to ascertaining the immediate origin of our religious beliefs.

CHAPTER XVIII.

THE RELIGIONS OF EGYPT AND INDIA.

In Egypt the Belief in Immortality Reached its Highest Development—Mysticism and Idealism.

THE Egyptians were the most pious people of antiquity. They seem to have expended more time and energy in religious observances, and to have had a more realistic conception of a future life, than any other race. Their writings, says M. Maury, "are full of sacred symbols and allusions to divine myths, perfectly useless apart from the Egyptian religion. Literature and the sciences were only branches of the theology, while its books formed a sacred code, supposed to be the work of the god Thoth, likened by the Greeks to their Hermes. The arts were only practised to add to the worship and glorification of the gods or deified kings.

"The religious observances were so numerous and so imperative that it was impossible to practise a profession, to prepare food, or to attend to the simplest daily needs without constantly calling to mind the rules established by the priests. Each province had its special gods, its particular rights, its sacred animals. Neither the dominion of the Persians, nor that of the Ptolemies, nor that of the Romans, was able to change this antique religion of the Pharaohs; of all polytheisms, it opposed the most obstinate resistance to Christianity, and continued to live on up to the sixth century of our era. It is because the Egyptian religion had penetrated so deeply into the mind of the people and the customs of the country, that it became, so to speak, a part of the intellectual and physical organization of the race."

Alfred Maury: Revue des Deux Mondes, Sept., 1867.

The animal-worship of the Egyptians, which is the term generally applied to their religion, was, of course, a form of idolatry, but a far less materialistic form than is generally supposed. The priests of the early dynasties taught (before the practice of image-worship had grown up) that their conception of the God of the universe could not be expressed by any image made by hands, and that they therefore preferred to take a living creature to symbolize the power and wisdom of the Creator,—a singularly pure and beautiful idea. conception of God as a person having human form and feelings, exercising a divine will in his government of all nature, and loving, punishing, forgiving, and caring for his children, is surely as near an approach to making an image of God as was the practice of setting up living creatures as symbols of certain divine attributes. Where, after all, shall we find a religion without idolatry? Our very words and thoughts are symbols. Even to say that God is the universal principle, is to symbolize the most general fact, to create a sign that will call up this conception in the minds of others.

Speaking of the innumerable gods of the Egyptians and of the vast machinery of worship which they carried on, Mr. Clarke says: "Every day has its festival, every town its god and temple. Sacrifices, prayers, incense, processions, begin and close the year. The deities, we discover, are innumerable. Great triads of gods, superior to the rest, are worshipped under different names in the different provinces. Every year the festivals of Osiris and Isis renew the mourning for the Divine Sufferer, and joy at his resurrection. The tombs are resplendent with mosaics and brilliantly colored paintings. The dead are more cared for than the living; their resting-places are carved out of solid rock and filled with rich furniture and ornaments. One supreme being, above all other deities, is worshipped as the maker and preserver of all things." 1

So vast a subject as the morality of a nation whose existence can be traced back for seven thousand years would be

^{1 &}quot; Ten Great Religions," vol. II., p. 7.

hazardous to deal with in any but the most general manner. After the fifth dynasty a great calamity seems to have fallen upon the people which destroyed for a time their civilization. This calamity was probably a nomadic invasion, and must have revolutionized the whole national life. It is difficult, therefore, to select moral characteristics which survive throughout such sweeping changes in a nation's existence.

All authors agree that the notions of divine existence, the ideas of the lives of the gods, and the general tenor of prayer or the manner of addressing the gods, indicate a singular purity of life in ancient Egypt.

Bonwick says: "An entire confidence in the goodness and integrity of their deities is the most pleasing attribute of the Egyptian mind. No Greek could trust his lying, treacherous, unstable, and immoral gods.

"On a tomb of the eleventh dynasty, B.C. 3000, the deceased is made to say: 'I have ever kept from sin, I have been truth itself on the earth. Make me luminous in the skies! Make me justified! May my soul prosper!' Upon a papyrus we read this touching appeal: 'My god! My god! O that thou wouldst show me the true god!' * * *

"A prophet of Osiris says: 'I have venerated my father. I have respected my mother. I have loved my brothers. I have done nothing evil against them during my life on earth. I have protected the poor against the powerful. I have given hospitality to every one. I have been benevolent, and loving the (?) gods. I have cherished my friends, and my hand has been open to him who had nothing. I have loved truth, and hated a lie.' * * *

"A prayer from their Scriptures—the Ritual for the Dead—gives a part of the confession the soul must make after death. * * * The 125th chapter of the Ritual contains this: 'Homage to thee, great god, lord of truth and justice! I am come to thee, O my master. I present myself to thee, and contemplate thy perfecting. I know you, lord of truth and justice. I have brought you the truth. I have committed no fraud against men. I have not tormented the widow. I

have not lied in the tribunal. I know not lies. I have not done any prohibited thing. I have not commanded my workman to do more than he could do. I have not been idle. I have not made others weep. I have not made fraudulent gains. I have not altered the grain-measure. I have not falsified the equilibrium of the balance. I have not taken away the milk from the foster-child. I have not driven sacred beasts from the pastures. I am pure. I am pure.'"

Again Mr. Clarke thus testifies to the morality of the Egyptians: "Many of the virtues which we are apt to suppose a monopoly of Christian culture appear as the ideal of these old Egyptians. Brugsch says a thousand voices from the tombs of Egypt declare this. One inscription in Upper Egypt says: 'He loved his father, he honored his mother, he loved his brethren, and never went from his home in bad temper. He never preferred the great man to the low one.' Another says: 'I was a wise man, my soul loved God. I was a brother to the great men and a father to the humble ones, and never was a mischief-maker.' An inscription at Sais, on the tomb of a priest who lived in the sad days of Cambyses, says: 'I honored my father, I esteemed my mother, I loved my brothers. I found graves for the unburied dead. I instructed little children. I took care of orphans as though they were my own children. For great misfortunes were on Egypt in my time, and on this city of Sais.' * * * The following inscription is from the tombs of Ben-Hassen, over a Nomad Prince: 'What I have done I will say. My goodness and my kindness were ample. I never oppressed the fatherless nor the widow. I did not treat cruelly the fishermen, the shepherds, or the poor laborers. There was nowhere in my time hunger or want; for I cultivated all my fields, far and near, in order that their inhabitants might have food. I never preferred the great and powerful to the humble and poor, but did equal justice to all.' A king's tomb at Thebes

^{1&}quot; Egyptian Belief and Modern Thought."

gives us in few words the religious creed of a Pharaoh, which Moses seems hardly to have appreciated: 'I lived in truth, and fed my soul with justice. What I did to men was done in peace, and how I loved God, God and my heart well know. I have given bread to the hungry, water to the thirsty, clothes to the naked, and a shelter to the stranger. I honored the gods with sacrifices, and the dead with offerings. A rock at Lycopolis pleads for an ancient ruler in the same unmistakable tones. Hundreds of stones in Egypt announce, as the best gifts which the gods can bestow on their favorites, 'the respect of men and the love of women.'"

Thus we see that the morality of the Egyptians had the same direct and simple source as that of other races, namely, those perceptions of justice and purity which are engendered by measuring the feelings of others by our own.

The daily life of the Egyptian people seems to have been a physical expression of their theology. Certain days in the year were set apart for observances which corresponded to events in the lives of their gods. "In an old papyrus described by De Rougé it is said: 'On the twelfth of Choràk no one is to go out of doors, for on that day the transformation of Osiris into the bird Wennu took place. On the fourteenth of Toby no voluptuous songs must be listened to, for Isis and Nepthys bewail Osiris on that day. On the third of Mechir no one can go on a journey, because Set then began a war.'"

The theology of Egypt indicates a great depth of thought. The whole nation seemed to be physically employed in illustrating its conceptions; but the vast majority were as unconscious of the meaning of their religion as the physiological units in a human organism are unconscious of the genius of the life in which they take part. A great system of myths and superstitions had grown up during an immeasurable past. The best minds, no doubt, were able to decipher in all this a great thought, a commanding general-

¹ See "Ten Great Religions," pp. 221, 222.

ization; but the majority of the priests and the people, as in our day, were content with the symbols, and never went beyond them. The mysteries which the priests so carefully guarded were connected with their scientific knowledge, and were not unmixed with the art of magic, hence the awe with which the people regarded them.

In the Egyptian theology there were two branches or departments.—the esoteric or internal, and the exoteric or ex-The former was an interpretation of nature and life which the priests built up among themselves; it exhibited remarkable knowledge and philosophic insight; but, probably for the want of a better language, it was for the most part expressed in the form of deities and their attributes. We can judge of the penetration of these inquiries from the fact that they included among others the theory that "Matter is but the rotating portions of something which fills the whole of space." The latter was the more concrete and fabulous form of religion taught to the people, and which was suited to their understanding. There must have been a great disparity of intelligence even among the priests themselves. In witness of which mark the incongruity between their best inductions and the clumsy symbolism in which we find them expressed.

Not to dwell too long on the complex subject of Egyptian theology, suffice it to say that there were three orders of gods, which corresponded to three orders of interpretation of nature. The first dealt with general principles, and manifested a remarkable power of analysis. The second and third orders of gods descended from general principles to particulars, and became thoroughly anthropomorphic, assuming the minutest details of human life.

Looking at the history of Egypt from a distance, the most striking features are the pyramid-building age, chiefly confined to the fourth dynasty, and the reign of Rameses II., the most brilliant epoch of the Empire. Since Champollion (1822) deciphered the hieroglyphic inscriptions, the greatest archæological discovery of modern times, the history of Egypt has gradually unfolded itself until a dim outline is

discerned; but scarcely more than this can vet be claimed. The fact that the most ancient writers of the Egyptians regarded time in the cyclical light, fixing no era from which to reckon events, makes it almost impossible to arrive at any definite dates until the historical age is fairly begun by other nations. It is generally conceded that at least four thousand years would have been necessary for the development of the civilization which appeared in Egypt at the beginning of the fourth dynasty, when the Great Pyramid was built by Ages before this. Menes emerges from the mythological period, the age of divine reigns which precedes the beginning of Egyptian history. It is agreed by all Egyptologists, however, that Menes is no legendary personage, but that he founded the Egyptian state by uniting its many parts into one nation, and that he began the building of the city of Memphis.

The first dynasty, beginning with the reign of Menes, is estimated by Mariette Bey as 5004 B.C., and by Professor Lepsius as 3892 B.C. The reign of twenty-six dynasties, or families of kings, is counted from Menes to the conquest of Egypt by the Persians; but owing to the division of the nation into as many as five kingdoms, these dynasties were not consecutive, several royal families during certain periods reigning at the same time. When the Assyrian Empire fell, the Egyptians regained their independence under the Theban Amenophis, who became king of the whole country, and founded the eighteenth dynasty. But the nation was soon again conquered by Nebuchadnezzar, and paid tribute to the Babylonians until Egypt was absorbed by the Persian Empire. Previous to this the separate kingdoms had been overcome one by one by the invasion of a race of nomads, which resulted in the rule of the Shepherd Kings, during which Egyptian civilization suffered a long decline. It is in the reign of the last shepherd king that Joseph, who is acknowledged to be an historical character, is supposed to have been in power.

It is almost impossible to obtain reliable details of the

sojourn and oppression of the Hebrews in Egypt and their subsequent exodus. The legend, as it appears in the sacred writings of the Jews, is one side of the story, which is generally admitted by scholars to be highly colored and largely fanciful; while from the detached references to the event gathered from Egyptian inscriptions and other sources, it is difficult to give to it any thing like the coherency and relative historical importance which it assumes in the Hebrew chronicles.

The theology of Egypt centres about the myth of Osiris. which seems to be the oldest religious story in the world. Five thousand years before the beginning of our era. Osiris. a mythological king of Egypt, was worshipped after reigning upon the earth, where he left such a remembrance of his beneficence that he became the type of goodness, the chief moral ideal of the Egyptians. He was betrayed, suffered temporary death, ascended into heaven, where he became the judge of the quick and the dead. The Greek author Athenagoras "laughed gaily at the Egyptian absurdity of weeping for the death of their god, then rejoicing at his resurrection, and afterward sacrificing to him as a divinity." Bonwick says, in speaking of Osiris: "It is idle for us, at this distance of time, to talk of him as a solar myth, or a refined intellectualism of the Egyptians; he was a person who had lived and died. They had no manner of doubt about it. Did they not know his birthplace? Did they not celebrate his birth by the most elaborate ceremonies, with cradle, lights, etc.? Did they not hold his tomb at Abydos? Did they not annually celebrate at the Holy Sepulchre his resurrection? Did they not commemorate his death by the Eucharist, eating the Sacred Cake, after it had been consecrated by the priests, and become veritable flesh of his flesh?" The solemn strains of the Roman Miserere are but the echoes of the Egyptian dirges representing the grief of Isis. This devoted wife of Osiris, the chief maternal goddess of Egypt, seeks her lost husband round the world and

^{1 &}quot;Egyptian Belief and Modern Thought," p. 162.

through the regions of death. When she has at last recovered his remains, her tears and prayers revive him, and the faithful wife miraculously conceives a son. Then she flees with her unborn babe from pursuing enemies. Some say that she was caught up by the sun, others that she bore and suckled the babe Horus in loneliness. Thus Horus, begotten and born after death through tears and prayers, is but the living incarnation of Osiris. Horus was the Egyptian saviour of humanity. He was born in winter, and the annual festivals in celebration of his birth were the beginning of our Christmas rejoicings. This beloved god was the last of the long line of divine rulers, and he was followed by Menes, the first historical king.

Isis, the mother of Horus, who was worshipped six thousand years ago, was styled by the Egyptians, "'Our Lady, the 'Queen of Heaven,' 'Star of the Sea,' 'Governess.' 'Earth Mother,' 'Rose,' 'Tower,' 'Mother of God,' 'Saviour of Souls,' 'Intercessor,' 'Sanctifier,' 'Immaculate Virgin,' etc. * * * In the story of her love and devotion to Osiris there is a pathos and a tenderness that speak well for the domestic virtues of the Egyptian people who invented and cherished the myth. Only those who believed in faithful wives and honored women could have exhibited so noble a specimen of female goodness as seen in their chief divinity. * * * In an ancient Christian work, called the 'Chronicle of Alexandria,' occurs the following: 'Watch how Egypt has consecrated the childbirth of a virgin, and the birth of her son, who was exposed in a crib to the adoration of the people. King Ptolemy having asked the reason of this usage, the Egyptians answered him that it was a mystery taught to their fathers." "1

It is generally conceded by Egyptologists that Isis is the Virgo of the zodiac. "One sees," says the Arabian writer, Abulmazar, "in the first Decan of the sign of the Virgin, according to the most ancient traditions of the Persians, Chaldeans, Egyptians, of Hermes, and of Esculapius, a

^{1&}quot; Egyptian Belief and Modern Thought," pp. 141, 143.

chaste, pure, immaculate virgin, of a beautiful figure and an agreeable face, having an air of modesty, holding in her hand two ears of corn, seated on a throne, nourishing and suckling a young child."

Thus, as most of the original Christian theology was formulated in Alexandria, we see in its symbols but a reproduction of the mythology of Egypt. As Isis was carried to heaven by her son Horus, so "the virgin Mary was declared to have been carried there by her glorified son." The immaculate conception, the symbols of the cradle and the cross, the ceremony of the last supper, the death, the resurrection, the ascension, and in fact the whole scheme of Christian salvation, have counterparts in the superstitions of ancient Egypt. As the Egyptians were undoubtedly the first historic people, in the mythologies of all other nations we trace a likeness to their beliefs; just such a likeness as it is natural to suppose was disseminated by the slow intercourse of the earliest races of the world. All superstitions are merely exaggerations of human experiences, consisting for the most part of the incidents of family life. This is the reason why religion is said to be an emotional government, as its beliefs spring from the childhood of our race, in which the emotions have ascendancy over thought.

The only emotions which we can trust are moral emotions; and if we deprive our sacred beliefs of every thing that thought cannot approve of and morality can dispense with, superstitions disappear and the religion of Philosophy alone remains. Could a greater service be rendered to humanity than to relieve it of the slavery of its hoary superstitions?

The monuments of Egypt teach the same lesson of mysterious beliefs. Notwithstanding the incalculable amount of toil which they represent, they are almost wholly the work of superstition, and therefore have contributed little or nothing to the well-being of the race that built them. Such vast structures as the pyramids of Ghizeh or the temples at Karnac must have been national undertakings; and so far

removed were they from the useful, that their construction must have meant the practical enslavement of large classes of the population. It is difficult to imagine a state of society in which labor could have been sufficiently redundant to explain these enormous ideal enterprises in any other way. The great public works of China and the Roman Empire were national movements, but they were for the public good: the building of the pyramids and temples of Egypt, and the vast religious industry of the nation, on the contrary, must have inflicted grievous burdens upon the people; illustrating in a striking manner what superstition has cost the world.

The literary monuments of this people only repeat the same evidence. The antiquity of the Egyptian Bible is perhaps the most wonderful fact connected with this oldest of nations. Portions of these sacred writings are said to have been written seven thousand years ago. As now collected, they consist chiefly of a ritual of worship for the guidance of the priests, and a "code of existence in the other world." Deveria says: "Not only under the reign of Men-ka-râ, the builder of the Third Pyramid, but even under the fifth king of the first dynasty, certain parts of the sacred book were already discovered, as antiquities, of which the tradition had been lost." At the Turin Museum is a copy of this wonderful prehistoric "Book of the Dead." "It covers one side of the wall. Though in four pieces, it may altogether measure nearly three hundred feet in length. The breadth of the papyrus is from twelve to fifteen inches. Parts are, however, incomplete or obscured by age. * * * Thereon one seems to have the whole Egyptian theology at a glance. Though there is every reason to believe the greater part of the people were at least as well educated in reading as Europeans at the beginning of this century, yet the perpetual pictorial display could not fail to be instructive to those unable to make out the text. The Scriptures must have been well known, as copies of chapters are found by the thousand on the persons of mummies themselves, and on the walls of

the thousands of tombs, which would not have been the case were the living majority unable to read." 1

The doctrine of the immortality of the soul is supposed to have been first elaborated in Egypt. The whole religion of this first civilization is but a mystic reflection of actual life in the form of a resurrected existence, and yet, there is not a single fact of life or mind that can lend reality to this vast dream of futurity. The belief in the immortality of the soul has the combined authority of almost every religion the world has ever known, and yet it is not only a mistaken belief, but in common with all other superstitions it has a demoralizing influence upon life.

But how can we hope to overcome such religious superstitions, which rest upon mysteries, while even science and philosophy cling to the belief that all facts centre in an ultimate mystery or the great unknowable? It would be difficult to find in this century of intellectual progress a scientist or a thinker who does not believe the First Cause to be an unfathomable mystery; and yet belief in any order of ultimate mystery is a self-contradiction just as flagrant as that which is implied in the word unknowable. It disregards the limits of language and the nature of perception, and denies the possibility of the unification of knowledge.

Almost every form of mystery can be traced to Egypt. The solemn symbolisms of Freemasonry, which are but efforts to give expression to divine truths, the art of magic, which has been almost wholly associated with religion, and the mystery of immortality upon which all religious superstitions depend, have all apparently come to life in Egypt. Although a belief in magic is widely conceded, in our time, to be not only false but vulgar, Christianity has been closely associated with the "mystic art." The rite of baptism, the different degrees of superstition connected with the Lord's Supper, the belief in the power of prayer to convert souls, to cure sickness, and to obtain forgiveness of sins; the consecration of priests and churches,

^{1&}quot; Egyptian Belief and Modern Thought," pp. 188, 189.

and even the ceremony of benediction, are all forms of belief in the magical or the supernatural. The life of Jesus is full of instances of the same order of belief. It is true that the more recent development of the black art known as Demonology had an Eastern origin and was unknown on the Nile, but the one hundred thousand witches "said to have been destroyed in Protestant churches alone" show that Christianity was not inhospitable even to this innovation.

In a word, the belief in any form of mystery, from the metaphysical tenet of "an unknowable" to all manner of religious superstition, is diametrically opposed to the higher appreciations of human life. To overcome this insidious error is the first condition to the establishment of a true conception of God. The foregoing glance at the beliefs of Egypt, therefore, is intended but to give an idea of the form which this error assumed in the earliest civilization, so that we may recognize it as it reappears in the religions of other nations.

We may now turn to another but almost equally ancient faith.

The study of the civilizations of India, China, and Japan is excluded from the range of what is generally termed ancient history, because these nations were but little known to the Greeks, who originated history for us. It is principally through modern research that such knowledge as we have of the life of these nations has been obtained. study of Sanskrit, begun by the English scholars at Calcutta during the early part of this century, has developed so rapidly that now nearly all the important universities of the world have established professorships of this language. It is through the efforts of these students of oriental languages that we are enabled to trace out the history of India and the East, which a short time ago was a blank to the outer world. The literature of India, although very voluminous, is utterly devoid of historical data. Consisting of poems, mythology, and sacred books, "no piece of

chronicle, no list of kings," breaks the monotony of these emotional and abstract writings, and we are left to discern the moral character of the people of India, to judge of the thoughts and feelings of this great race, through the agency of fable. These fables consist of a philosophy susceptible of the deepest interpretations, strangely mixed with the most elaborate, grotesque, and even brutal idolatry, and a vast mythology, the joint fruit of widespread religious sentiment and a gorgeous and unrestrained imagination.

It is by a recent movement in science, that the origin of the Hindoo people, which was of late supposed to be undiscoverable, has been made familiar to the reading world. As early as the sixteenth century. Renan tells us, it was discovered that the Hebrews, the Phænicians, the Carthaginians, the Syrians, Babylon, from a certain period at least, the Arabs, the Abyssinians, spoke languages wholly cognate. "Eichhorn, in the last century, proposed to call these languages Semitic, and this name, inexact as it is, may as well be retained. * * * The philologists of Germany, Bopp in particular, laid down sure principles, by means of which it was demonstrated that the ancient idioms of Brahmanic India, the different dialects of Persia, the Armenian, many dialects of the Caucasus, the Greek and Latin languages, with their derivatives, the Sclavic languages, the Germanic, the Celtic, formed a vast whole radically distinct from the Semitic group, and this they called Indo-Germanic, or Indo-European."

This division of the principal nations of the world into two great groups, however, relies upon more than the generic development of languages; the same division is disclosed by a comparison of their respective literatures, customs, institutions, governments and religions. Thus we see that the philosophy of history, great as are its achievements, has scarcely begun the work of portraying the conditions which are to explain human development.

The Aryans, to which name the modern *Ivan* for Persia and the ancient *Ariana* for the region about the Indus are traced, occupied those vast plains in Asia lying east of the

Caspian Sea. The division of this primitive race of warlike shepherds into the family of Indo-European nations must have been very gradual, as the results of their early migrations are to be seen in the first dynasties of Egypt, a period varying from one to two thousand years before the time at which the Aryans are supposed to have lost their identity in the formation of other nations.

The castes into which the Hindoo nation has been so firmly crystallized are, first and highest, the Brahmans, or priestly class, a spiritual aristocracy, which, viewed from every standpoint, is beyond question the most wonderful social phenomenon presented by our race. Beneath them are graded the landed military class, the commercial and agricultural, and the servile classes, and the social status of each is minutely provided for in the Vedic law, forming a civilization entirely unique.

The oldest works in the Hindoo literature are the Vedas, which, like all the earliest writings of the world, are religious in character. They were composed and preserved by priests, and it is through them alone that we are able to study Hindoo history, as the two great epics are so legendary and fanciful that they give but the vaguest idea of events.

"The last hymns of the Vedas were written (says St. Martin) when the Aryans arrived from the Indus at the Ganges and were building their oldest city, at the confluence of that river with the Jumna. Their complexion was then white, and they call the race whom they conquered, and who afterward were made Soudras, or lowest caste, blacks. The chief gods of the Vedic age were Indra, Varuna, Agni, Savitri, Soma. The first was the god of the atmosphere; the second, of the Ocean of Light, or Heaven; the third, of Fire; the fourth, of the Sun; and the fifth, of the Moon. Yama was the god of Death. All the powers of nature were personified in turn,—as earth, food, wine, months, seasons, day, night, and dawn. Among all these divinities Indra and Agni were the chief. But behind this incipient polytheism lurks the original monotheism,—for each of

these gods, in turn, becomes the Supreme Being. The universal Deity seems to become apparent first in one form of nature and then in another. Such is the opinion of Colebrooke, who says that 'the ancient Hindoo religion recognizes but one God, not yet sufficiently discriminating the creature from the Creator.' And Max Müller says: 'The hymns celebrate Varuna, Indra, Agni, etc., and each in turn is called supreme. The whole mythology is fluent. The powers of nature become moral beings. It would be easy to find, in the numerous hymns of the Veda, passages in which almost every single god is represented as supreme and absolute. Agni is called 'Ruler of the Universe'; Indra is celebrated as the Strongest god, and in one hymn it is said, 'Indra is stronger than all.' It is said of Soma that 'he conquers every one.'"

To give an idea of the purity of thought and grandeur of expression which these ancient Hindoos commanded, to say nothing of their monotheism, we give a translation by Max Müller of one of the oldest Vedic hymns in which their idea of the creation is set forth.

"RIG-VEDA X, 121.

"In the beginning there arose the Source of golden light. He was the only born Lord of all that is. He established the earth, and this sky. Who is the God to whom we shall offer our sacrifice?

"He who gives life. He who gives strength; whose blessing all the bright gods desire; whose shadow is immortality, whose shadow is death. Who is the God to whom we shall offer our sacrifice?

"He who through his power is the only king of the breathing and awakening world. He who governs all, man and beast. Who is the God to whom we shall offer our sacrifice?

"He whose power these snowy mountains, whose power the sea proclaims, with the distant river. He whose these regions are as it were his two arms. Who is the God to whom we shall offer our sacrifice? "He through whom the sky is bright and the earth firm. He through whom heaven was stablished; nay, the highest heaven. He who measured out the light in the air. Who is the God to whom we shall offer our sacrifice?

"He to whom heaven and earth, standing firm by his will, look up, trembling inwardly. He over whom the rising sun shines forth. Who is the God to whom we shall offer our sacrifice?

"Wherever the mighty water-clouds went, where they placed the seed and lit the fire, thence arose he who is the only life of the bright gods. Who is the God to whom we shall offer our sacrifice?

"He who by his might looked even over the water-clouds, the clouds which gave strength and lit the sacrifice; he who is God above all gods. Who is the God to whom we shall offer our sacrifice?

"May he not destroy us,—he the creator of the earth, or he, the righteous, who created heaven: he who also created the bright and mighty waters. Who is the God to whom we shall offer our sacrifice?" 1

The Vedic literature begins with the hymns called the Rig-Veda; these are divided by Müller into the Chhandas and the Mantras periods. These writings are liturgic in character. The earliest theological writings of India are the Brâhmanas. Later on, the philosophic writings called the Upanishads make their appearance; these are almost the only Vedic writings which are read at the present day; and if the antiquity claimed for them can be substantiated, i. e. Soo to 600 years B.C., they show clearly that the speculations of the earliest Greeks were anticipated in India. When we think how Egyptian and Babylonian history, also, gives evidence of philosophic thought vastly older than any thing connected with Greece, it would seem possible that the Aryans were not only the progenitors of the language, but the thought, of the Indo-European nations. It may seem venturesome, however, to attribute much philosophic insight

¹ Müller's "Ancient Sanskrit Literature," p. 569.

to the warlike shepherds who occupied the regions east of the Caspian Sea, before the earliest dates of even legendary history, and of whom nothing more definite is known than what is suggested by the words traced through convergent languages to them; but is it more venturesome than to suppose that all the details of metaphysical speculation should be faithfully reproduced in different countries, at great distances in time, without any generic connection? This is the same question with regard to psychology as that which is presented by the contrasted theories of Darwin and Lewes in biology. Darwin says that organic life began in not more than four or five different points on the earth's surface, and that all subsequent development has been a generic divergence from these points of beginning. Lewes says that the conditions of organic life are far too general to admit of any such narrow beginnings. When we study the general subject of the beginnings of life, and see how clearly organic activities are affiliated with chemical and cosmical activities, are we not irresistibly carried to the larger of these views?

So with regard to the origin of philosophy. If thought is the function of conditions, it is natural to suppose that certain civilizations produce inevitably certain types of thought. The only question is, what constitutes the intellectual germ, or logical type, upon which the social conditions of each age have acted as merely a developing medium. Will not the psychology of the future demonstrate that this logical germ is as deeply seated in every sentient organism as the properties of its physiological units, and is in fact indistinguishable from them? Our inductions are as natural as the swinging of the pendulum, or the response of the organic compounds to light and heat. There is no break in development between the cosmical and the organic activities expressed in our race and its highest logical genius. An analysis, therefore, which seeks to discover some ultimate principle as the basis of mind will have to relinquish one special fact after another until it comes face to face with the ultimate reality, the first principle of life.

In the light of this induction, the thought of Arvan shepherds. Hindoo priests, the Egyptians, the Greeks, and the most modern European metaphysicians, will assume a level which, in an unphilosophical view of history, would seem impossible. The thought of the human race, from its earliest beginnings to its best attainments, forms but the base-line in a sentient parallax of infinite proportions. With our complicated vocabularies we imagine that we have risen far above the level of those early inductions which mingled dim intuitions of divine unity with all manner of superstition; but alas! after seventy centuries of reform, we find the inarticulate gesture of the primitive man declaring the scope of language and the nature of perception as unerringly as our most scholarly analyses of mind; and thus the fact of sentiency. viewed through the long avenues of organic development which lead up to it, presents a level scarcely broken by the highest waves of civilization. In a word, so deep-seated in nature are the facts of consciousness, that the difference between the intelligence of races is rendered insignificant when this intelligence is viewed in the true perspectives of its development. It is only in that more complete view of knowledge which identifies action with thought, morality with religion, practical with theoretical happiness, that our notions of progress are justified. It is only by subjecting the "transcendental properties of the modern intellect" to the discipline of actual existence, by denying to the imagination all the extravagances of mystery and superstition, that we are enabled to really distinguish ourselves intellectually or morally from the primitive types of man. The question which presses upon us therefore is, Have we accomplished this distinguishing logical feat?

Following the Brâhmana period in Hindoo literature, we have the Sûtras, coming from a word meaning *string*, and consisting of a string of sentences concise and epigrammatic in style, representing the thought of the Brahmans reduced to the simplest form. These writings are supposed to have appeared from 600 to 200 years B.C. The Brâhmanas, which

precede in order of time the Sûtras and the philosophic Upanishads, are very numerous. "Müller gives stories from them and legends. They relate to sacrifices, to the story of the deluge, and other legends. They substituted these legends for the simple poetry of the ancient Vedas. They must have extended over at least two hundred years, and contain long lists of teachers." But when we call them Vedic writings, we use a form of speech which is inconsistent with fact, for the Vedas were not reduced to writing until long after they appeared. They were memorized by the priests and thus transmitted through many centuries.

The antiquity of the original Vedic hymns or Rig-Veda cannot be determined with any certainty, although all authorities agree in placing them as early as 1200 to 1500 years B.C., while Dr. Haug believes that the oldest hymns were composed B.C. 2400. In the damp climate of India no manuscript will last more than a few centuries, which accounts for the fact that there are few Sanskrit MSS. more than four or five hundred years old.

"Müller supposes that writing was unknown when the Rig-Veda was composed. The thousand and ten hymns of the Vedas contain no mention of writing or books, any more than the Homeric poems. There is no allusion to writing during the whole of the Brâhmana period, nor even through the Sûtra period. This seems incredible to us only because our memory has been systematically debilitated by newspapers and the like during many generations. It was the business of every Brahman to learn by heart the Vedas during the twelve years of his student life. The Guru, or teacher, pronounces a group of words, and the pupils repeat after him. After writing was introduced, the Brahmans were strictly forbidden to read the Vedas, or to write them. Cæsar says the same of the Druids. Even Pânini never alludes to written words or None of the ordinary modern words for book, paper, ink, or writing, have been found in any ancient Sanskrit work.—no such words as volumen, volume; liber, or inner bark of a tree; byblos, inner bark of papyrus; or book, that is, beech-wood. But Buddha had learned to write, as we find by a book translated into Chinese, A.D. 76. In this book Buddha instructs his teacher; as in the 'Gospel of the Infancy' Jesus explains to his teacher the meaning of the Hebrew alphabet. So Buddha tells his teacher the names of sixty-four alphabets. The first authentic inscription in India is of Buddhist origin, belonging to the third century before Christ."

The type of religion depicted in the Vedas has long since passed away. At the present day, in India, there is a polytheism among the people very different from the written religion of the priestly caste. The Brahmans acknowledge the equal divinity of Brahma, Vishnu and Siva, known as the Hindoo triad; but the great mass of the people worship different gods according to the multitude of sects into which they are divided. There is a large class of unbelievers in India who doubt the inspiration of the Vedas, and even deride the sacred books. The widespread religious feeling of the people may be judged of from the fact that two thirds of all the books sold in that country, according to a recent report from Calcutta, are of a religious character.

There is a sect which corresponds to the Quakers of England and America, the Kabirs, a part of whose creed it is to oppose all worship; there are Hindoo monks, Ramavats, who live in monasteries; and there is a prototype of the polygamous Mormons, the Maharajas, whose religious observances are mingled with licentiousness. When these facts are considered, it is difficult to determine to what extent the great typical religion of India known as Brahmanism, which succeeded the age of the elder Vedas, was ever observed by priests or people. The text-book of Brahmanism is known as the Laws of Manu. This is a very ancient religious code supposed to have originated about 1000 to 900 B.C. Manu, in the Vedas, is spoken of as the father of mankind and the hero of a legend resembling somewhat that of Noah in the Hebrew Scriptures; the Brahmans regard him as the author

of their code. The laws of Manu, in their present form, are a synopsis of a legendary poem, or metrical composition, of one hundred thousand couplets, which represented the laws and customs of the ancient Brahmans. These laws "may possibly have been reduced to the form of a written code with a view to securing the system of a caste against a popular movement of Buddhism, and thus give a rigid fixity to the privileges of the Brahmans."

The Brahmans represent the early Aryan civilization of India. They have always been the great literary caste. Their priestly power has often been assailed, and sometimes overcome. On account of their comparative monopoly of learning, however, they have been, until recent times, both the counsellors of princes and the instructors of the people. The whole history of India seems to be made up of the resistance of this caste to religious and political innovations from the early invasions of non-Brahmanic tribes to the great religious movement which culminated in the establishment of the Buddhist kingdoms. So determined was the resistance of the Brahmans, that Buddhism was at last dethroned and driven out of India. Some writers think that the manner in which this victory over Buddhism was achieved was by joining the worship of the two gods Vishnu and Siva to Brahmanism. The worship of these gods had gradually grown up in India as a sort of dissent from Brahmanism long before the time of Buddha. These worships were founded upon the ancient Vedas, and were simply the forms which the popular religious ideals of two different sections of the country assumed. In the valley of the Ganges the Vedic god Vishnu was promoted to the chief rank in the Hindoo Pantheon. He was given "the character of a Friend and Protector, gifted with mild attributes, and worshipped as the life of Nature." In the west of India the god selected was Siva, supposed to be derived from the god Rudra of the Rig-Veda, who, "fierce and beneficent at once," is the Storm-god and presides over medicinal plants. The worship of this god gradually spread until under the name

of Siva, the Destroyer, he became one of the most prominent deities of India. In harmonizing the worship of these two popular gods with their own religion, the Brahmans were able to unite India and successfully oppose Buddhism.

The origin of the Hindoo triad of Brahma, Vishnu, and Siva, like all other divine trinities, is probably a dim reflection of the three elements of thought, the ultimate reality Motion and its subjective and objective aspects Time and Space. There is, of course, no resemblance between the deities composing the Egyptian, Persian, Hindoo, or Christian trinities and the principles known as Space, Time, and Motion; but the conditions of thought are common to all humanity, and it is more natural to believe that the religions of the world offer this distant reflection of an ultimate analysis than that they bear no trace of it.

We will make no attempt to follow out the elaborate beliefs of this great race, whose distinct languages, states, and peoples exceed in number those of all Europe, and whose civilization was seemingly greater than now before writing as we use the word was invented in any part of the world; suffice it to say that the illogical and extreme part of Brahmanism is its mysticism. In the imagination of India mysticism has had a high development. Its alluring promises have fascinated while its innate deceit has corrupted the heart of man. Such morality, and hence such true religion, as the world has seen, has come not from mystery, not from impossible images of life and purity, but from generalizations of experiences, the healthful and natural extension of human sympathies.

Plato derived his ecstasies of perception from the East, and all subsequent idealism has been but an outgrowth of these intellectual mysteries. Christianity has assiduously fostered the mysticism of India; witness her doctrine of

¹ Egypt has Osiris, the Creator; Typhon, the Destroyer; and Horus, the Preserver. Persia has Ormazd, the Creator; Ahriman, the Destroyer; and Mithras, the Restorer. Buddhism has Buddha, the Divine Man; Dharma, the Word; and Sangha, the Communion of Saints. Christianity has God, the Father: Christ, the Divine Man; and the Word, or the Holy Ghost.

"Purification, of Illumination, and of ecstatic union with God and absorption in divine contemplation."

Mysticism, in its various forms, constitutes the illogical part of every religion and of every philosophy. In Christianity and other Catholic religions, this principle takes the name of Spiritualism, as in philosophy it is called idealism. The chief tenet of mysticism, as it appears in the ethnic religions, is contempt for human energy; which is the belittlement of the present life upon the supposition that there is another and more important one hereafter. If it is admitted that morality is the science of human conduct, then mysticism, which in its most familiar form is a belief in immortality, leads away from morality. It is upon this issue concerning the relative importance of the present and the future life that all religions must stand or fall. influence of beliefs upon actual life is the measure to which all systems of faith must sooner or later submit; and it is by this comparison that the Religion of Philosophy will triumph.

The magnificence of the religious monuments of India has been celebrated in every tongue. Her emblazoned grotto-temples and matchless mosques tell us how universal her worship has been, and how art has slowly refined it. The most beautiful building in the world, the Taj Mahal at Agra, is a memorial temple raised by a bereaved husband to a princess of India. The most imposing column in the world, the Kootub Minar, towers above the desolate site of ancient Delhi, unequalled in design. But the most lasting monument which India has raised is her Mysticism. Who can estimate the extent of its influence?

Even in America, among the cultivated classes who have become relatively independent of superstition, who have given some heed to the recent achievements of historical criticism, the deep roots of mysticism are still to be found. When Dr. David Strauss published his "Life of Jesus," the opposition which it encountered from the orthodox world was not greater than that experienced, from the same

source, by a small group of literati in this country known as the Transcendentalists of New England. The critics of Strauss were, for the most part, blind to the fact that he was an eminent theologian, who distinctly taught a belief in a personal God, and who, in dealing with the story of Christ as it is found in the Christian Scriptures, merely tried to separate the truly historical portions from what was unhistorical, and therefore mystical. He brought to this labor a vast erudition, besides a minute conscientiousness with regard to judging historical data which is almost painful to those who follow his work. The New England Transcendentalists were the first people in this country who evinced, on any considerable scale, a truly literary spirit, a disposition to study all literatures from a comprehensive standpoint. They took the liberty of casting "a free and bold regard upon the beauties of the pagan classics and upon the deformities of books hitherto held as above human estimate." But Strauss and his followers in Germany, Renan and his school in France. and the Transcendentalists in this country, have all grievously sinned against philosophy. They one and all perpetuate the mysticism of India. From the ideal mystic, who. according to the Hindoo conception, passes his life on the top of a column, abnegating all human relations, or earthly feelings, so that he may come face to face with God, to the Transcendentalist, who advocates "a philosophy which continually reminds us of our intimate relations to the spiritual world," which aims to approach "the mysteries of man's higher life," and affirms "the existence of spiritual elements in his nature," we have but degrees in subserviency to the same doctrine of the unknowable. Nothing can be more seductive than the language in which this doctrine finds expression. It is a worship of man's higher nature on the supposition that it has a counterpart in a divine nature. It is an exceedingly refined anthropomorphism,—so refined that some of the best minds freely use the idioms and technical terms which have become identified with this faith with-

^{&#}x27; See article in Atlantic Monthly of July, 1883, by O. B. Frothingham.

out a suspicion that they are transgressing the laws of reason.

Until the sin of idealism shall be laid aside, the idolatry which we call orthodoxy will have a permanent excuse, and materialism will be a natural reaction from the religions of faith. For, strange as it may seem, materialism is the logical accompaniment of Transcendentalism; both rest upon the acknowledgment of a fundamental mystery in life.

The Transcendentalist and the Materialist are both agnostics: one represents the optimistic, the other the pessimistic form of skepticism. One says life is material; let us reach after the divine or spiritual, a mysterious type of virtue which is above and beyond this life: the other says life is material, and we cannot make it any thing else. The Transcendentalist would make a mystery of a natural propensity of human life. We have sympathies, or breadth and depth of feeling; we have aspirations for a wider and purer sphere of existence,—feelings perfectly natural and no more and no less difficult to explain than the simplest sensation; and because these feelings are grand in their objects, taking in the whole sweep of our existence, it is taken for granted that they are *mysteries*, and represent "our intimate relations to a spiritual world."

There is no absolute spirit, there is no mystery in life. Every thing to which the word spirit can be applied means also body. Every thing that has ever appeared mysterious springs from and is indissolubly connected with the familiar. The principle of perception, the dignity of life, are both assailed by these substantializations of aspects of our existence, this confusion of relative facts with the universal principle. What, in a word, will it avail us to reason about divine unity unless we apply the principle to the laws of perception or individual life?

CHAPTER XIX.

THE RELIGIONS OF CONFUCIUS, ZOROASTER, AND BUDDHA.

All the Higher Ideals of Christian Morality Firmly Established Principles throughout the World Ages Before our Era—The Resemblance between Christian Worship and The Worship of Earlier Faiths.

THE Chinese Empire is twice as large as the United States, and contains a third of the population of the globe. Its antiquity, by comparison, makes ancient Greece a modern state, and the first centuries of our era familiar times. For thirty centuries its oral language has remained the same, and its writing dates from a far earlier period.

In China we have the only nation which has a purely literary aristocracy, where office is obtained solely through competitive examinations, and where there is no rank or nobility apart from office. The Emperor has theoretically absolute power, but is in turn rigorously governed by an unwritten law of usage which defines his duties to his people as those of a father to his family. So strong is this ideal of government with the people that its open neglect is inevitably followed by revolution, so that, as a means of retaining their power, rulers have found it necessary to simulate the higher virtues.

In the language of China we have a singularly truthful portrayal of the national mind and character. It is monosyllabic, and therefore inflexible,—incapable of that syntactical motion which gives power and grace to expression. The literature is unimaginative, and were it not for its pure moral tone and philosophic spirit it might be called commonplace.

The Chinese nation has far excelled the West, until quite

recently, in the extent of its public works, in mechanical skill, in the refinement of the industrial arts, and in popular education. With regard to some phases of social morality and civil government, China is unapproached by any modern nation. Religion with this nation is more ethical than theological; philosophy more practical than metaphysical.

The classics of China are the sacred books and writings upon law and history. All education consists in memorizing the classics, and the whole national mind, as a consequence, has fallen into a servile literary imitation. In exalted conservatism, in veneration for custom. China is without a peer: but in the competition of human genius,—the struggle for those new combinations of thought and feeling which constitute progress, in short, in imagination,—she is far behind many of the vounger nations. The civilization of China, like that of Egypt, has a significance of which her people are apparently unconscious. The design of her social and political life constitutes a beautiful system of ethics, and yet abuses and inconsistencies are admitted, which, when compared with this design, appear grotesque. In a word, the individual has become so highly disciplined that he is but a silent factor in the spirit of his race; he has become bewildered by the proportions of his own civilization.

The religion of China centres around the life and teachings of Confucius, one of the greatest moral teachers the world has known. What is most admirable in the Chinese faith is the absence of fable and superstition concerning this man, who, judged by accepted standards, was holy and inspired, and fully as worthy of being canonized or deified as any of the great prophets. It is instructive to see, after all, how little moral influence, or power for doing good, depends upon belief in the supernatural. All that appeals

¹ China was intersected with canals long before there were any in Europe. The great wall was built for defence against the fierce tribes of the North, two hundred years before Christ; it crosses mountains, descends into valleys, and is carried over rivers on arches; it is twelve hundred and forty miles long, twenty feet high, and has towers every hundred yards. In this country beautiful books were printed five hundred years before the invention of Gutenberg.

to the hearts and consciences of mankind, however expressed, must be human. Hence the extravagances of faith are unnatural, inartistic, irreligious.

Confucius was born, 551 B.C., in the province or state of Loo, now called Shan-tung, during the reign of Ling-wang, 23d emperor of the Teheou. His parents were of high dignity, but were poor, and the untimely death of the father early subjected the son to the discipline of toil. He was passionately attached to his mother; and when she died, he gave up a state office which he held, to mourn her. This, however, was not without precedent in the customs of his country. His character early attracted the attention of the Prince of his State, who offered him the revenues of an office without the duties, which he declined from a sense of honor.

Confucius was at length given the charge of a city, and immediately applied himself to the institution of reforms. "He punished false dealing, suppressed licentiousness, and reduced brigandage and baronial ambition." Troops of dancing-girls and fine horses were sent as bribes to the Prince by those who were inconvenienced by these reforms of the minister, which at last had the effect of securing his dismissal. For thirteen years he was an exile, and wandered from court to court teaching his principles of peace, national unity, and self-improvement. Some of the friends whom his principles had attracted followed him in these wanderings and were known as his disciples. Among them was Mencius, himself a very able and profound teacher, although entirely devoted to Confucius.

The incessant theme of Confucius, says Johnson, is the balance of character, the danger of one-sidedness, the mutual dependence of study and original thought, of sound sense and fine taste; that due observance of limits in which the virtue of any quality consists. Being asked by one of his disciples what constituted the perfect man, he drew no impossible picture of virtue, but simply responded: "Seeking to be established, the true man establishes others; wishing enlargement, he enlarges others."

Confucius was renowned for his reverence and sympathy. While receiving in high office he would rise when approached by a person in trouble. Even at his time, which seems so early to us, there were annals of a vast antiquity belonging to his nation, filled with the lives of pure men. These annals he assiduously studied, and constantly referred to them as the source of his principles and knowledge. He disclaimed all originality; and it is probably due to this marked honesty and unselfishness that he is regarded by his nation as a man,—not as a god.

Those who study the social history of China cannot fail to be impressed with the immeasurable advantage which this simple and unassuming method of teaching morality has over the more highly colored and imaginative systems of other countries. The beauty of moral truth is more effectual when unadorned by superstition. In morality as in all else the best teacher is example; hence the sublimity of human nature is in no wise enhanced by the fanciful and grotesque impersonations of it which we find in the mythologies and theologies of the world.

Confucius affirms that knowledge and belief should be the same thing: "When you know a thing, to hold that you know it; and when you do not know a thing, to allow that you do not know it; this is knowledge." To this he adds: "To see what is right and not to do it is want of courage." Nor was Confucius unacquainted with the qualities of the heart, for he says: "It is only the truly virtuous man who can love or who can hate others. * * * Virtue is not left to stand alone; he who practises it will have neighbors." Again he says: "It is not easy to find a man who has learned for three years without coming to be good."

In his ethics we find the golden rule: "What I do not wish men to do to me, I also wish not to do to men." The Brahmans, says Müller, expressed the same truth in the Hitopadesa—"Good people show mercy unto all beings, considering how like they are to themselves."

Confucius also seems to have been conscious of the limits.

of language. "Ke Loo asked about serving the spirits of the dead. The Master said: 'While you are not able to serve men, how can you serve their spirits?' Ke Loo added: 'I venture to ask about death.' He was answered: 'While you do not know life, how can you know about death?'" And again, concerning the same question, "The Master said: 'I would prefer not speaking.' Tsze-Kung said: 'If you, Master, do not speak, what shall we, your disciples, have to record?' The Master said: 'Does Heaven speak? The four seasons pursue their courses, all things are continually being produced; but does Heaven say any thing?'"

Do not the ideas of virtue which Confucius promulgated compare favorably with our best ethical conceptions? "Virtue is inquiring with earnestness and inwardly making application." "Is virtue from a man's own force or from another's? How can a man conceal his character? The superior man sees the heart of the mean one. Of what use is disguise? Therefore the wise will be watchful when alone, * * * Distinction is not in being heard of far and wide, but in being solid. straightforward, and loving the right. * * * Filial piety is supposed to mean the support of one's parents; but brutes can do that: without reverence, what difference between these kinds? * * * Learning is fulfilment of the great relations of life (a luminous definition of culture). Manners consist in behaving to each other as if receiving a guest, in causing no murmurings, and in not treating others as you would not be treated by them. * * * Propriety is that rule by which tendencies are saved from excess. If one be without virtue, what has he to do with the rights of propriety, or with music?" A quaint way of arguing that morality is the expression of the highest harmonies of life. "Language is not mere utterance, but keeping words to the meaning of things." Hence the virtue of a wise reticence with regard to what we do not know.

To one who said: "I believe in your doctrine, but am not equal to it," Confucius said: "That would be a case of

weakness, but you are limiting yourself. *** Progress must be gradual. Conceit and complacency are inexcusable and fatal."

Confucius, says Johnson, demurs at repaying injuries with the kindness with which we return benefits; he taught rather to "Recompense injuries with justice."

To the ideal character Confucius ascribes unlimited powers: "It is everywhere appreciated." "It will subdue barbarians." "Its appeal will do more than punishments to reform the bad." "It settles strife with a word." It finds "all men brothers." "Thus founded, a ruler's virtue is irresistible." What chance have these poor Chinese, educated under such high principles of morality, in dealing with the less scrupulous Christian nations?

It is needless to dwell upon the purity of these ethics, or to attest that they equal any thing to be found in modern literature or example. They were imbibed from the oldest writings of China, called the *Kings*, to which Confucius gave much study, and which he spent the last years of his life in revising and editing.

The religions of China are three in number: first and oldest, the Tao; then the great revival and reform of this religion, known as the faith of Confucius; and lastly, the innovation of Buddhism.

The philosophy of the Tao religion is found in the great work of the Tse-Lao, or the old teacher. It is a remarkably good system of metaphysics, considering its antiquity, and its morals, as above indicated, are of singular purity. In the philosophy of Confucius the idea of Heaven and God seems to be one. The word Teen, so frequently employed in the sense of the ultimate principle, seems to resemble our word divine. The devotions of Confucius do not imply a belief in a personal god. "They were (says Clarke) the prayer of reverence addressed to some sacred, mysterious power above and behind all visible things. What that power was, he, with his supreme candor, did not venture to intimate. In the *She-King*, however, a personal God is

addressed. The oldest books recognize a Divine person. They teach that there is one Supreme Being, who is omnipresent, who sees all things, and wishes men to live together in peace and brotherhood. In these ancient writings the Supreme Being commands not only right actions, but pure desires and thoughts, that we should watch all our behavior, and maintain a grave and majestic demeanor. 'which is like a palace in which virtue resides'; but especially that we should guard the tongue. 'For a blemish may be taken out of a diamond by carefully polishing it: but if your words have the least blemish, there is no way to efface that.' 'Humility is the solid foundation of all the virtues.' 'To acknowledge one's incapacity is the way to be soon prepared to teach others; for from the moment that a man is no longer full of himself, nor puffed up with empty pride, whatever good he learns in the morning he practises before night.' Heaven penetrates to the bottom of our hearts, like light into a dark chamber. We must conform ourselves to it, till we are like two instruments of music tuned to the same pitch. We must join ourselves with it. like two tablets which appear but one. We must receive its gifts the very moment its hand is open to bestow. Our irregular passions shut up the door of our souls against God." Thus we see that the old Chinese idea of God was that of a perfect man—the union of all ideals of conduct in one person.

Confucius instituted an advance upon these older teachings. He *separated* the human from the divine, the particular from the general. He saw that idealized conduct was but the natural forecast of a pure spirit, and that to worship this human form, this creation of the mind, was idealtry—a kneeling before symbols.

The "Kings," which are among the earliest productions of the human mind, resemble in their primitive character the Hebrew Scriptures, although they are of a higher ethical order. In the time of Confucius these ancient writings were almost forgotten by the people and their precepts neglected. Confucius revived them and brought about a religious and moral reform which is still the chief impulse of his people.

The religion of Confucius has often been compared to Christianity, which it resembles in the purity and sweetness of its sentiments, and the vast influence for good which it But the idea of human sacrifice for the has exerted. expiation of sin, upon which Christianity is built, has no counterpart in the faith of China. The savage custom which this idea commemorates seems to be further removed from the Chinese than from ourselves. At all events, the bloody sacrifice as a means of salvation is not one of the superstitions of this people, whereas it is our greatest super-Confucius was a literary man, an indefatigable student, as well as a moral reformer. In his teachings the mysticism and the mythology of Taoism, the old religion of his people, were left out. Having re-edited the ancient writings, with explanations and comments, "as one of the last acts of his life, [he] called his disciples around him and made a solemn dedication of these books to heaven."

The Buddhists of China are very numerous. To the student of religion, the introduction of this religion into China will ever be a question of interest. The inability of Christianity, notwithstanding its many and persistent attempts, to gain a footing in the Celestial Kingdom, makes the success of Buddhism the more remarkable.

What chiefly interests us in the religion of the Chinese, as above shown, is the simplicity and purity of its moral perceptions. It is true that superstition abounds among this people, and that in this respect their religion has deteriorated; but if Christianity were added to their other faiths, the question naturally arises, would their morals be exalted, or would they simply have another prophet to worship, and another and more complicated scheme of salvation to learn?

The great prophet of the Persian faith, Zoroaster, is believed to be among the earliest of religious teachers. Although it is very difficult to fix any definite date, the best authorities agree that he must have lived before the Assyrian conquest of Bactria, 1200 B.C. This, however. gives but little idea of the remoteness of the age to which he probably belongs. The uncertainty of the whole question of the date of Cpitama Zoroaster (says Johnson) is indicated by the differences between the almost equally valuable estimates of Haug, Rapp, Duncker, and Harlez, which cover a period of four hundred years between the eleventh and fifteenth centuries before Christ. The first great struggle for empire, of which detailed and authentic accounts have reached us (says Prof. Spiegel), is the contest between the Greeks and the Persians, B.C. 400, more than twenty-three centuries ago; and even at this early date the religion of Zarathustra was already so old that the language in which it was originally composed differed essentially from the language spoken by Darius. This much we have learned from the Cuneiform Inscriptions; but when we attempt to go farther and fix the date of the Iranian Prophet, we are met by difficulties, at present insuperable, and we can neither deny nor confirm the statement of Aristotle, who places Zoroaster six thousand years before his own time, or rather that of Plato (about 360 B.C.).1

The sacred writings of the ancient Persians are still read and reverenced, and the faith which they represent still survives among scanty communities of Parsis in modern Persia and India, the largest being at Surat. These sacred writings are called the *Avesta*, which has been written in the literary form of the oldest Iranian language, known as the Zend.² Hence, the *Zend-Avesta* is among the most ancient writings remaining to us of the early history and religion of the Indo-European family.

One portion of these writings is in the form of a revelation from Ahura-Mazda (Ormazd), the Supreme Being, to

¹ See Introduction to Avesta.

² "The Zend idiom, in its widest sense, embraces two so-called 'Bactrian' dialects, which, together with the 'West Iranian' languages, i. e. those of ancient Media and Persia, form the stock of Iranian tongues. These tongues were once spoken in what the Zend-Avesta calls the 'Aryan countries' (Airyao danharo)."

Zoroaster (Zarathustra), and through him to mankind. is in great part a prescriptive, a moral and ceremonial code. teaching the means of avoiding or of expiating sin and impurity." The remainder of the Avesta is liturgic in character, being made up of prayers and praises to the Divinity and to other beings: these are principally metrical. and give evidences of being by far the oldest portion of the work, which is thought by Dr. Haug to go back to the time of Zoroaster himself. The Avesta is clearly an assemblage of fragments of a much more extended literature. Parsis hold that the writings of Zoroaster filled twenty-one volumes, but were lost and destroyed during the conquest of Alexander, and the consequent ruin of the Persian Empire and religion. The present form of the Avesta is probably what was recovered and preserved from the original writings during the reign of the first Sassanian monarch.

It is to the devoted and intrepid French Orientalist Anquetil du Perron that we owe the discovery of the Avesta, which throws so much light upon the history and the religion of the Persians. This discovery was the result of the most determined enterprise in travel and research, efforts which were promptly recognized and encouraged by the French Government. He visited the Parsis at Surat, learned their language, and brought back to Paris, in 1762, one hundred and eighty Oriental manuscripts, which resulted in the publication, in 1771, of the Zend-Avesta, containing, besides the selections from the sacred writings of the Persians, a life of Zoroaster, and fragments of works ascribed to that sage.

The following passages are from the oldest part of the *Avesta*, the Gâthâs, or Gahs, which are ancient hymns somewhat resembling the Vedas:

"I praise thee, O Asha,—to whom belongs an imperishable kingdom. May gifts come hither at my call."

"I who have entrusted the soul to heaven with good disposition. So long as I can and am able, will I teach according to the wish of the pure."

"Teach thou me, Mazda-Ahura, from out Thyself. From

heaven, through Thy mouth, whereby the world first arose. Thee have I thought, O Mazda, as the first to praise with the soul."

"In the beginning, the two Heavenly Ones spoke—the Good to the Evil—thus: 'Our souls, doctrines, words, works, do not unite together.'"

"Now give car to me, and hear! The Wise Ones have created all. Evil doctrine shall not again destroy the world."

"Good is the thought, good the speech, good the work of the pure Zarathustra."

"He who holds fast to wisdom asks after the heavenly abodes; concerning this I ask Thee what may be the punishment (for him) who through evil deeds does not increase life even a little? For the tormentors of the active, and those who do not torment men and cattle?"

"Is he like Thee, O Mazda-Ahura, if he (resembles Thee) in deeds?"

"Teach us, Mazda-Ahura, the tokens of good-mindedness. May there come brightness, enduring wisdom through the best spirit. Accomplishment of that whereby the souls cohere."

"I praise Ahura-Mazda, who has created the cattle, created the water and good trees, the splendor of light, the earth and all good. We praise the Fravashis of the pure men and women,—whatever is fairest, purest, immortal."

"We honor the good spirit, the good kingdom, the good law,—all that is good."

The following is from the "Khordah (or little) Avesta," which consists chiefly of prayers and invocations intended for the use of the people:

"Purity is the best good." "The immortal sun, brilliant with swift horses, we praise. Purify me, O God, give me strength to teach thy joy."

"Ormazd! Lord, Increaser of mankind, of all kinds, all species of men. May he let all blessings and knowledge, fast faith and blessings of the good Mazdayaçnian law come to me. So be it!"

"Thou art to be praised, may thou ever be provided with offerings and praise in the dwellings of mankind."

"All good thoughts, words, and works are done with knowledge." "All good thoughts, words, and works lead to Paradise. All evil thoughts, words, and works lead to hell."

"In the name of God, the giver, forgiver, rich in love, praise be to the name of Ormazd, the God with the name 'Who always was, always is, and always will be'; the heavenly amongst the heavenly, with the name 'From whom alone is derived rule.' Ormazd is the greatest ruler, mighty, wise, creator, supporter, refuge, defender, completer of good works, overseer, pure, good, and just.

"With all strength (bring I) thanks; to the great among beings, who created and destroyed, and through his own determination of time, strength, wisdom, is higher than the six Amshaspands, the circumference of heaven, the shining sun, the brilliant moon, the wind, the water, the fire, the earth, the trees, the cattle, the metals, mankind.

"All good do I accept at thy command, O God, and think, speak, and do it. I believe in the pure law; by every good work seek I forgiveness of all sins. I keep pure for myself the serviceable work and abstinence from the unprofitable. I keep pure the six powers—thought, speech, work, memory, mind, and understanding. According to thy will am I able to accomplish, O accomplisher of good, thy honor, with good thoughts, good words, good works.

"I enter on the shining way to Paradise; may the fearful terror of hell not overcome me! May I step over the bridge Chinevat; may I attain Paradise, with much perfume, and all enjoyments, and all brightness!

"Praise to the Overseer, the Lord, who rewards those who accomplish good deeds according to his own wish, purifies at last the obedient, and at last purifies even the wicked one of hell. All praise be to the creator Ormazd, the allwise, mighty, rich in might; to the seven Amshaspands¹; to Ized Bahrâm, the victorious annihilator of foes."

¹ The seven Amshaspands were the chief among the guardian spirits, of whom Ormazd was first. The other six were King of heaven, King of fire, King of metals, Queen of earth, King of vegetables, and King of water.

The following are selections from a CONFESSION, OR PATET.¹

- I-2-3. "I praise all good thoughts, words, and works, through thought, word, and deed. * * * I dismiss all evil thoughts, words, and works. * * * I commit no sins. * * * I praise the best purity. * * * I am thankful for the good of the creator. * * *
- 4. "I repent of the sins which can lay hold of the character of men, or which have laid hold of my character, small and great, which are committed amongst men,—the meanest sins as much as is (and) can be; yet more than this, namely, all evil thoughts, words, and works which (I have committed) for the sake of others, or others for my sake, or if the hard sin has seized the character of an evil-doer on my account,—such sins, thoughts, words, and works, corporeal, mental, earthly, heavenly, I repent of with the three words: pardon, O Lord, I repent of the sins with Patet."
- 6. "The sins against father, mother, sister, brother, wife, child, against spouses, against the superiors, against my own relations, against those living with me, against those who possess equal property, against the neighbors, against the inhabitants of the same town, against servants, every unrighteousness through which I have been amongst sinners,—of these sins repent I with thoughts, words and works, corporeal as spiritual, earthly as heavenly, with the three words: pardon, O Lord, I repent of sins," etc.
- 19. "Of pride, haughtiness, covetousness, slandering the dead, anger, envy, the evil eye, shamelessness, looking at with evil intent, looking at with evil concupiscence, stiff-neckedness, discontent with the godly arrangements, self-willedness, sloth, despising others, mixing in strange matters, unbelief, opposing the Divine powers, false witness, false judgment, idol-worship, running naked, running with one shoe, the breaking of the low (midday) prayer, the omission of the (midday) prayer, theft, robbery, whoredom, witch-

¹See Spiegel's Avesta (trans. Bleeck), pp. 153-155.

craft, worshipping with sorcerers, unchastity, tearing the hair, as well as all other kinds of sin which are enumerated in this Patet, or not enumerated, which I am aware of, or not aware of, which are appointed, or not appointed, which I should have bewailed with obedience before the Lord, and have not bewailed,—of these sins repent I with thoughts, words, and works, corporeal as spiritual, earthly as heavenly. O Lord, pardon, I repent."

Is it not evident from these extracts that the spirit of the *Avesta* is pure, reverent, and hopeful? The idea of a dual principle in nature, however, representing good and evil, which has its counterpart in the dual conception of God and Devil in the Christian religion, was a fundamental superstition with the Persians.

Ahura and Ahriman are respectively the good and evil spirits of the *Avesta*. The Zoroastrians were known as the creatures of Ahura by their creed and conduct, while the children of Ahriman were recognized by their unbelief in the pure law. In showing this Iranian dualism to be of a purely ethical nature, a contrast of good and evil conduct, Samuel Johnson says: "This service of Ahura, this hate of Ahriman, is a living fire; the symbol has mounted to the heavens of conduct. * * * The hosts of spiritual forces, good and evil, multiply around the central ideas of righteousness and iniquity." ¹

As all moral influence springs from the force of example, we may be sure that the moral element in every religion emanates from the genius of some *individual*. In those religions which do not worship an individual as a founder the moral element is inconspicuous. In such religions, theology displaces the study of human conduct, the conduct studied being chiefly that of a future or mystical life. The religions of China and ancient Egypt are examples of the opposite extremes of this fact. Although between the indefinite and variously interpreted faiths of nations during long periods of their history it is difficult to make any clearly defined compari-

^{1 &}quot; Persia," pp. 56-57.

sons, all doubt as to the historical reality of Zoroaster disappears. We see the stamp of a great life in the literature and the conscience of the race.

From the establishment of the Persian Empire by Cyrus, and during his dynasty, which ended with the invasion of Alexander, there was one definite system of worship throughout Persia, which was simply an elaboration of the moral code of the *Avesta* as interpreted by Zoroaster.

A peculiarity of this religion was its love of nature. Its sacraments were not made in temples, but on rude altars on hill-tops. Fire was regarded as the most powerful of the elements, and was held sacred. Hence the name of fire-worshippers so generally given to the Persians.

Nothing can be more significant of the life of a race than the selection it makes of symbols of power. The fire symbol is common to all religions, although there is but one great instance of pure pyrolatry. The Christians have exalted water and blood as symbols of divine power in the treatment of sin, but the efficacy of fire, in the same connection, is also distinctly believed in by almost every Christian sect. The Persians were not baptists, nor did they believe in bloody sacrifices, nor even in those burnt-offerings which we are told in our sacred writings were so grateful to the God of Israel: but, in "the holy health flame (Hestia), parent of the city, the homestead, the shrine, awful to gods and inviolable by men," the most useful servant of humanity, they did believe. The name given to the Avestan priest (Athrava) means "provided with fire." The Parsis still preserve the fire altar (Atesh-gâh), or "ever-burning naphtha-spring," as the central rite of their faith. The celestial impersonations of fire, which are celebrated in the solar mythologies, have been reduced to images dwelling in temples, but the simple fire altars of the Persians have always risen from mountain tops or in open spaces of light, tributes to the grandeur and simplicity of nature.

So completely was Persia conquered by the Mohammedans, that its religion has almost disappeared. A recent account

estimates the Parsis of Persia, which with those of India arethe chief remaining representatives of the ancient faith of Zoroaster, as but seven thousand. Many of these have fallen into poverty and ignorance, but, it is said, they maintain a reputation for industry, honesty, and chastity. Could a more eloquent tribute be paid to the value of their ancient faith?

In trying to console the Christian missionaries for their failure to convert the modern Parsis, Professor Müller says that Christianity is not a gift to be pressed upon the unwilling minds of natives by their conquerors: it is the highest privilege which the conqueror can offer. These natives would lose true caste, and consequently self-respect, by renouncing the ancient faith of their forefathers," that rests upon a foundation which ought never to be touched, namely, a faith in one God, the Creator, the Ruler, and the Judge of the World." However deplorable this conception of deity may seem to us, it certainly corresponds closely enough with the Christian idea of God to obtain from the most devoted missionary a certain acquiescence. Again, when we are told: "The morality of the Parsis consists in these words, 'pure thoughts, pure words, pure deeds,'" we perceive at once that the moral ideals of their religion are identical with ours; and that these ideals are the natural aspirations for purity of life and mind, common to mankind. Another reason that the Parsi has for preferring his religion to the Christian is that he is not troubled with any theological problems or difficulties. His faith in the inspiration of Zoroaster is not. made contingent upon a belief in the stories incidentally mentioned in the Zend-Avesta. "If it is said in the Vasna that Zoroaster was once visited by Homa, who appeared before him in a brilliant supernatural body, no doctrine is laid down as to the exact nature of Homa." In a word, the Parsi trusts in the divine principles of his religion, and is quite indifferent to the fate of the "fables and endless genealogies" which occur in his sacred books. Another fact which attaches the Parsi to his religion is its remote antiquity

and former glory, pleas which are sometimes advanced in behalf of very much younger faiths.

In thus comparing the Zoroastrian faith with Christianity we must not too readily conclude that all the advantages are on the side of the former religion. The pious Parsi has to say his prayers sixteen times at least every day. These prayers are all pronounced in the old Zend language, of which neither the priests nor the people, as a rule, understand a "Far from being the teachers of the true doctrines and duties of their religion, the priests are generally the most bigoted and superstitious, and exercise much injurious influence over the women especially, who, until lately, received no education at all." For us, it is a truism to say that devotions should be acts of intelligence; and that superstition and ignorance are inexcusable in priests, since their teachings belong to the highest sphere of knowledge. It would be unreasonable for us to expect so high a standard of criticism to prevail among the poor Parsis. So deep-rooted, however, in the human heart are the forms of hereditary devotions, that notwithstanding the many infelicities of the Zoroastrian faith, we find it still professed by a handful of exiles-"men of wealth, intelligence, and moral worth in Western India—with an unhesitating fervor such as is seldom to be found in larger religious communities."2

In Buddhism we find the most correct metaphysical induction which the history of religion presents. In this religion *conduct* is united with thought in defining knowledge, which is in effect to identify knowledge and life as one fact or principle. This is to suggest the real scope of language, by denying the absolute separation of body and spirit, and recognizing all thought as the interactivity of the individual and the social organisms. It also suggests the true nature of perception, by affirming that all insight springs from the natural procedures of life, and neither tends toward nor emanates from the supernatural.

In making this great claim for Buddhism, we pay but a

^{1 &}quot;Chips from a German Workshop," Müller. Vol. I., p. 165.

[&]quot; Chips from a German Workshop," Müller, Vol. I., p. 161.

just tribute to the astuteness and high moral perceptions of a Hindoo prince who lived at about the time of the earliest Greek philosophers, only in a far more advanced civilization. The father of this prince, the last of the line of Solar monarchs so celebrated in the great Indian epics, ruled over the kingdom of Oude at the foot of the mountains of Nepaul. in the latter part of the sixth century before Christ. capital city, Kapilavastu, was the birthplace of Siddartha, who afterward assumed the title of the Buddha (the enlightened). He was distinguished during early youth for his intellectual attainments, religious fervor, and a deep solicitude for his fellow-men. He criticised his age and felt the need of a better knowledge of life than it possessed. This conviction grew upon him until he decided to renounce his position and devote his life to the search for truth. Despite the entreaties of his father and wife, he determined to withdraw from the world. At Vaisali he attended the lectures of a famous Brahman teacher who had many pupils. Then visiting the capital of Magadha, one of the principal seats of learning in India, he studied under another Brahman teacher whose lectures attracted great numbers of students. Dissatisfied with these teachings, which did not contain the principles of reform that he felt stirring within him, he withdrew into a solitary hermitage, accompanied by five of his fellow-students. Here they dwelt (near the village of Uruvilva) for six years, subjecting themselves to the severest penances preparatory to appearing in the world as teachers. But Siddartha at length became convinced that this manner of life did not lead to the discovery of truth, and suddenly resumed a more comfortable mode of living; upon which his hitherto faithful disciples deserted him.

The mind of this intense man at last grasped what he conceived to be the true principles of life, upon which he claimed the title of Buddha—the one who has conquered knowledge. In his long hesitation whether he would communicate to the world the great truths he had conceived, Max Müller sees the fate of millions of human beings

trembling in the balance, but "compassion for the sufferings of man prevailed (says Müller), and the young prince became the founder of a religion which, after more than two thousand years, is still professed by four hundred and fifty millions of people," or more than one third of the human race.

In setting out upon his mission of teaching, Buddha first proceeded to Benares, the principal seat of learning in India. Here he gained for disciples the students who had passed with him the six years of asceticism. A deliberate crusade against Brahmanism, which had become a great religious despotism throughout India, was then inaugurated. This was begun by denying the inspiration of the Vedas, and opposing the system of castes, by proclaiming that men differed from one another not by birth but by their own attainments and character. According to the accounts in the Buddhist canon, the prophet was invited by king Bimbisara to Magadha, the capital of one of the places at which he had studied after leaving home. Here he lectured for many years in the monastery of Kalantaka, which was built for him by his followers. After the death of Bimbisara, Buddha went to Srâvasti, north of the Ganges, where a friend offered him and his disciples a magnificent residence. Here most of Buddha's lectures were delivered. After an absence of twelve years he visited his father, and converted to his faith all the Sakvas. His own wife and his foster-mother became the first female devotees to Buddhism, and founded the orders which have since grown into so vast a system. At the age of seventy, while still engaged in teaching, this great prophet peacefully died, or, as his followers would say, entered into Nirvâna.

Although much philosophical thought has become incorporated into the faith of Buddhism, there is no evidence that its founder inclined much to metaphysical reasoning. His aim was rather to produce practical reforms, to benefit and enlighten the people, to remove the burdens of caste, and to harmonize the interests of all classes. Those who have

written about this religion all alike pay tribute to the purity and beauty of the life and teachings of Buddha. The Rev. Spence Hardy, a Weslevan missionary, author of "Eastern Monachism" and a "Manual of Buddhism," testifies to the purity of the Buddhist ethics. M. Laboulave, one of the most distinguished members of the French Academy, remarks in the Débats of April 4. 1853: "It is difficult to comprehend how men not assisted by revelation could have soared so high and approached so near to the truth. * * * Besides the five great commandments not to kill, not to steal, not to commit adultery, not to lie, not to get drunk, every shade of vice, hypocrisy, anger, pride, suspicion, greediness, gossiping, cruelty to animals, is guarded against by special precepts. Among the virtues recommended, we find not only reverence of parents, care for children, submission to authority, gratitude, moderation in time of prosperity. submission in time of trial, equanimity at all times, but virtues unknown in any heathen system of morality, such as the duty of forgiving insults and not rewarding evil with evil. All virtues, we are told, spring from Maitri, and this Maitri can only be translated by charity and love." M. Barthélemy Saint-Hilaire is equally eloquent in his testimony to the same effect, that the moral teachings of Buddha are unsurpassed excepting by the revelations of Christianity; and as these three writers are devout believers in supernatural revelation in their own religion, the reservation which they make has but little effect.

The meaning of Nirvâna, the condition to which Buddhism looks forward as the future state of man, has been the subject of much dispute. Max Müller devotes an able letter to this question in the London *Times* (April, 1857), in which he sustains his opinion that Nirvâna means "utter annihilation." This letter is in answer to one from Mr. Francis Barham maintaining that Nirvâna means "union and communion with God, or absorption of the individual soul by the Divine essence,"—both of which interpretations of human destiny, from the metaphysical standpoint, at once

appear as vain efforts to make an ultimate fact out of what never can be more than the relative fact of personal existence. Buddha himself expressed the future state in terms as free as possible from contradiction when he defined Nirvâna as the cessation of change or life; but observe how deep the contradiction is when he goes on to explain that the chief end of life is to pass into an existence of perfect inaction. In declaring, however, that knowledge consists not only of thought, but of action, he strikes the keynote of metaphysical truth. In all theologies, in that of Christianity as well as others, this logical helplessness in the use of ultimate terms appears. Thus it is that in religious writings we often find the deepest truths and the most absurd contradictions mingled in the same sentence. The task which every religion sets itself is to solve the problem of existence, to unite the highest or most general with the simplest truths. And vet the method universally adopted is that of reaching after mysteries (which are declared to be unknowable). In this respect it must be admitted that philosophy, hitherto at least, has had but little advantage over religion; for although the mystery of philosophy has been one instead of many, although it has resulted from a refinement of speculation instead of from gross and concrete superstitions,-still the methods of the most superstitious religion and the most refined agnosticism are identical; they both deny the unity of knowledge; they would both build up a divine truth, not upon simpler truths, but upon a mystery which they call the unknowable.

The speculations of Buddha, therefore, with regard to human destiny, compare favorably for accuracy with any thing to be found in other faiths. Seeing no perfect action about him, he imagined that perfection could alone be attained by reaching an existence which had no change. Absurd as this proposition may seem, is it farther from the truth than the modern theological reasonings concerning a life which transcends space and time, the aspects of motion or change?

It will be asked, if Buddha paid more attention to moral reform than to theology or metaphysics, how can the claim be made that his religion expresses a higher metaphysical induction than is found in any other faith? The reason is, that Buddha distinctly taught that the highest aim of life was to enhance knowledge, and that knowledge does not mean learning alone, but that it includes conduct: that it consists of both moral and intellectual perceptions. Like all deep thinkers, he was impressed with the universal presence of change, which made him feel that life was unreal. "He cried out from the depths of his soul for something stable, permanent, real," just as the Greek philosophers did; but no metaphysical abstraction gave him rest. He made the discovery that personal existence is a relative fact pointing to the one ultimate fact beyond it, which is general existence. He therefore strenuously denied the existence of a personal God. He saw in God a universal principle, not a subject of activity, not an object of worship, but the source of activity, the cause or inspiration of worship. saw in personal life the only field of human activity, and in the perfection of this life the only means of salvation. recognized no bargain with Deity for salvation; he recognized only the obligation of man to his fellow-men and to all surrounding life. It was in this recognition of duty, and only in this, that he perceived God and worshipped him. Does not a careful analysis of the principle of worship clearly show that this is the only virtue which it contains. the only practical idea which it represents?

To trace the growth of Buddhism would be to write the religious history of the East from the sixth century before Christ. After gaining a great ascendency in India, it was practically driven from that country by the combined efforts of the Brahman caste whose privileges it assailed. Though expelled from India, it continued to exert a powerful influence, converting to its creed the majority of the Mongol nations. To-day it is the principal religion of China and Japan; the state religion of Thibet, and of the Burmese

Empire; as well as the religion of Siam, Napaul, Assam, Ceylon; in fact, of nearly the whole of Eastern Asia.

The sacred books of Buddhism are of two classes, those of the Northern and those of the Southern Buddhists. former are in Sanskrit; the latter, which are considered by far the most important and reliable, are in the ancient Pali: the relation of the Sanskrit writings to the Pali resembling, in many respects, that of the apocryphal gospels to the New Testament. These writings have been made the subject of several great conventions or councils of priests. with a view to deciding upon their authenticity. The Tripitaka, which is the name given to the Southern canon, was finally determined upon by the Council of Pataleputra on the Ganges, which was convened by the great Buddhist emperor Asoka, B.C. 250. This work consists of three parts: the Sûtras, or discourses on Buddha; the Vinaya, or code of Morality: and the Abhidharma, or the system of Metaphysics. These three parts taken together are about twice the length of our Bible, and are regarded by the Buddhists with a superstitious reverence which Christians will readily understand. The exalted spirit of Buddhism is by no means appreciated by all its followers, the majority of whom look upon the faith as a holy institution which it is their duty to believe in and support, but not particularly to understand.

There is a sublime monotony in religion which lulls the mind to sleep; its beauties are so grand, its truths so deep, that the intellect becomes dazed as by the contemplation of infinity. No such perspectives, however, are necessary to overcome the majority of minds to whom the unworthy appointments of superstition assume the same legitimacy as the permanent conditions of life upon which they have intruded. The droning cylinders turned by water and filled with inscriptions of the "holy sentence" are the Buddhist engines of prayer. In these curious devices, varying in size from the "rotary calabash" carried in the hand of the devotee, in his walk through the villages when engaged in the ordinary

affairs of life, to the large cylinders used by lamas in the service of the great temples and those erected by the road-side to be turned by water or wind, we have what is, without doubt, the oldest religious symbol in the world, the sacred "wheel" which simulates the rotation of the seasons, the events of life, and the divine power.

The laxity of thought in religion, which is so prominent a feature in the Christian world, has its counterpart in this greatest religion of the East. "The Buddhist monks of Siam do not, as a rule, endeavor to make their sermons interesting. They are satisfied to monotonously chant or intone a number of verses in the dead language Pali, and to add an almost incomprehensible commentary in Siamese, Nor do their hearers care. Crouching on the ground in a reverential posture, they make merit by appearing to listen, and they do not believe that that merit would be one whit the greater if they understood the language of the preacher. They have been taught that 'blessed is he who heareth the law.'" It certainly would not require much imagination to establish a resemblance between this kind of devotion and that which distinguishes so many Christian congregations

The resemblances between Buddhism and Christianity are not confined to the unreasoning faith of the followers or the well-known Catholic spirit of both religions; the symbols, the ceremonies, the worship, are strikingly alike. As Buddhism preceded the Roman Church by some six centuries, it is not unlikely that a great many of the forms of Christianity have been derived from it. "Father Bury, a Portuguese missionary, when he beheld the Chinese bonzes tonsured, using rosaries, praying in an unknown tongue, and kneeling before images, exclaimed in astonishment: 'There is not a piece of dress, not a sacerdotal function, not a ceremony of the court of Rome, which the Devil has not copied in this country!' Mr. Davis ('Translations of the Royal Asiatic Society,' ii., 491) speaks of 'the celibacy of the

¹ H. Alabaster: "Good Words," vol. XIII, p. 845.

Buddhist clergy, and the monastic life of the societies of both sexes; to which might be added their strings of beads. their manner of chanting prayers, their incense and their candles.' Mr. Medhurst ('China,' London, 1857) mentions the image of a virgin, called the 'Oueen of Heaven,' having an infant in her arms and holding a cross. Confessions of sin are regularly practised. Father Huc, in his 'Recollections of a Journey in Tartary, Thibet, and China' (Hazlitt's translation), says: 'The cross,' the mitre, the dalmatica. the cope, which the grand lamas wear on their journeys, or when they are performing some ceremony out of the temple. —the service with double choirs, the psalmody, the exorcisms, the censer suspended from five chains, and which you can open or close at pleasure,—the benedictions given by the lamas by extending the right hand over the heads of the faithful,—the chaplet, ecclesiastical celibacy, religious retirement, the worship of the saints, the fasts, the processions. the litanies, the holy water,—in all these are analogies between the Buddhists and ourselves.' And in Thibet there is also a Dalai Lama, who is a sort of Buddhist Pope. * * * The rock-cut temples of the Buddhists, many of which date back to two centuries before our era, resemble in form the earliest (Christian) churches. Excavated out of solid rock, they have a nave and side-aisles, terminating in an apse or semi-dome, around which the aisle is carried, * * * and Buddhist monks (centuries before our era, as now) took the same three vows of celibacy, poverty, and obedience, which are taken by the members of the Catholic orders," 3

If the Phænician navigators in the Mediterranean, eight hundred years before Christ, brought to the shores of Greece the knowledge of the arts of Egypt, the manufactures of Tyre, and the products of India and Africa, is it to be won-

¹ Thought to be derived from the still more ancient Egyptian myth of Isis and the miraculously conceived Horus.

² The Cross is one of the oldest of religious symbols, found in Egypt and the East, thought to be derived from the ancient sex-worship.

^{3 &}quot;Ten Great Religions," Clarke, vol. I., pp. 139-142.

dered at that the religious forms and ceremonies of theseearly ages should have been gradually transplanted from one country to another? It is true that there is no recognized historical movement which indicates the growth of Christianity out of Buddhism; but is not the intercourse which is known to have existed between the ancient nations sufficient to account for the resemblance between their religions?

CHAPTER XX.

THE RELIGIONS OF GREECE, ROME, SCANDINAVIA, AND ISLAM.

Widely Contrasted Types of Religious Belief Showing Constant Principles of Development.

THE religions of ancient Greece and Rome are extinct. No living representative remains of the worshippers at the Acropolis and the Pantheon. The gods of these places are still an inspiration in art and poetry, but they have long since ceased to be regarded as divine. A just comprehension of the ancient mythologies, strange as it may seem, has been gained but recently. The difficulty in reaching the true significance of myths arises from the fact that the truths which they contain are so evanescent that they are injured by any thing short of the most delicate and sympathetic analysis. In mythology, analogy is strained to the uttermost, poetry is abused, symbolism overwrought, fiction overwhelms fact, and vet truth survives in the form of real thought and feeling throughout. To discover these truths, to discern the workings of the social heart and mind under these dense accretions of imagery, is the task of the student of mythology.

The Greeks had a wonderfully poetic cosmogony. Their intellectual vigor is declared by the endless details with which they worked out their imaginary surroundings. Where other nations were content with a few abstractions, concerning the origin of things beyond the reach of ordinary perception, the Greeks originated fable after fable to satisfy their inquiring minds, until they were surrounded with a world of semi-supernatural beings to which all phenomena were traced and by which every conceivable

experience was explained. "Love issued from the egg of Night, which floated in Chaos. By his arrows and torch he pierced and vivified all things, producing life and joy."

Ophion and Eurynome ruled over Olympus until they were dethroned by Saturn and Rhea. Then the rebellion of Jupiter against his father Saturn and his brothers the Titans was successful. The penalties inflicted upon the vanguished Titans involved the imprisonment of some of their number in Tartarus. Atlas was condemned to bear up the world upon his shoulders, and Prometheus, the divine sufferer, is chained to the rocks and at length delivered by the self-sacrifice of Cheiron. Jupiter divided with his brothers his newly acquired dominions, retaining the heavens, giving Neptune the ocean, and Pluto the realms of the dead. Jupiter was king of gods and men, and the earth and Olympus were regarded as common property. Juno (Hera), the wife of Jupiter, was queen of the gods, the stately peacock was her favorite bird, and Iris, the goddess of the rainbow, attended upon her. Jupiter bore the shield called Ægis, which was the workmanship of Vulcan, and the eagle attended, carrying his thunderbolts.

Vulcan (Hephæstos), the son of Jupiter, was born lame. Juno, displeased at his deformity, flung him out of heaven. A whole day in falling, he at last alighted upon the island of Lemnos, where, in the interior of his volcano, he commanded the Cyclopes workmen at the forge.

Aphrodite, the frail wife of Vulcan; Mars, the god of war; Phœbus Apollo, the god of archery, prophecy, and music; Venus, the goddess of love and beauty, and Cupid, her son; Minerva (Pallas Athênê), the goddess of wisdom, who sprang in full armor from the head of Jupiter, Mercury, the god of eloquence, science, commerce, and theft;—these usher in the long list of Grecian deities, a marvellous imaginative creation thronging with heroic personages the world of fancy in which this nation dwelt. Such explanations of the questions of existence are, no doubt, childlike; but none but the most intelligent children have such imaginations.

The active life of the ancient Greeks was insensibly blended with this vast mythology, giving it a freshness and warmth which, owing to the unreality of our religious conceptions, it is difficult for us to understand.

The joyous Greek civilization, rich in art, poetry, and thought, formulated its theory of life, or its religion, under the inspiration of its artists, its poets, and its philosophers.

Homer and Hesiod were the first Greek theologians; they named the gods and assigned to them arts and honors. The great sculptors gave form to the gods and taught morality and humanity by idealizing human grandeur and beauty.

The Jupiter of Phidias, occupying the Doric temple at Olympia, was an object of veneration to the whole nation. The games over which it presided "were a chronology, a constitution, and a church to the Pan-Hellenic race. * * * Here at Olympia, while the games continued, all Greece came together; the poets and historians declaimed their compositions to the grand audience; opinions were interchanged, knowledge communicated, and the national life received both stimulus and unity. And here, over all, presided the great Jupiter of Phidias, within a Doric temple, * * * covered with sculptures of Pentelic marble. The god was seated on his throne, made of gold, ebony, and ivory, studded with precious stones. He was so colossal that, though seated, his head nearly reached the roof, and it seemed as if he would bear it away if he rose. There sat the monarch, his head, neck, breast, and arms in massive proportions; the lower part of the body veiled in a flowing mantle; bearing in his hand a statue of Victory, * * * and on his face that marvellous expression of blended majesty and sweetness." Speaking of the great difficulty of forming a true idea of this wonderful statue, L. M. Mitchell. writes in her admirable work on Greek art: "Gladly would we search the galleries of existing sculptures or ponder over coins to find a clearer reflex of this great Zeus. One beautiful Elis coin from Hadrian's time is thought to give the most

^{1 &}quot;Ten Great Religions," vol. I., p. 288.

faithful hint of the benignant head. * * * In the broad serene brow, strong eyebrows, firm but gentle mouth, power seems coupled with unspeakable mildness." An ancient writer says: "Phidias alone has seen likenesses of the gods, or he alone has made them visible."

All Greece was filled with statues of the gods; and each of these inspirations was an expression of the best sentiments of the best men. Chastity was taught by the attitude, expression, and very nakedness of the human form. Thus Milman describes the Belvedere Apollo:

"For mild he seemed, as in Elysian bowers,
Wasting, in careless ease, the joyous hours;
Haughty, as bards have sung, with princely sway
Curbing the fierce flame-breathing steeds of day;
Beauteous as vision seen in dreamy sleep
By holy maid, on Delphi's haunted steep,
Mid the dim twilight of the laurel grove,
Too fair to worship, too divine to love.

All, all divine: no struggling muscle glows, Through heaving vein no mantling life-blood flows, But, animate with Deity alone.

In deathless glory lives the breathing stone. "2

Another beautiful conception of Greek art is Diana the twin-sister of Apollo, otherwise known as Artemis, the untouched one. In the celebrated statue of this goddess at Versailles we see a huntress in swift motion accompanied by a hind. She carries bow and quiver and reaches for an arrow as she runs. A short tunic gives freedom to the limbs. In this lovely guardian of the chase we have no difficulty in recognizing the goddess of chastity and marriage, the Greek ideal of womanhood. Of all the conceptions of Diana this seems to be the noblest and purest.³

Plato, the greatest theologian of Greece, reduced the

^{1 &}quot;History of Greek Sculpture." 1883. 2 Milman, vol. II., pp. 297-298. 3 Diana of Ephesus was only in rare instances accepted by the Greeks outside of Asia Minor. The Greek Artemis was usually represented as a huntress, with face like Apollo.

many gods to one, and built a philosophy upon the idea of a personal God, supplementing the great mythology of his country with a sublime theology, the purest and most consistent ever known. The growth of morality in Greece, as in all nations, took the form of a protest against the immoral aspects of its religion. As already mentioned in Part I., Xenophanes, the rhapsodist of Elea, protested against the immorality of the Homeric legends. Pindar taught that "Law was the ruler of gods and men": that "a man should always keep in view the bounds and limits of things." "The bitterest end awaits the pleasure that is contrary to right." Sophocles, who constantly enjoined in his tragedies a reverence for the gods, makes Antigonê to say, when she is asked if she had disobeyed the laws of the country: "Yes, for they were not the laws of God. They did not proceed from Justice, who dwells with the Immortals. Nor dared I, in obeying the laws of mortal man, disobey those of the undving Gods. For the Gods live from eternity, and their beginning no man knows."

Greek mythology, although a curious phenomenon mingling the frivolous and the commonplace with things divine, to an extent which seems grotesque from our point of view, was yet full of grandeur and purity. It was a religion in the sense that it was an appeal, a sentiment. an inspiration. It was a religion because it expressed the highest and most general conceptions which Greece formed of her existence. It has passed away because the people who lived it have passed away; and we can only understand this religion by putting ourselves in their position. It was not a system of belief which could be adopted by other nations; their gods were merely exaggerations of forms and qualities of Greek life. The chronology of these deities was interwoven with Greek history; their worship was an essential part of the national or political life. The deities were also largely local. Different parts of Greece had different pantheons, and the interprovincial courtesies which existed between the inhabitants were extended to their gods.

The Greeks had no sacred books, no doctrinal system. The works of their great poets, dramatists, and philosophers formed the public mind, perfected the language, and were revered, as were the works of their artists, on account of the high influence which they exerted.

The most marked superstition which we find in Greece is connected with the diviners and soothsayers, who were much consulted. These oracles were often employed as a means of persuading and imposing upon the credulous and ignorant. Indeed, the political intrigues connected with the great Delphic oracle are an important part of the history of the nation. The solemn and secret worship, known as the mysteries of Bacchus and Ceres, seems to have been a thing apart from the joyous and spontaneous religion of this people. The Bacchic mysteries were a form of wild nature-worship, varying from the intoxication, or nervous frenzy, which we find in somedegree in almost all religions, to sensual excesses of the grossest kind. This savage worship was modified and reformed by Orpheus, but even in its improved state it was "distasteful to the best Greeks, suspected and disliked by the enlightened, proscribed by kings, and rejected by communities." The mystery of Ceres, otherwise known as the Eleusinian mysterics, seems to have been derived from the Egyptian myth of Osiris and Isis. In Greece, it took the form of Ceres or Dêmêtêr in search of Persephonê, a symbolism connected with the theory of the expiation of sin and the salvation of the soul hereafter (which was the central belief of the Egyptian religion), and never took any strong hold upon the Greek mind. To this doctrine of remorse for and. expiation of sin, with a view to obtaining a future salvation, can be traced all the exclusive prerogatives of priesthood, from the unparalleled despotism of the Brahmans to the mildest form of ecclesiastical pretension. Sacerdotal privileges which are not derived from supremacy of knowledge and virtue rest upon the inculcation of belief in mysteries which accounts for the deep affection which all religions. display for the unknowable.

The Greeks had no priestly class: kings, generals, and fathers of families offered sacrifices to the gods. There were priests, and sometimes the office was hereditary, but it was not confined to a class, nor did its sanctity attach to the individual, but belonged rather to the offices performed by them.

The life of the Greeks was a succession of religious ceremonies spontaneously mingled with every thing that they did. All their festivals were religious; they prayed for every thing that they wanted in a loud voice with their hands extended toward heaven, and they even threw kisses to the gods. Is it any wonder that humanity should love this wonderful nation, revere its peerless literature, copy its art, and never tire of the romance of its life? It has taught us the limits of an exclusively ethnic development, the highest point to which a nation can reach whose ideals do not express universal principles.

The Roman nation, although coming from the same original Arvan stock as the Greeks, was chiefly derived from three secondary sources,—the Sabines, Latins, and Etruscans. The gods of these peoples form the beginning of the Roman pantheon, and their worships that of the Roman religion. The most elaborate polytheism ever known, the most prosaic theology, was the religion of ancient Rome. As it developed it borrowed its form and ideas from Greece, but applied them in the Roman spirit, which made the resemblance between the religions of the two nations but superficial. As Rome was hospitable to all nations she was hospitable to all religions. She expected all foreigners to worship the gods of their own countries, and in the case of some conquered nations even admitted their gods to her pantheon, but the worship was to conform to the methods of the national or state religion. So preëminent in the Roman character, indeed, was this spirit of organization, or government, that the beauties of religion were lost sight of in the effort to reduce all worship to a public discipline.

In the Roman religion the element of monotheism was manifested by the subordination of all gods to Jupiter

(Optimus Maximus); all other gods being declared but qualities or manifestations of this central deity; yet they carried further than any other nation the multiplication of minor deities. It was the duty of the pontiffs to create gods as they were needed by the increasing diversities of life. For instance, there was the old deity *Pecunia*, money (from *Pecus*, cattle), dating from the time when cattle were a medium of exchange; after this the gods Æsculanus and Argentarius were added, as copper and silver came into use as coin.

The worship of such gods as Fides (Faith), Concordia (Concord). Pudicitia (Modesty), and the gods of home gives us a picture of the Roman moral life. There was no plan of the universe, no creed, in the Roman religion; it was a ceremonial or ritual: a utilitarian faith, a faithful picture of the national character, practical, order-loving, unimaginative. Gibbon tells us that the Roman provincials had been trained by a uniform, artificial, foreign education, and were therefore engaged in a very unequal competition with those bold ancients who had gained honor by expressing their genuine feelings in their own tongue. "The sublime Longinus * * * who preserved the spirit of ancient Athens * * * laments this degeneracy of his contemporaries," who, he says, remained intellectual pygmies by the unnatural confinement of their minds in youth. "It was not until the revival of letters in Europe," continues Gibbon, "that the youthful vigor of the imagination, after a long repose, national emulation, a new religion, new languages, and a new world, called forth another era of genius. * * * The diminutive stature of mankind among the Romans was sinking daily below the old standard. when the fierce giants of the north broke in and mended the puny breed, restoring a manly spirit of freedom which in time became the happy parent of taste and science."

It behooves us Americans to take warning of the consequences of a uniform, artificial, and foreign education. Whether our moral and intellectual ideals are imported from Athens as with the Romans, or from Palestine as

with the Europeans, we should see that they do not make intellectual pygmies of us by confining our minds in youth. Unhappily there are no fierce giants of the north who are able to swoop down upon us and release our minds by destroying our civilization.

But it is not alone the religious ideals of the Europeans (who are in truth the once barbarous heirs of the Roman Empire) that are limiting us. Their political and social aspirations are a dangerous example. The nations of Europe have reproduced Roman characteristics with singular fidelity. As Christian Rome sought to govern the world with the sceptre of love through the spread of ecclesiastical dominion. so did political Rome seek through the power of organization to make her empire universal. The horizon of the Roman mind was bounded by political aspirations, so that even its religious sentiment fell within the range of national aggrandizement and supremacy. National aggrandizement is the ruling passion of the European mind; for what power is really worshipped by these nations but the spread of individual dominion? Do they not perpetually confront one another with the most brutal passions? Are not all their relations but feints in a struggle in which hate and jealousy, cupidity, distrust, and arrogance predominate? Is not royalty the corner-stone of European society, and can any thing be more barbarous than royalty, any thing a greater crime against humanity? Is not the best thought of Europe locked in a death-struggle with the national religion, and is not the whole social and political power enlisted upon the side of the religion which countenances and sanctifies these barbarities?

The Romans of the early period had no statues of their gods; the art of giving form to their deities they got from the Greeks, upon whom they depended even in the matter of augury, for they frequently sent to inquire of the Delphic Oracle. After the current of Greek influence had once set in, it was not long before the whole Roman religion was transformed into an outward imitation of the Greek,

notwithstanding that this tendency was strenuously resisted by the senate and priesthood. As in Greece, there were gods representing objects of nature, such as the sun, moon, ocean, and rivers, the dawn, the tempest, the day, and calm weather. There were deities representing faculties of the mind, sentiments and occupations, such as intellect, reverence for parents, courage, fear and hope, the time of planting, the harvest, war and peace. To the chief of these deities temples were dedicated; and their worship studded the whole calendar with holy days, and mingled with almost every detail of private and public life.

In Rome there was a strange liberty of unbelief and religious criticism. At the time of Catiline's conspiracy, Cæsar openly opposed, in the senate, the execution of the conspirators, on the ground that death was the end of suffering, meaning that he regarded as false what the state religion taught about suffering after death. And Cæsar was at the time the chief religious dignitary of the state. Again: in Cicero's "De Naturâ Deorum," Cotta, the Pontifex Maximus, refutes the belief in a special providence; explaining that. as a Pontifex, he believed in the gods on the authority and tradition of his ancestors, but as a philosopher he felt perfectly free to deny them. These were merely instances of that general lack of deep religious conviction which the story of Roman life reveals. These people made a business of religious observances, but their conceptions of the general principles of existence were not sufficiently exalted to deserve the name of a spiritual faith.1 Notwithstanding her virtuous emperors, chief among whom was Marcus Aurelius, Rome produced no great moral reformer who attained sufficient preëminence to inspire any marked regeneration of life, which gives us the striking picture of a civilization unsurpassed for political power and internal discipline, but

¹ Among the cultivated English and French ecclesiasts of the present day we have many instances of such apostasy, the difference being that it is in society, and in converse with critical minds, that their admissions of unbelief are made, instead of in public tribunals.

never reaching to the sublime height of the impersonal in thought and feeling. Hence Rome had no philosophers; and although she has been called the most religious nation in the world, in the deepest sense she had no religion.

The most beautiful side of her religion was its worship of home, its reverence for the family. Much as the history of Rome may cloud this sentiment, it was nevertheless the central feature of the devotional life of the nation. From this veneration grew the institution of the Vestal Virgins who watched over the sacred flame of the national family life.

The mythology of the Scandinavians, as is the case with that of all nations, was largely determined by their physical surroundings and mode of life. This race was the most important branch of the Teutonic or German division of the Indo-European family. They settled in the northern part of Europe at a very remote period, and were numerous enough to organize the great Cimbric invasion which threatened the existence of the Roman Republic one hundred and eleven years before Christ. The invading host, numbering over three hundred thousand men, issuing from the Cimbric peninsula now known as Denmark, after overwhelming four successive armies of Romans, was only repulsed at last by the military genius of Marius.

In the fifth century these Scandinavians invaded and conquered England as Saxons, in the ninth century as Danes; and in the eleventh century, as Normans, they overran both England and France.

Bishop Percy, in the preface to his translation of Mallet's "Northern Antiquities," gives many reasons for believing that the mythology of the Scandinavians had the same source as that of all the other branches of the Aryan race, and he sees traces of a pure monotheism behind the fabulous adventures of the northern gods.

As, from our metaphysical standpoint, we know that a pure monotheism can only be a realization of the ultimate fact or principle of the universe, we, of course, cannot enter-

tain any theory which supposes this state of mind to have existed among early and uncultivated peoples; although we regard every religion as the best attempt each race and age have made toward this ultimate analysis. The Vedas and the Zend-Avesta certainly breathe a spirit of monotheism; but it is a clouded monotheism obscured by many imperfections, as was also that of the early Hebrews. The favorite doctrine, among so many modern writers, that there was a pure monotheism among the ancient Aryans and Jews, as will more fully appear hereafter, is not supported by facts, even supposing that these writers had clear ideas of what constitutes a pure monotheism.

Of the northern gods the chief was Odin, who received in his palace Valhalla all the braves who were slain in battle. The heroes, says their sacred legend, who are received into the palace of Odin "have every day the pleasure of arming themselves, of passing in review, of arranging themselves in order of battle, and of cutting one another in pieces. But as soon as the hour of repast approaches, they return on horseback, all safe and sound, to the hall of Odin, and fall to eating and drinking. * * * A crowd of virgins wait upon the heroes at table and fill their cups as fast as they empty them. * * * Such was that happy state the bare hope of which rendered all the inhabitants of the north of Europe intrepid, and which made them not only to defy, but even to seek with ardor, the most cruel deaths. Accordingly, King Ragnor Lodbrok, when he was going to die, far from uttering groans or forming complaints, expressed his joy by these verses: 'We are cut to pieces with swords; but this fills me with joy, when I think of the feast that is preparing for me in Odin's palace. Ouickly, quickly, seated in the splendid habitation of the gods, we shall drink beer out of curved horns. A brave man fears not to die. I shall utter no timorous words as I enter the Hall of Odin.' This fanatic hope derived additional force from the ignominy affixed to every kind of death but such as was of a violent nature, and from the fear of being sent after such an exit into Niflheim.

This was a palace consisting of nine worlds, reserved for those who died of disease or old age. Hela, or Death, there exercised her despotic power; her palace was Anguish; her table, Famine; her waiters were Slowness and Delay; the threshold of her door was Precipice; her bed, Care; she was livid and ghastly pale, and her very looks inspired horror."

Odin seems to have been an historical as well as a mythical character. The chronicle of the Swedish kings begins by giving an account of a people who dwelt on the river Tanaquisl, who were governed by a pontiff-king named Odin. This king resided in the city Asgard, and is believed by some historians to have actually conquered Scandinavia at the head of an army of Asiatics. This invasion is supposed to have taken place about forty years before Christ. The historical character of Odin, however, soon disappears in the mythology of which he is the central figure. Although there are verbal traces to this day of the worship paid to Odin, in the name given by almost all the people of the North to the fourth day of the week, which was formerly consecrated to him, nothing remains in Europe, either in literature, customs, or beliefs, which gives any definite idea of this ancient worship. The learned men of Scandinavia had reason to be surprised, therefore, when about the middle of the seventeenth century there was discovered in Iceland a most extraordinary production of the Odin period. The Eddas, or the sacred legends of the Scandinavians, had been reduced to writing, it is supposed, about the eleventh century. Iceland had been discovered and settled by the Scandinavians in 860 to 874 A.D. And thus while political and religious changes were sweeping away all traces of this ancient faith in the mother country, excepting such as linger in the sounds of our words, the literature of this distant island preserved the story in all its details.

The Edda Rhythmica, or Edda of Sæmund, was sent by Bishop Sveinsson from Iceland to the learned Torfæus in

¹Old Norse Odin's dagr; Swedish and Danish Onsdag; Ang.-Sax, Wodane's dag; Old Ger, Wuotane's tac; Eng. Wednesday.

1643; and soon after followed the prose Edda, supposed to have been collected by Snorro Sturleson, the Wise, in the eleventh century, from the lips of the Scalds.

When Harold Harfager determined to subjugate Norway and reduce it to a feudal despotism, which he succeeded in doing after twelve years' hard fighting, many of the nobles of that country sought freedom in the Shetland and Orkney islands, and some went as far as Iceland. Encouraged, probably, by the long winters, which compelled in-door life, these Scandinavians developed almost immediately an oral literature, and Iceland became noted for her learning. An order of sages known as Scalds became numerous and were sought after and honored by the courts of Europe. These men were "living libraries of history and of the maxims of experience," and passed as welcome guests from court to court, even while the governments were in the highest state of hostility.

The discovery of Iceland led to that of Greenland, in 982, and Mallet gives a description of several expeditions which penetrated as far as Massachusetts Bay, built houses, and traded with the natives on the southern coast of Cape Cod, from 1000 to 1008 A.D. The runic inscriptions and the numerous other vestiges of the early colonies scattered along the eastern shore of Baffin's Bay confirm the authenticity of the sagas of Iceland which relate the stories of the discovery of Greenland and the American continent.

Not only did this race of Northmen first discover our continent, but their influence upon us, difficult as it is to trace, has been very great. Almost all our popular nursery stories come directly from the Scandinavian mythology. Our names of days, Tuesday, Wednesday, Thursday, and Friday, come from the names of their gods; their popular assemblies, or Things, were the origin of our Parliament, Congress, and General Assemblies. Our trial by jury was immediately derived from Scandinavia, and our love of freedom, and veneration for woman, are clearly to be traced to the same source.

The Elder or Sæmund's Edda is the chief depository of the

Odin mythology, and also contains a cycle of poems on the demigods and mythic heroes of the North. Howitt says that they show us what the Greek legends would have been without a Homer to form them into one grand epic. These writings contain every degree of emotion from tempestuous passion to unselfish love; they give evidence of deep wisdom wrought into maxims, but throughout runs an almost childish imagination strangely mixed with thought. An idea of the mythology of this Edda can be had from the following description by the Howitts in their "Literature and Romance of Northern Europe":

"Amid the bright sunlight of a far-off time, surrounded by the dimmest shadows of forgotten ages, we come at once into the midst of gods and heroes, goddesses and fair women. giants and dwarfs, moving about in a world of wonderful construction. * * * The mysterious Vala, or prophetess. seated somewhere unseen in that marvellous heaven, sings an awful song of the birth of gods and men, of the great Yggdrasil, or Tree of Life, whose roots and branches run through all regions of space to which existence has extended: and concludes her thrilling hymn with the terrible Ragnarök, or Twilight of the Gods, when the dynasty of Odin disappears in the fires which devour creation, and the new heaven and new earth come forth to receive the milder reign of Baldur. Odin himself sings his high song, and his ravens Hugin and Munin, or Mind and Will, bring him news from all the lower worlds, but he cannot divest his soul of the secret dread that the latter will one day fail to return, and the power which enabled him to shape the sky and all the nine regions of life beneath it shall fall from his hands. strange mixture of simplicity and strength, of the little and the great, the sublime and the ludicrous, runs through this ancient production, or rather collection of productions, betraying at once an age of primitive vigor and of almost infantine naïveté. Odin fights daily with his hero-souls in the neighborhood of Valhalla, or goes forth on some curious mission among giants and men; Thor thunders with his hammer among the rocks; Loki plays off his spiteful tricks on high and low; the leaves of Yggdrasil rustle in the winds of heaven; the waters of the ocean roll glitteringly between Midgard and Jötunheim, the outer regions of the Giants and of Frost; the gods travel daily over the beautiful bridge Bifröst, the Rainbow; and men, the descendants of Ask and Embla, claim kindred with the divine Asar, and doubt not to reach Valhalla by deeds of hardihood and endurance.

"To the antiquity of some of these songs it would be vain to attempt to fix a limit. They bear all the traces of the remotest age. They carry us back to the East, the original region of the Gothic race. They give a glimpse of the Gudaheim, or home of the gods, and of the sparkling waters of the original fountain of tradition. They bear us on in that direction toward the primal period of one tongue and one religion, and, in the words of the Edda, of that strange God 'whom no one dared to name.'"

The Younger or prose Edda may be regarded as a sort of commentary on the poetic one, or as its translation into prose, mixed with many extravagances in accordance with the taste of the age. It is said to bear no comparison in literary and philosophical value to the poetical Edda, which preceded it by about one hundred and fifty years.

The idea to be gained of the morality of this hardy race of Northmen from these sacred books, the only record which we have of their life, is of the vaguest kind. All opinions seem to concur in according to them a rude chastity, but their great love of conflict must have entailed an untold brutality.

Even in so savage a faith as that of the Scandinavians the principles of religious development are seen to be constant. Vague ideas of life and nature take on fantastic forms. Every thing is reduced to imaginary personalities, around which cluster the most extravagant beliefs. As the mind advances, these personages range themselves with more or less order under the government of a single person, who at last gives way to a single principle.

Some sanguine modern writer, in attempting to voice the higher aspirations of his fellow-men, has said that "all earnest Christians desire a unity which rests upon the belief that 'the children of one Father may worship him under different names,' that they may be influenced by one spirit even though they know it not, that they may all have one hope even if they have not one faith." This seems to be a worthy sentiment, but its author has "counted without his host." for Christians desire nothing of the kind. They desire rather that the children of one Father may worship him under one name, and that the world may have as soon as possible one faith and one hope. The name of this God they insist is the Christian God, and the faith and hope which they wish the world to have are faith and hope in Christ. This is the real Christian spirit, and it is the better spirit of the two. A true religious spirit means singleness of purpose, steadfastness of belief, uncompromising loyalty to a certain God, a certain church, and a certain creed. This is the only spirit which accomplishes any thing in religion; a spirit particularly evident in the latest religion which the world has produced.

In Islamism we have a religion, the earliest beginnings of which are within the broad light of history. We know from many sources the minutest details of its inception and growth, while the resemblance between it and the older faiths is so close as to illustrate in a striking manner the universality of religious sentiment and the uniformity of its development.

The true Christian who studies the religion of Mohammed is unavoidably puzzled. It contains so much that the Christian acknowledges to be holy, that the natural resistance to a rival faith is softened into a reluctant admiration. The puzzle of Mohammedanism is not its marvellous growth and endurance, its near approach to universal truth, nor its doctrinal contradictions, but the want of harmony which exists between its moral precepts and the life and methods of its founder. The wonder is, how so vast and comparatively pure a faith could have grown out of a career such as that of

Mohammed. This wonder is only increased by closely examining the events which immediately followed the death of its founder. Those of his successors who were in sympathy with his best aims, one after another fell victims to the hate of opposing factions, until the power of Islam actually resided with its enemies, who perpetuated the system solely for the temporal advantages which it secured them: and yet the faith arose from these spiritual ruins, surviving the crimes of both the prophet and his enemies, and has exerted a moral suasion over millions of lives for many centuries.

For forty years Mohammed led an exceptionally upright life. During his youth having distinguished himself for probity, and intelligence in business affairs, he was put in charge of the property of a young widow of high character and position. He executed his trust so well that he gained her esteem, which afterward resulted in their marriage. He was thoughtful and observing, and as his people, the Arabians, were for centuries before his time a comparatively unorganized race, living in detached tribes or communities without national unity, and suffering all the disadvantages of such a condition, he felt deeply the need of a general and fundamental reform. The Arabs and Jews are not only related as branches of the Semitic race, speaking cognate languages, but Judaism, in an indistinct form, was the faith of the Arabian tribes. A vague monotheism, combined with the worship of local deities, and a reverence for the great Tewish teachers, were the chief characteristics of the Arabian faith at the time of Mohammed. Abraham was looked upon as their physical and spiritual father: and although the customs and religious forms of the Jews were entirely distinct from Arabian life, the essential doctrines of Judaism were common to both nations.

Against this disorderly state of things the nature of Mohammed rebelled. His thoughts gradually grew into the most vivid convictions; his feelings, encouraged by the examples of religious fervor so frequent among his race, became morbidly intense and assumed the form of ecstatic

visions. He began by believing himself a great prophet, and his wife, impressed by his deep earnestness and the unquestioned loftiness of his aims, became his first convert and encouraged him in his course. He then openly declared himself a prophet of God, bent upon the establishment of a universal religion, the substance of which was faith in one Supreme Being, submission to his will, trust in his providence. and good-will to his creatures. "A marvellous and mighty work." says Mr. Muir, "had been wrought by these few precepts. From time beyond memory Mecca and the whole peninsula had been steeped in spiritual torpor. The influences of Judaism, Christianity, and Philosophy had been feeble and transient. Dark superstitions prevailed, the mothers of darker vices. And now, in thirteen years of preaching, a body of men and women had risen who rejected idolatry; worshipped the one great God: lived lives of prayer; practised chastity, benevolence, and justice; and were ready to do and to bear every thing for the truth. All this came from the depth of conviction in the soul of this one man."

This is one side of the picture, viewing the religion from its subsequent success. The other side, that which was presented at the time of the occurrence of these events, gives us a view of the opposition and contempt which Mohammed met on every hand: the niggardly results of the first thirteen years of his preaching (only about two hundred converts, and those principally slaves), the indignities and the personal danger which his cause earned for him among the inhabitants of his native city of Mecca, and at last the flight from that place to Medina for safety,—the Hegira,—from which event the Mussulmans date the beginning of their era. The story of the thirteen years preceding this event contains all that is purely religious, all that is inspiring, in the career of Mohammed. From the Hegira, Mohammed became a great political leader, a statesman, a general, but gradually lost, as his ambition and success increased, all the dignity, simplicity, and purity of a great reformer.

During the early part of his religious life, the period of obscure efforts to establish a great truth, we find in Mohammed a commanding moral character. His thought and his methods were imbibed from Judaism and Christianity. people were peculiarly ripe for such a religious movement as followed: and no sooner had he established the nucleus of the faith than it grew with astonishing rapidity. This growth completely entangled the great prophet in its luxuriance, and he became in many ways a weak and worldly man: stooping to subterfuges, showing cruelty and arrogance, and vielding to sensuality. His temptations, however, were great, and his education rendered him peculiarly liable to such weaknesses. Had he, for instance, known Christianity from its better side, he would have seen less to encourage him in his original undertaking. He would very likely have been the St. Paul of Arabia, and the strange phenomenon of a vast Semitic nation becoming Christianized might have taken place; for there is scarcely a principle which Mohammed taught which has not its counterpart in the Christian religion. Philosophy, however, had mingled with Christianity, and built up the complicated theory of the Trinity. It is from this metaphysical side that Mohammed had learned our religion: and this side, as many devout Christians admit, being by far the less imposing and attractive, Mohammed was uninspired by the great faith, and never evinced more than a courteous respect for it.

Before Mohammed had gained the political power which made the progress of his religion, for the most part, a military conquest, an incident occurred which throws light upon the difficulties of his undertaking, upon his character, and also upon that of the people with whom he had to deal. It is thus related by M. Renan:

"There is a curious episode belonging to the first period of Mahomet's mission which very well explains the icy indifference which he encountered in all about him, and the extreme reserve which he was bidden to maintain in the use of the marvellous. He was seated in the square of the Caaba, at a

short distance from a circle formed by a number of Koreisch chiefs, all opposed to his doctrine. One of them, Otba, son of Rébia, approaches him, takes a place by his side, and, speaking in the name of the rest, says:

"'Son of my friend, thou art a man distinguished by thy qualities and thy birth. Although thou causest disturbance in thy country, divisions in families, although thou dost outrage our gods, taxest our ancestors and sages with impiety and error, we would deal discreetly with thee. Hear the propositions I have to make to thee, and consider if it does not become thee to accept one of them.'

"'Speak,' said Mahomet, 'I listen.'

"'Son of my friend,' resumed Otba, 'if thine object be to acquire riches, we will contribute to make thee a fortune larger than that of any of the Koreisch. If thou aspirest to honors, we will make thee our chief, and we will take no resolution without thine advice. If the spirit that haunts thee clings to thee and sways thee so that thou canst not withdraw thyself from its influence, we will call in skilful physicians and pay them to cure thee.'

"'I am neither greedy of property, nor ambitious of dignities, nor possessed by an evil spirit,' replies Mahomet. 'I am sent by Allah, who has revealed to me a book and has ordered me to announce to you the rewards and punishments that await you.'

"'Very well, Mahomet,' said the Koreisch to him, 'since thou dost not agree to our propositions, and pretendest to be sent by Allah, give us clear proofs of thy qualification. Our valley is narrow and sterile, prevail on God to enlarge it, to push back these mountain chains that shut us in, to cause rivers like those of Syria and of Irak to flow through it, or else to bring from the tomb some of our ancestors, and among them Cossay, son of Kilâb, whose word had such authority; let these illustrious dead, revived, acknowledge thee as a prophet, and we also will recognize thee.'

"'God,' replies Mahomet, "has not sent me to you for that; he has sent me merely to preach his law."

"'At least,' resumed the Koreisch, 'ask thy Lord to cause one of his angels to appear, and avouch thy veracity and bid us believe thee. Ask him, likewise, to publicly ratify the choice he has made of thy person, by relieving thee of the necessity of seeking thy daily subsistence by trade, like the rest of thy fellow-countrymen.'

"'No,' says Mahomet, 'I will make none of these requests; my duty is only to preach.'

"'Very well; your Lord may cause the sky to fall on us, as you pretend that he can; for we will not believe thee.'

"It is clear that a Buddha, a son of God, a high-flown magician, were too high for the temperament of this people. The extreme delicacy of the Arab mind, the frank, plain way in which he takes his stand on fact, the license of morals and of beliefs that prevailed at the epoch of Islamism, forbade grand airs to the new prophet. ** Arabia, especially, had lost, perhaps never had, the gift of inventing the supernatural. In all the moallakât,¹ and in the vast repository of anti-Islamic poetry, we hardly find a religious thought. This people had no sense for holy things; but as compensation it had a very lively sentiment of things finite, and of the passions of the human heart. This is the reason why the Mussulman legend outside of Persia has remained so poor, and why the mythical element is so absolutely wanting in it."

With regard to the difficulty that Mohammed had to create stories of miracles, the same author says: "The only time that Mahomet allowed himself to indulge in an imitation of the gorgeous fancies of other religions, in the night-ride to Jerusalem, on a fantastic beast, the affair turned out very ill; the story was greeted with a storm of merriment. Many of his disciples swore off, and the prophet made haste to withdraw his troublesome idea by declaring that this marvellous journey, given out at first as real, was only a dream."

¹ They term *moallakât*, or *suspended*, the pieces of verse which had taken the prize in the poetical tourneys, and were suspended by gold nails to the door of the Caaba. Seven of them are extant, to which two or three other poems of the same character are attached.

Apart from a few miracles, about the details of which, as we have indicated. Mohammed was very particular, this great prophet really asked his friends to believe nothing which could not with perfect propriety be offered to the Christian world to-day as a valid faith. All the great principles of Christian belief are rigorously complied with in his appeal. Mohammed solemnly declared himself to be the true prophet of the one true God. He offered as credentials a book of revelations, the authenticity of which can hardly be disputed. since he wrote it himself. He gave up the greater part of his time to rewarding his adherents and providing punishments, both temporal and spiritual, for all who refused to believe in him. He made the most complete arrangements in heaven to correspond with his plans upon earth, and he took all his friends into this arrangement and excluded from it all his enemies. He appointed his apostles, founded his church, formulated creed and ritual, and virtually created a bible. In fact, no man ever worked harder to establish a religion, and few have succeeded any better. Mohammed was a good organizer: he knew how to make the best of circumstances. Finding that he had to deal largely with Jews and Christians, he proclaimed that the Jewish law and the Christian gospels were all equally the Word of God, and he inculcated belief in them all on pain of hell-fire. Any confusion which might arise in the minds of the faithful on account of the variety of beliefs set forth in these holy books he removed by the luminous doctrine that "as the Koran was the latest, in so far as it pleased the Almighty to modify his previous commands, it must be paramount." Mohammed lost no opportunity of affirming that his writings were concurrent with the Jewish and Christian scriptures, although of the latter he knew so little that he supposed the Gospel was a direct revelation from God to Jesus. No doubt he possessed a minute knowledge of the facility with which such a literary transaction could be arranged.

"When his own work was condemned as a 'forgery' and an antiquated tale' his most common retort was, 'Nay, but

it is but a confirmation of the preceding Revelation and a warning in simple Arabic to the people of the land.' The number and confidence of these asseverations secured the confidence or at least the neutrality of both Jews and Christians." Thus we see that the analogy between the Christian and the Mohammedan religions is not accidental. "The New Revelation of Arabia" was persistently offered as the Arabian form of both Judaism and Christianity, the chief innovation being confined to the substitution of an Arabian for a Jewish prophet.

The death of Mohammed was a severe shock to the faith of his followers, many of whom had gradually come to believe him immortal. This disaffection, added to the triumph of those who had refused to believe in him, or had only half believed, well-nigh caused a general apostasy. Rival prophets at once appeared all over Arabia. Numerous sects sprang into existence, some of them bordering on avowed infidelity. There had been a few proud families of Mecca, the Omeyyades, who had never made more than the merest semblance of belief in Mohammed. They by degrees came into possession of the chief administrative power of Islamism; and we have the strange spectacle of the primitive and pure generation of Mohammedan leaders exterminated and replaced by a party who had never been in sympathy with the faith. Thus Islamism grew into the power and unity which later distinguished it, from a relative beginning of scarcely any religious faith.

Mohammed was no more the founder of monotheism than of civilization or literature among the Arabs. M. Caussin de Perceval says that the worship of Allah the supreme (Allah taâla) seems to have been always the basis of the Arab religion. "The Semitic race never conceived of the government of the universe otherwise than as an absolute monarchy. Its theodicy has made no progress since the Book of Job; the sublimities and the aberrations of polytheism have always been foreign to it."

[&]quot;"The Life of Mahomet," Muir., p. 154.

The Mohammedan bible, the Koran, is entirely unique among the sacred books of the world, both in its form and in its manner of production. It is a collection of the preachings of Mohammed (not lacking in beauty of thought and expression), and the daily orders which he issued to his followers bearing the date of the places in which they appeared. "Each of these pieces was written, from the prophet's recitation, on skins, on shoulder-blades of sheep, camels' bones, polished stones, palm-leaves; or was kept in memory by the principal disciples, who were called Bearers of the Koran." These pieces were collected into a single book soon after the prophet's death, and copied in the order of the length of their contents without any regard to the sense or connection. This want of arrangement in the Koran is regarded by scholars as an evidence of its authenticity: a forgery would have had more method in it.

The Moslem sects are as numerous as the Christian. Between these sects, which are grouped in two principal branches, cruel wars and persecutions have long prevailed. The most zealous Moslems are the Turks, who observe the fasts and holy days with rigor, and have no desire to make proselytes, but cordially hate all outside of Islam. So many hard things have been said of the Turks of late years, that it is refreshing to meet with testimonials of their religious and moral character.

Bishop Southgate says: "I have never known a Mussulman, sincere in his faith, * * * in whom moral rectitude did not seem an active quality and a living principle. In seasons of plague the Turks appear perfectly fearless. They do not avoid customary intercourse and contact with friends. They remain with and minister to the sick with unshrinking assiduity. * * * In truth, there is something imposing in the unaffected calmness of the Turks at such times. It is a spirit of resignation which becomes truly noble when exercised upon calamities which have already befallen them." ²

¹ The word Koran means recitation.

² Southgate's "Travels in Armenia," vol. I., p. 86.

Allah is constantly on the lips of the Mohammedans, both men and women; but it has become with them a mere form of speech. The incidents of their daily and religious life prove that they do not regard God as a person, but rather as a divine unity of will.

The attempt, so often made by Christians, to account for all the imperfections of the Moslem governments by the error of the Mohammedan conception of God is an exalted method of criticism, but one which can hardly be consistently employed by believers in a personal deity. The conception which a civilization forms of God indicates the stage of its development, but this conception is the consequence or function of the whole civilization, not its cause. improve it would be to remould the life of a race. As morality is shown to be a logical phenomenon only by first establishing the interdependence of thought and feeling, so the effect upon individual and national conduct of the belief in a personal God can alone be made clear by tracing knowledge and belief to their humblest beginnings, which is to take the widest possible view of religious development.

CHAPTER XXI.

THE HEBREW RELIGION.

Semitic Monotheism-The Jewish Conception of God.

WHAT can be more instructive than the diverse opinions of our great religious critics and historians concerning the origin of our ideas of God, especially when we remember that no two of them agree as to the nature of Deity? If by the term God is meant the God of Abraham, of Isaac, and of Jacob, it would seem but natural to credit the Iews with the origin of the conception: but we are by no means sure that it is the God of Israel that we are seeking. In the preface to the great work of Ewald on the history of Israel, Russell Martineau tells us that the author is a devout theologian, and that no one could have labored more sincerely than he did to defend the belief in a personal God, and a supernatural revelation coming from him to Israel, against the contrary evidence which an intelligent study of tradition would supply. A careless reader might understand this to mean that Ewald had not studied tradition intelligently; but had this been the meaning of Mr. Martineau, is it likely that he would have written an eloquent preface to Ewald's great work? With regard to Ewald's treatment of tradition, Mr. Martineau says: "If we penetrate further back than the age of mythic heroes, we come only to a time when the gods themselves were imagined to people the earth with their kind. If this is true everywhere alike, we might expect to find it in Israel also, where, indeed, we do find the very same ideas and stories. We cannot treat the Assyrian, Persian, and Greek deluges as mythical, and refuse the character to the Hebrew. Hence Ewald treats the Hebrew myths of Genesis in the same spirit as he would those of any other nation; nor does he deem it necessary to justify such treatment any more than an historian of Rome would apologize for the myth of Romulus."

If we would gain an idea of how Ewald really has treated the sacred traditions of Israel, we have but to look a little farther into the same preface. Here we are reminded of the difficulties which the conscientious historian has to contend with in deciphering the truths which lie hidden in those legends and myths that have until recently been treated as actual history. "The value of history does not depend upon the vividness of its colors, or, in other words, the positiveness of its assertions. * * * The earliest period of the lives of all nations is now acknowledged to be mythical, but the myths cover events or thoughts generally grander than themselves. * * * Dorus and Æolus were not single men, but represent the whole nation of Dorians and Æolians: Shem and Ham. the whole population of their respective regions, the southwest of Asia, and the north of Africa. So when Ewald shows us Abraham as a 'representative man,' and his wanderings as those of a large tribe, the quarrels between Jacob and Esau as great international struggles between the Hebrews and the Arabian tribes, rather than the petty strife of a few herdsmen, the history assumes a grander scale than we had any idea of before. Stories which before amused us with their pettiness now tell of the fates of empires and the development of nations, and we see why they have been preserved from an antiquity so high that the deeds of individuals have long been obliterated. The mythical system, therefore, as understood and wielded by the chief masters, is any thing but destructive of history; it rather makes history where before there was none."

But the same careless reader might think that whatever fine distinctions the "devout theologian" Ewald may make, he has certainly forfeited the confidence of Christians by declaring the Bible, so far as it deals with early Jewish history, and the conceptions of God which it describes, not only uninspired but thoroughly unreliable, a mere mass of undigested tradition. We are naturally amazed, therefore, to find that such eminent Christian scholars as Dean Stanley and Dr. Rowland Williams concede Ewald's universal learning and "spiritual insight," although differing with him on "general principles," with regard to the authorship of several of the books of the Old Testament. Dean Stanley testifies to "the intimate acquaintance which Ewald exhibits with every portion of the sacred writings, combined as it is with a loving and reverential appreciation of each individual character and of the whole spirit and purpose of the Israelitish history." The same writer acknowledges the vast influence which the book has had, not only in the author's country, but in France and in England, and cites as an example the constant reference to it throughout the new "Dictionary of the Bible," "which is one of the greatest and best Christian books of reference of our time."

To an unprejudiced reader it would seem but natural to place the sacred writings of the Jews, at least up to the Persian Period, say B.C. 538, in the category of barbaric lore.

The reign of David (about 1000 B.C.) is supposed to have been the zenith of Hebrew religious life, and yet what do we find this life to have been? We are told that "the zeal for Yahveh being national, it manifested itself in persecution of the Canaanites. Samuel was believed to be a rain-maker. Saul put away those that had familiar spirits, and the wizards; yet in one instance he caused the dead to be called. David apparently believed Yahveh to dwell in the ark, to be confined to Canaan, to be appeased by the smell of sacrifices, and to admit of human sacrifices, though he conceived him to be a righteous God. In David's house teraphim were kept. Yet he fought the 'battles of Yahveh' (Yahveh of Hosts = Tzebaôth). David also believed in angels. Solomon did not recognize Yahveh as the only true God: he erected sanctuaries in honor of foreign gods. The brazen serpent

continued to be worshipped." And still "Christian scholars" who are perfectly aware of these facts unblushingly teach that these people had a knowledge of the true God, and that theirs is the God we are to worship. But why should we complain of this, when we find even such liberal scholars as Renan clinging to the same superstition, that the Israelites had in some way been intrusted with a supernatural or special knowledge of God? We must admit that the poor Christian scholars have a certain justification in standing upon the defensive and in admitting as little as possible, when the boldest investigators seem to quail before this common Israelitish myth.

Philology tells us that each race has had its mythic age. and that from this primitive stage of development has come its language, its thought, and its religion. The characteristics of this age are the same the world over. The causes which have led to it, and the results attained, are governed by the conditions of social development, which are in the main constant. If among the younger nations, such as the present peoples of Europe, or among the Greeks and Romans, whose beginnings can be traced through the aid of history, we know that there was no period of greater illumination which preceded this age, why should we believe that such a period existed in Canaan or Judea? And yet all the wellknown theories of Semitic monotheism rest upon a belief in a "period of greater illumination" which, in some form, either preceded, or took the place of, the mythic age of Iewish history. It is true that some of the most enlightened of these theories confine this "illumination" to the minds of a few individuals, such as Abraham and Moses, not being willing, perhaps, to take the responsibility of asserting that the barbarous and idolatrous Hebrews enjoyed any especially exalted conception of God.

The belief in the Hebrew knowledge of God, to which the Christian mind clings with such tenacity, appears in its worst light when we compare it with the conception of God as a

¹ See Spencer's "Descriptive Sociology," book VII., table II.

principle; although the personality which the Jews gave to the Deity must certainly be repulsive enough even to the modern Christian.

This tendency of the Christian mind is aptly illustrated by the plaintive appeal of the *Record*, in speaking of Ewald's work: "We sincerely hope [says the *Record*] that the English mind will long recognize the true grandeur of early Hebrew history to consist, not in the wanderings and squabbles of various Arab tribes, but in the presence of the living God forming for himself that people through which all nations of the earth are blessed." Thus Christian mythology fights hard for its life, and only inch by inch yields its superstitions. The very man who has done the most to give us a rational view of the Hebrew Civilization, holds to the most irrational myth of which Israel has been the author. It is hard to forgive such men as Ewald and Max Müller for their belief in a concrete personal God: a belief so utterly beneath the logical dignity, the scientific knowledge, of their age. But the brilliant Renan, who represents the purest, the least ethnic, the most cosmopolitan culture in the world, who speaks a language which has shown the least hospitality of all developed tongues to the vagaries of metaphysics,—it is still harder to forgive this man, great in almost every other particular, his failure to conceive God as the universal principle, to rise above those childish and limited interpretations of Deity which belong so clearly to past and inferior civilizations.

Thus, in his essay upon the history of the people of Israel, Renan says, with regard to the reign of Solomon: "We feel how far we are from the pure ideal of Israel. The calling of Israel was not philosophy, nor science, nor art (excepting music), nor industry, nor commerce. In opening these secular paths, Solomon, in one sense, caused his people to deviate from their peculiarly religious destiny. It would have been all over with the doctrine of the true God if such tendencies had prevailed. Christianity and the conversion of the world to monotheism being the essential work of

Israel, to which the rest must be referred, whatever turned it aside from this superior end was but a frivolous and dangerous distraction in its history. Now, far from having advanced this grand work, we may say that Solomon did every thing to embarrass it. Had he succeeded. Israel would have ceased to be the people of God, and would have become a worldly nation, like Tyre and Sidon, * * * While the successor of David was passing his time playing at riddles with Saba's infidel queen, there were seen on the Mount of Olives altars to Moloch and to Astarte What more inconsistent with the first duty of Israel? Guardian of an idea about which the world was to rally, charged to substitute in the human mind the worship of the supreme God for that of national divinities. Israel was bound to be intolerant, and to affirm boldly that all worship except that of Jehovah was false and worthless. * * *

"We see exhibited here the grand law of the whole history of the Hebrew people, the struggle of two opposing necessities which seem almost to have drawn in contrary ways this intelligent and passionate race: on one side the expansion of minds eager to understand the world, to imitate other people, to leave the narrow enclosure in which the Mosaic institutions confined Israel; on the other side, the conservative thought to which the salvation of the human race was attached."

It is hardly possible to read all this and still believe that M. Renan yielded to no superstition with regard to the "sacred career of Israel," that "the conversion of the world to monotheism was the essential work of Israel," or that "the salvation of the human race was dependent upon Israel," all of which theories are fast disappearing from the most enlightened historical criticism. In Prof. Max Müller's essay on "Semitic Monotheism," this favorite theory of M. Renan is warmly criticised. "The Semitic family," says Mr. Müller, "is divided by M. Renan into two great branches, differing from each other in the form of their monotheistic belief; yet both, according to their

historian, imbued from the beginning with the instinctive faith in one God:—

- "I. The nomad branch, consisting of Arabs, Hebrews, and the neighboring tribes of Palestine, commonly called the descendants of Terah; and
- "2. The political branch, including the nations of Phœnicia, of Syria, Mesopotamia, and Yemen.

"Can it be said that all these nations, comprising the worshippers of Elohim, Jehovah, Sabaoth, Moloch, Nisroch, Rimmon, Nebo, Dagon, Ashtaroth, Baal or Bel, Baal-peor, Baal-zebub, Chemosh, Milcom, Adrammelech, Annamelech, Nibhaz and Tartak, Ashima, Nergal, Succoth-benoth, the Sun. Moon. Planets, and all the host of heaven, were endowed with a monotheistic instinct? M. Renan admits that monotheism has always had its principal bulwark in the nomadic branch, but he maintains that it has by no means been so unknown among the members of the political branch as is commonly supposed. But where are the criteria by which, in the same manner as their dialects, the religions of the Semitic races could be distinguished from the religions of the Arvan and Turanian races? We can recognize any Semitic dialect by the triliteral character of its roots. Is it possible to discover similar radical elements in all the forms of faith, primary and secondary, primitive and derivative, of the Semitic tribes? M. Renan thinks that it is. He imagines that he hears the key-note of a pure monotheism through all the wild shoutings of the priests of Baal and other Semitic idols, and he denies the presence of that keynote in any of the religious systems of the Aryan nations, whether Greeks or Romans, Germans or Celts, Hindoos or Persians. * * * As it is impossible to deny the fact, that the Semitic nations, in spite of this supposed monotheistic instinct, were frequently addicted to the most degraded forms of polytheistic idolatry, and that even the Jews-the most monotheistic of all-frequently provoked the anger of the Lord by burning incense to other gods, M. Renan remarks that when he speaks of a nation in general he speaks only

of the intellectual aristocracy of that nation. * * * The fact that Abraham, Moses, Elijah, and Jeremiah were firm believers in one God, could not be considered sufficient to support the general proposition that the Jewish nation was monotheistic by instinct. And if we remember that among the other Semitic races we should look in vain for even four such names, the case would seem to be desperate to any one but M. Renan. * * *

"We cannot believe that M. Renan would be satisfied with the admission that there had been among the Jews a few leading men who believed in one God, or that the existence of but one God was an article of faith not quite unknown among the other Semitic races; yet he has hardly proved more. He has collected, with great learning and ingenuity, all traces of monotheism in the annals of the Semitic nations; but he has taken no pains to discover the traces of polytheism, whether faint or distinct, which are disclosed in the same annals. In acting the part of an advocate, he has for a time divested himself of the nobler character of the historian."

In short, M. Renan is struck with the religious instincts of the Jews and Arabs, and seeks to account for this remarkable instinct from a philological standpoint. There are other races besides the Arabs and Jews that belong to the Semitic group; and although these other nations—as the Assyrians, Babylonians, and Phænicians—are not monotheistic, still, for the sake of the theory, they must be shown to be more monotheistic than the Indo-European group of nations.

Max Müller, and other orientalists, protest that the facts of religious history cannot be made to sustain M. Renan's theory; but M. Renan replies by offering a learned argument, in the form of a comparison of the etymological constitutions of the Semitic and Aryan languages, with the object of proving that the idea of one God is the natural tendency of the Semitic mind and speech.

To the details of this argument Mr. Müller takes no exception, but to its aim, which is to prove the natural origin of the monotheism of the Jews, he opposes a theory which

depends upon a belief in the Bible story of the personal relationships between Abraham and God. "Of the ancestors of Abraham and Nachor, even of their father Terah, we know that in old time," says Mr. Müller, "when they dwelt on the other side of the flood, they served other gods (Joshua xxiv., 2). At the time of Joshua these gods were not yet forgotten, and instead of denving their existence altogether. Joshua only exhorts the people to put away the gods which their fathers served on the other side of the flood and in Egypt, and to serve the Lord: 'Choose you this day,' he says, 'whom ye will serve: whether the gods which your fathers served that were on the other side of the flood, or the gods of the Amorites, in whose land ve dwell: but as for me and my house, we will serve the Lord.' Such a speech, exhorting the people to make their choice between various gods, would have been unmeaning if addressed to a nation which had once conceived the unity of the Godhead. Even images of the gods were not unknown to the family of Abraham; for, though we know nothing of the exact form of the teraphim, or images which Rachel stole from her father, certain it is that Laban calls them his gods (Genesis xxxi., 19, 30). But what is much more significant than these traces of polytheism and idolatry, is the hesitating tone in which some of the early patriarchs speak of their God. When Jacob flees before Esau into Padan-Aram, and awakes from his vision at Bethel, he does not profess his faith in the One God, but he bargains and says: 'If God will be with me, and will keep me in this way that I go, and will give me bread to eat, and raiment to put on, so that I come again to my father's house in peace; then shall the Lord be my God: and this stone, which I have set for a pillar, shall be God's house: and of all that thou shalt give me, I will surely give the tenth unto thee' (Genesis xxviii., 20-22). Language of this kind evinces not only a temporary want of faith in God, but it shows that the conception of God had not yet acquired that complete universality which alone deserves to be called monotheism, or belief in one God. * * *

And yet this limited faith in Jehovah as the God of the Jews, as a God more powerful than the gods of the heathen, as a God above all gods, betrays itself again and again in the history of the Jews. The idea of many gods is there, and wherever that idea exists, wherever the plural of god is used in earnest, there is polytheism."

Now, after these evidences of the narrow personal idea which the Jews had of divine unity, how does Mr. Müller enlighten us with regard to that pure original monotheism from which he seems to regard all forms of polytheism as a retrogression? How does he introduce to the minds of his readers that stupendous event when the ruler of the universe came "face to face" with a certain man and revealed himself unto him, establishing a knowledge of God among men? It is in these words: "And if we are asked how this one Abraham possessed not only the primitive intuition of God as he had revealed himself to all mankind, but passed through the denial of all other gods to the knowledge of the one God. we are content to answer that it was by a special Divine Revelation. We do not indulge in theological phraseology, but we mean every word to its fullest extent. The Father of Truth chooses his own prophets, and he speaks to them in a voice stronger than the voice of thunder."

Before closing his argument, however, Mr. Müller seems to have a craving for a logical or philological basis for monotheism.

The theory of a "Special Revelation to Abraham" does not seem to quite satisfy him, so he suggests also a natural way by which Abraham attained his idea of one God; which is not unlike the intellectual procedures observed throughout the history of philosophy, tending to the reduction of the categories of thought to a single principle. "Whatever the names of the Elohim worshipped by the numerous clans of his race, Abraham saw that all the Elohim were meant for God, and thus Elohim, comprehending by one name every thing that ever had been or could be called divine, became the name with which the monotheistic age was

rightly inaugurated,—a plural conceived and constructed as a singular. Jehovah was all the Elohim, and therefore there could be no other God. From this point of view, the Semitic name of the Deity, Elohim, which seemed at first not only ungrammatical but irrational, becomes perfectly clear and intelligible, and it proves better than any thing else that the true monotheism could not have risen except on the ruins of a polytheistic faith." ¹

Mr. Müller leaves it to his readers to identify the "ruins of a polytheistic faith" and a "Special Divine Revelation to Abraham," as the sources of monotheism, and the knowledge of the true God. Any confusion which these widely differing sources of the same event might give rise to would probably be removed by declaring that Abraham kept the knowledge of the true God to himself, and that monotheism has been a divinely inspired effort of humanity to share it with him. We think, on the whole, we should prefer M. Renan's interpretation of the origins of our belief in One God; for, although it deprives human history of some of its grandest outlooks, it certainly leaves us on much better terms with the great father of the Hebrews.

After all, is there any necessity for these forced explanations of the monotheism of the Jews? Does not this dispute between two of the greatest scholars of our century illustrate the futility of the attempt which they both make? Would it not be well to remind these learned gentlemen that when it is found impossible to explain a supposed fact by natural causes, the fact itself is impeached and must be examined? M. Renan very naturally asks: How could a civilization like that of Israel, which was confessedly inferior to almost all the other civilizations of antiquity in every thing excepting one phase of religious belief,—how could a Semitic people, who, "compared with the Aryan nations, were deficient in scientific and philosophic originality," whose "poetry never rose above the lyrical and was without excellence in epic and dramatic composition," whose

^{1 &}quot;Chips from a German Workshop," vol. I., Semitic Monotheism.

"art had never gone beyond the decorative stage," whose political life had remained "patriarchal and despotic," whose "incapacity for organization on a large scale has deprived them of the power of empire," whose "inability to perceive the general and the abstract, whether in thought, language, religion, poetry, or politics," limited their horizon to the individual or personal,—how could this people bequeath to the world a perfect religious ideal or truth?

This is indeed a question worth considering, and the simplest answer to it is, that Israel has done nothing of the kind. This nation has not bequeathed to humanity a perfect religious ideal or truth; and here the whole difficulty ends. If the Christian religion is a generic development of Judaism, it is certainly a digression from the alleged monotheism of Judaism; for the doctrines of the Trinity and the divinity of Christ are diametrically opposed to the belief in one God, unless Christ and the Holy Ghost are acknowledged to be but relative facts, or aspects of the universal principle called God. The Christian metaphysicians have not as yet advanced this theory, although there is no telling how soon they may.

Israel, up to the establishment of Judaism proper (about 550 B.C.), worshipped the God of Abraham, but its ideas of this God are not to be compared to those which Christendom has formed of him. Judaism presents, if possible, a still lower conception of God,—correct in a numerical sense, but utterly unworthy in every other. To Greece and Egypt, to Persia and India, and even to Rome, we owe much of our knowledge of God. If we will acknowledge the insensible influences of races upon one another, we shall see that the growing conception of divine unity is the product of past civilizations, and that it finds expression in the actions as well as the words of men. Hence, although we are indebted to Israel for faithfulness to the conception of One God, we cannot forget the ingrained selfishness and narrowness which their concrete conception of a personal God has bequeathed to our civilization. In vain the voice of Xenophanes, six

hundred years before our era, protested against this anthropomorphism. In vain the dialectics of Plato, and Kant, and Hegel have tried to dissolve this materialism from our minds. From one reaction to another the progress of knowledge has made its way; and if we are to become conscious of a divine unity, it is not by ascribing a supernatural influence to one class of the many progenitors of our culture, but by recognizing in our beliefs the varied and combined influences of an immeasurable antiquity.

The history of the Hebrews is instructive when studied as a part of the general progress of humanity. Relieved from superstition, the narrative has a peculiar charm in the Christian languages; for in its simple events we see the origin of countless metaphors by which we express our highest emotions. A literature "sparkling with originality" and possessing all the charms of a young and earnest life, is surely entitled to rank with the classics of other nations. We should regard, then, all forced interpretations of Hebrew lore as impediments to a true understanding of its value. None of the sacred compositions of the world, excepting the Koran, appeared at first in writing. A searching criticism has long since established the fact that the documents which serve as the basis of the history of the Jews, and especially the five oldest portions of their annals which we are in the habit of grouping together as the Pentateuch, were formed by collecting historical fragments of diverse authorship.1

These fragments of history were handed down as oral tradition until about the eighth century before our era, when they were reduced to the definite form in which we know them. This fact has been discerned by the discovery, side by side with the ancient fragments, of more modern pieces, to which very different principles of criticism must be applied.

Renan tells us that Hebrew history has passed through analogous stages with that of Arabia. "Deuteronomy presents to us the history at its last period, worked over with a

¹ This theory has been adopted by all the enlightened critics of Germany.

rhetorical intention, the narrator proposing not merely to recount, but to edify. The four preceding books disclose visibly the seams of older fragments, set together in a connected text, but not assimilated. We may differ as to the division of the parts, as to the number and character of the successive editions: and it must be confessed that M. Ewald. in aiming at an unattainable exactness on all these points. has passed the limits which severe criticism should impose on itself; but we can no longer be in doubt in regard to the process which brought the Pentateuch and the Book of Joshua to their final state. It is clear that a 'Jehovistic' editor-that is, one who in his narration used the name Jehovah—has given the last form to this grand historic work, taking for the basis of it an Elohistic writing, -a writing, that is, in which God is designated by the word Flohim.—the essential parts of which may even now be reconstructed.

"As to the opinion which ascribes the editing of the Pentateuch to Moses, it is outside of criticism, and we have nothing to do with its discussion; moreover, this opinion seems to be quite modern, and it is very certain that the ancient Hebrews never thought of regarding their legislator as an historian. The stories of the old times appeared to them absolutely impersonal; they attached to them the name of no author."

This analysis of the Pentateuch, which agrees substantially with every thing that is regarded by scholars as authoritative upon the subject, shows us how primitive is the Christian idea of the first five books of the Bible. The most striking feature of the question is, that there is hardly a well-read priest or minister among us, who is not perfectly familiar with these results of modern historic criticism.

The annals of the Judges, the Kings, and of the Captivity as far as Alexander, bring us to the confines of modern history. "No people can boast of so complete a body of history, or archives so regularly kept."

¹Renan: "The History of the People of Israel."

The best authorities agree that Abraham was an Arabsheik, of a type which is common at the present day, Some writers regard him as a distinct historical character. while others incline to the view that he is but a representative man who figures in tradition as an individual. There are many reasons for believing that the art of writing was not employed among the Iews until the time of Moses, and that it did not become sufficiently general to inaugurate any important literary or historical movement until the reign of Solomon, which was the time of the greatest literary activity among the Hebrews. It is to be remembered, however, that this Hebrew literature, from every point of view, was of the most primitive character. Such was the destruction of the Jewish state, at the time of the Babylonian captivity, that only a few fragments of this literature have reached us. These are the Song of Songs, the Ecclesiastes, and the Book of Proverbs.

The traditions of Israel attribute to Abraham the beginning of their knowledge of the true God. So prominent has this idea become, that one naturally looks for some mark of this knowledge which shall distinguish it from the many conceptions of a supreme being which we find among other nations. The chief characteristic of Abraham's conception of God is that of the father of a tribe or family; or, in other words, this conception was merely an enlargement of his own existence. God, to him, was a friend,—a friend of his friends, and an enemy of his enemies. Abraham supplies us with no cosmogony; his God is in no sense the God of nature. He abruptly introduces us to his family and tribal affairs as pictured in his relations with the Deity. Far from being the historical beginning of the Semitic race, Abraham's was one of many Arab tribes occupying the country extending from their ancient home in Chaldea to the borders of Egypt. The simple life of these Arab tribes bears evidence of being of a great antiquity. When Abraham meets Melchisedec, we find him belonging to a confederation of Arab tribes of which Melchisedec was a sort of arbitrator, or pastoral governor, exercising judicial powers and exacting tribute. The name Melchisedec means King of Justice, and his title, King of Salem, means King of Peace.

Abraham met Melchisedec on his return from the successful pursuit of Chedorlaomer and his allies, which he had undertaken for the rescue of Lot's wife. Abraham gave him tithes of all the spoils, thus acknowledging his official superiority. The Jewish traveller, Wolff, states that "in Mesopotamia a similar custom prevails at the present time. One sheik is selected from the rest on account of his superior probity and piety, and becomes their 'King of Peace and Righteousness.' * * * This 'King of Justice and Peace' gave refreshments to Abraham and his followers after the battle, 'blessing him in the name of the Most High God,' of whom Abraham recognized him as a true priest."

Thus we see that the knowledge of the true God, which is so devoutly believed to have been a special revelation to Abraham, was shared by a number of Bedouin tribes, to whom Melchisedec was both High-Priest and Judge. When to this is added the well-known fact that the Assyrians, Babylonians, Phænicians, and Carthaginians all possessed religions almost identical with that of the Jews, worshipping a supreme being under the various names Ilu, Bel, Set, Hadad, Moloch, Chemosh, Jaoh, El, Adon, Asshur, 'thé originality of Judaism, or the "purity" of its monotheism, becomes more and more doubtful.

It is supposed that Abraham settled in Canaan (Palestine), about 2000 B.C., from Mesopotamia beyond the Euphrates. The term Hebrew is said to have been given these settlers by the Canaanites. Whatever meaning attached to the word Hebrew before the time of Jacob, it appears afterward to have been applied to his descendants exclusively. The story of the entry of the Israelites into Egypt, their settlement there, their gradual enslavement by the Pharaohs, and their exodus under the leadership of Moses, is susceptible of

¹ Milman: "History of the Jews," vol. II., p. 417. McClintock and Strong, vol. IV.

a perfectly natural interpretation. The chief wonder is, how these events, so simple and unobtrusive when compared with the general history of the times, should have acquired so important a place in our retrospect of antiquity. The wonder ceases, however, when we remember that until quite recently our knowledge of antiquity has been principally limited to the Hebrew scriptures.

The great fault in studying Hebrew history is in regarding the Israelites as a formed nation at the time of Moses. It was not until long after this that the national life really began. Their life under Moses had been the first to awaken the feeling of solidarity among the tribes which afterward constituted the nation; but this feeling took no decided form until the conquest of Palestine proper, and then, strange to say, it gradually disappeared. The national unity of Israel was based upon a common religious belief or government which, although it has received the name of Theocracy. was simply that primitive form of organization which is found in all the early civilizations. The tribal faith was summed up in the formula "Jehovah is the God of Israel, and Israel is the people of Jehovah." The spirit of nationality among the Jews never developed much beyond this primitive form of religious unity,—the most feeble type of political life. The cause of this suspension of national development is certainly one of the most interesting questions of sociology. From what Dean Stanley calls the Mosaic Revelation dates the establishment of the "Jewish Theocracy, the government by God, as well as his worship." This simply means that the tribal leader Moses legislated and taught under the form of a divine authority; and when we remember to what a recent date the belief in the divine right of rulers prevailed among us, it is easy to understand how the course adopted by Moses might have been the only practical one at the time.

The heroic age of Hebrew history, beginning after the death of Joshua, the successor of Moses, was barbaric from every point of view. The land of Palestine was divided

among the tribes which, as a body of warrior shepherds, had invaded Canaan. In the measure in which they conquered the Canaanite cities and passed on to agriculture, they left tent life for fixed abodes. They believed in the direct action of Yahyeh. The Judges, who had administrative as well as judicial powers, gave their judgments always in the name of God, or Yahveh. They had no fixed sanctuary. They sacrificed on altars of unhewn stone wherever they saw fit. "Human sacrifices were rare, but especially meritorious," Yahveh worship was not without its images, sacred stones, and trees. "The sanctuaries of the Canaanites were often resorted to." The ark, the moving sanctuary of the time of wandering, with its tablets of stone, was held in superstitious reverence. The priests, besides managing the worship, were soothsavers. Private people took omens. Divining was done by means of "holy lots," or of teraphim. The ecstatic prophecy of the Canaanites was imitated. The armies were held together by "vows," commanded by the "strongest men," and disbanded at the death of the leaders, the Elders commanding the contingents, which were kept separate. They had neither the horsemen nor the chariots of their more civilized neighbors. Writing had scarcely passed beyond "cutting on wood and stone." It was not until the end of this period that the code was reduced to writing. probably in archaic Phænician characters. There was no permanent union of the tribes. "In times of danger, valiant men occasionally succeeded in getting together their own and perhaps one or more neighboring tribes for common resistance, and the authority thus gained would sometimes pass to their sons within the tribe." The dialects used varied between the tribes, and gesture-language was often resorted to. The possession of the Promised Land by the tribes was largely theoretical, however much Yahveh is supposed to have supported them. The Midianites, who have their prototype in the Bedouin Arabs of the present day,

¹ For above facts, see Spencer's "Descriptive Sociology," book VII., Hebrews and Phenicians.

were in the habit of making marauding expeditions from the desert, "leaving no sustenance for Israel, neither sheep, nor ox, nor ass." Only in the mountain strongholds, in dens and caves among the hills, could the people preserve their lives and the produce of their fields. Gideon, who makes his appearance in history "threshing wheat by the wine-press to hide it from the Midianites," by his valor and military genius rids the country from these invaders for a period of forty years, driving them back into the Syrian desert. The deep interest which God took in these battles is well understood by the Christian world.

When Jephthah, the natural son of Gilead, was driven from home by his brothers, he became a successful brigand,— "a profession not destitute of honor in the East, if practised in moderation and against national enemies." chosen captain of the Israelitish forces in their opposition to the Ammonites. He distinguished himself for diplomacy and generalship, and was one of the greatest of the Judges. because most successful in resisting the enemies of the tribes of Israel. The compact which he made with God to sacrifice the first innocent person who might come out of his house to meet him, on condition that the Lord would help him to slav the Ammonites, has become historical because the evil fate fell upon his daughter. What can be clearer to the Christian mind than the joy of the Lord upon the fulfilment of Jephthah's vow, unless it is the satisfaction which the Deity experienced at the human sacrifice offered on Calvary. when, according to our illustrious scheme of salvation, the sins of humanity were atoned for by the blood of Christ?

The respective pictures of Deborah uttering her judicial oracles from her tent under a palm-tree in Mt. Ephraim, and the natural statesman and patriot Samuel yielding at last to the wish of the people to exchange the tribe-life, or Theocratic Rule (?), for a more united and stable form of government by nominating a king, open and close the Heroic period, known as the time of the Judges. Then we have the reign of Saul, with its comparative success over the

Philistines and the other enemies of Israel; the conspiracy of David, the genius of his rule, and the splendid failure of Solomon, who impoverished the nation by his extravagances. Then comes the period of the two kingdoms (about two hundred and fifty years), during which nineteen dynasties reigned in Israel, "few of whom succeeded to the throne excepting by the murder of their predecessors." During this period there is a succession of bloody civil wars, in which Iehovah is made to take an active interest. The "will of God" is represented by a line of Prophets, inaugurated by Samuel, who seem to have derived their policy from the traditions of the tribal life or the theocratic régime established by Moses. They seem to have been utterly unable to keep the people from the grosser forms of nature and image-worship; and the God of Israel as defined by these prophets is systematically neglected. There is no doubt that the moral influence of Moses and Samuel gives to the teachings of the prophets a certain dignity and purity, but it is also clear that the religions of surrounding nations which the prophets characterized as heathen are not fairly judged in the Hebrew scriptures: for when we approach these religions through other sources we find that they contain a great deal that is good, and that on the whole they compare very favorably with the faith of the Hebrews.

All accounts agree that the Canaanites were far more civilized than the invading Hebrews; and we risk but little in supposing that the gods they worshipped were as humane and just as the God of Israel.

To follow the history of this remarkable people through their four great captivities, their brief independence, and their final absorption into the Roman Empire, would throw but little additional light upon the origin of our religious beliefs. When Alexander the Great, however, carried one hundred thousand of the inhabitants of Jerusalem captive to Alexandria, an epoch of Hebrew culture began which accounts almost entirely for the form Christianity has taken. Many of the early Christian writers were these learned Israelites of

Alexandria. To their speculative genius the elaborate creed of the Gnostics is due, and it is to their religious thought and feeling that we owe the fervent spirit of Judaism which breathes throughout our civilization.

One of the best reasons for supposing that the Christian civilization will be ranked as barbarous by the historians of future races is the character of our sacred books. How it is possible for us to believe that "the Jews were the people of God," in the sense in which we use the word, or that the Jewish conception of God was ever an exalted one, is as great a mystery as that we should regard the Hebrew scriptures with superstitious reverence, or as in any sense divine.

For an understanding of these anomalies of religious belief we must look to the study of the origins of Christianity.

CHAPTER XXII.

THE RELIGION OF CHRIST.

The Origin of the Faith—The Doctrines of Jesus—A Glance at the Present State of Christianity in America.

THERE is a painting by Munkacsy called Christ Before Pilate, which gives at a glance a more truthful conception of the origin of Christianity than we might be enabled to form by years of careful study. All the minute researches of the great German theologians and religious historians of the present century, which have done so much to distinguish for us the historical from the ideal Christ, the critical studies of Renan, the scholarly and eminently devout treatment of the subject which such men as Channing, Parker, Frothingham. Clarke, and Emerson have advanced,—all this great and good effort to dispel the fictions and still retain for the world the inspiration of Christianity has been voiced in this striking picture. Confronting the Roman Judge, calm, thoughtful. and determined, with blanched and even haggard face, a coarse, uncouth dress, surrounded by clamorous adversaries. representing the different classes of the Jews of Palestine. this man of Galilee awaits his fate. There is nothing ideal about the picture. It carries us back to the event itself, and, banishing for the instant the accumulations of superstition through which we are accustomed to view it, gives us a glimpse, startling but true, of what actually took place.

The art of the world has done its best to portray Jesus. The resources of the human face have been exhausted to find expressions of benignity, moral power, and sweetness, and all the nobler attributes of manhood, in trying to do justice to-

the portraits, real and ideal, of this great man. This artist simply tried to tell the truth, and has surpassed them all.

Jesus as a man is immeasurably grander than as a God. As a God, faith in him is so unnatural that it cannot be reconciled with the better views of history, of science, and of life; but as a man he is one of the most commanding personages of our race.

When we criticise the writings which describe the life of Jesus, our object is not to decide whether Christ was God. but whether Jesus thought that he was God, and what conception of Deity was possible to him. His education, his social and moral surroundings, the ideals of the civilization to which he belonged, were all factors in the conception which he formed of God. His moral worth can only be estimated by considering the time and circumstances of his life. Moral character consists in an individual's relations to actual surroundings. These surroundings are factors in his life, and largely determine its quality. Many of the principles of social reform promulgated by the hero of the Gospels would have been entirely out of place in such mature civilizations as those of China, India, or Egypt, in the time of Jesus; and they have since been demonstrated to be utterly impracticable in any civilization. But the ideals of personal purity which Jesus advocated were based on a clearer and better view of life. They had been taught in other nations ages before the time of Jesus, and have invariably been found practical and benefi-There is every evidence which a sincere inquiry can demand that the conception which Jesus formed of God was cast in the mould of Israelitish thought and feeling, and was an inevitable consequence of the circumstances and history of his race. God to him was a person, not a principle. His mind had been little exercised in those methodical classifications which the thoughtful in Egypt, Greece, and other nations had carried to such perfection, and which constitute the germ of modern science. Jesus was not only entirely unconscious of the vast achievements of Greek culture, but he was ignorant of the only truly liberal Jewish culture of his own time. The beautiful philosophic essays of Philo, his contemporary, a representative lew of Alexandria, in which we find many moral and religious precepts at least equal in value to the teachings of the Nazarene, were not only unknown to Iesus, but belonged to a body of learning which was strictly interdicted by the religious authorities of Palestine. The virtues which we so much admire in the character of Jesus: his deep-laid moral purpose, coming as it did from an earnest and sincere nature, in which there is a constant play of the broadest and most delicate human sympathies: his patience and cheerfulness under the hardships of poverty: his stern opposition to the hollowness and hypocrisy of the established religion of his time, were not original with him, but had been set as an example to the Jews by Hillel, the moralist and reformer of fifty years before, who promulgated maxims which correspond, to a marvellous extent, with the best teachings of Tesus.

The atmosphere in which Jesus lived was charged with mysteries and superstitions. His crushed race, unable to maintain independence among the stronger nations surrounding it, gave vent to pent-up feelings of sorrow and vague hope by forming a religion which has few parallels in history for passionate imagery and sublime selfishness. Judaism is the religion of a race whose destiny is held to be of much greater importance than that of the rest of humanity, whose God is not only exclusive, but the violent enemy of all other nations who for any reason oppose the Hebrews. The canons of the sacred books of this religion were wrought into a vast allegory, fantastic, provincial, unenlightened, and breathing throughout a longing for some physical deliverer who should re-establish the Jewish state and give to the nation another lease of independence. That Jesus was not unaffected by these longings for a national deliverer is manifested in his life and teachings, as far as they can be discerned through the mists which surround them. The impassioned dreams and eloquence of the prophets, the legends, such as the Book of Daniel, which professes to see in the rise and fall of empires but movements in a great drama which was being performed for the exclusive benefit of the Jews, cannot but have inspired him with that Semitic dream of dominion called the kingdom of God.

The countrymen of Jesus were continually looking forward to a universal catastrophe, in which their deliverance was to be the central figure. Nothing was lacking in the details which their imaginations bestowed upon this looked-for event. The most gorgeous cosmical phenomena were to accompany it, and to the mind of Jesus this programme, with all its marvellous superstitions, appeared simple and natural. "The earth to him appears still to be divided into kingdoms which were at war; he seems to be ignorant of the 'Roman peace' and the new state of society which his century inaugurated. He had no precise idea of the Roman power; the name of 'Cæsar' alone had reached him. He saw the building, in Galilee or its environs, of Tiberias, Julius, Diocesarea, and Cesarea,—pompous works of the Herods, who sought by these magnificent constructions to prove their admiration for Roman civilization and their devotion to the members of the family of Augustus, whose names, by a freak of fate, serve to-day, grotesquely mutilated, to designate the wretched hamlets of the Bedouins. * * * But this luxury of power, this governmental and official art, was displeasing to him. What he loved was his Galilean villages, confused medlevs of cabins, of threshing-floors and wine-presses cut in the rock, of wells and tombs, of fig and olive trees. He always continued near to nature. The court of the kings seemed to him a place where people wear fine clothes. The charming impossibilities with which his parables swarm when he puts kings and mighty men upon the scene prove that he had no conception of aristocratic society save that of a young villager who sees the world through the prism of his own simplicity." 1

The idea of immortality, as we use the word, was first developed in Egypt. It was for a long time a stranger in

¹ Renan: "Life of Jesus, "pp. 78, 79.

Palestine. Future life to the early Jews was the projection of their natural life, just as to the man of science and philosophy, future existence is the life of the human family passing through its generations. The ancient Hebrew writings contain no trace of future rewards and punishments. In the time of Iesus Judaism had its Sadducees, who maintained the old belief in the identity of body and soul, and the Pharisees, who believed that the just would live again. Between these parties or sects there was a controversy as to the correct principle of immortality, the one teaching that virtue should be its own reward, and the other that the soul is immortal in order that it may be rewarded or punished. The doctrine of the immortality of the soul, as it is now generally held by the different Christian sects, did not exist among the lews of the time of Iesus, but was an outgrowth of the Pharisaic idea of the resurrection: the theory of the return of the just to Abraham's bosom, and of the New Jerusalem, with all its minute plans, varying from a reorganization of the nations of the world into a Jewish kingdom of God, to a new world which was to follow a season of universal wrath and destruction. It was a confirmed habit of the Jews of Palestine to torture the simple narratives of the old Hebrew scriptures, in order to make them yield all sorts of predictions concerning their race. Messianism was the pre-occupying subject of the national The great principles of history were but poorly appreciated, if understood at all, by the Jews of the time of Jesus: and vet we are confronted with the unwelcome but incontrovertible fact, that their insufficient theories of life form the groundwork of nearly all of our religious conceptions. Into this narrow mould of Hebrew thought and feeling the minds and characters of millions of our fellowcountrymen are yearly cast, which accounts for much of the moral and intellectual imbecility which we see about us. Still we continue to teach the pernicious doctrine of future rewards and punishments as an incentive for virtue; still we detract from the awful responsibilities, the high privileges of

the hour, by promising a future life which we are unable even to describe; still we advocate a philosophy of history which represents all human events as the play of a divine will (formed on the plan of human volition, with the difference that it feels no need of justifying itself).

Is it because the great Galilean taught us some precious moral precepts that we feel bound to transplant the whole genius of an undeveloped and benighted race into our new civilization of humanity? This exotic is so ill-suited to our surroundings, so out of sympathy with the dearly-bought experiences of our people, so unable to supply us with any adequate principles of life, that our nation in the first flush of youth is already showing startling symptoms of moral decay. If we would see this disease fastened upon us, let us continue to instil into American minds the pitiful views of life which were dominant in Palestine during the first century of our era, and which were largely assimilated by the mind of Jesus.

In order to distinguish Jesus from others of the same name, he was called the son of Mary. His widowed mother, soon after her husband's death, moved to Cana, a small town about eight miles from Nazareth. Here Jesus plied the trade of carpenter during his youth, and gradually developed that character which afterward made him one of the greatest of moral reformers; great because his teachings have influenced a vast civilization, although they contain nothing either purer or higher than had been taught before. sublime earnestness and courage of the young prophet. the pathos of his teachings, strongly appealed to the simple-minded people who flocked about him. His life and sentiments have been made the beginning of a religion of humanity, for this is what Christianity has tried to become. Jesus lived in a time of moral reformers and prophets, and belonged to a nation that had been accustomed to look for its higher instruction to this class of men. Hillel will never be considered the real founder of Christianity; but he enunciated aphorisms as lofty and pure as any to be found in the Gospels. The great principles which Judaism had established concerning "alms, piety, good works, gentleness, the desire of peace, complete disinterestedness of heart," have but been revived in Christianity. Jesus the son of Sirach, Schemaïa, Abtalion, Schammai, Juda the Gaulonite, and Gamaliel, were also prophets of the same people at nearly the same time; and their teachings, which constitute in great part the Talmud, are incontestably of the highest moral excellence. Jesus, therefore, was literally surrounded by examples of the very life which he afterward chose. Going about preaching to the multitude was not an innovation, but a common practice, in his country and time. The idea of the kingdom of God, which seems to have been the ruling one of Jesus' life, is explained by him in many conflicting ways. In no sense was it a clear and consistent conception. The details change from time to time until it becomes impossible to fix upon more than the vaguest principles which are common to all his descriptions of this ideal state. The ruling sentiment in these descriptions seems to be a complete subversion of the existing order of nature and society: the first shall be last; the poor shall inherit the earth. At all events, the dream was Utopian, ideal in the extreme. The shape that it took varied from that of a democracy, from which all forms of authority and luxury were abolished, to a kingdom of souls, whose only activity was to be the worship of the Father. It is easy to read in these ideas of Jesus the influence of his surroundings, the ominous Roman power which he only partially comprehended, and to which he rendered a disdainful submission; the confusion in his mind of the pastoral simplicity of the Galilean life with all virtuous existence: and the confusion also of governmental discipline. of which he seems to have had but the crudest conceptions. with wickedness and enmity to the power of God. from appreciating the true sources of morality, Jesus taught that this life was ordered by Satan, and that all its conditions must change before the "children of heaven" could regard it otherwise than as a tiresome ordeal. No thought of regenerating the world through natural and existing agencies.

occurred to his mind. And, above all, there was not the remotest appreciation of the fact that the feelings of love. humanity, and justice, with which his pure soul was overflowing, were as natural as the other beauties of nature which he never ceased to admire. What could have convinced Jesus, for instance, that the power of political organization, for which he had so unfeigned a contempt, was merely a higher phase of the very restraints which gave him control over his own passions? What could have convinced him that the God whom he so sincerely imagined that he represented was not a person full of the same emotions which he experienced. but the principle of universal life? What would have convinced him that the drama of life which he saw from afar, ignorant of its past, unconscious of its extent, was but the passing procession of a universal empire of cause and effect? How narrow his conception of God, of life, of eternity! How utterly unable was he to teach, excepting in the most indirect manner, those civilizations which were contemporaneous with him, and which stretched far beyond the range of his knowledge! How much less able is he to instruct us who live in a vastly more complicated world; who know that love is not so high a sentiment as that of humanity, nor humanity, as that of justice; who know that lives which represent vast power of rank, of wealth, or of knowledge, can be sublimely virtuous, touchingly humane, supremely just; who know that submission to unjust political power is not a virtue, but a crime; who would scorn to pay to Cæsar his tribute, had we no voice in the imposition; who, if we are unjustly deprived of our coat, have no idea of enriching the plunderer with another garment; who, if we are struck upon the right cheek, would straightway resist the assault under the divine right of self-protection; who, in a word, see no virtue in a cringing humility which can come only from a crushed political existence in which all natural feelings of independence have to be exercised in an ideal world, or postponed until a supernatural catastrophe inverts all known relations. The gospel of Jesus is pathetic, when we

consider the conditions of its birth; but it is uninspiring to our age, it is contradicted in the lives of all men and women who can be said to have formed a true conception of the dignity, the opportunities, and the responsibilities of life.

Who can overestimate the baneful influences of that favorite plea of Jesus that the world is on the point of coming to an end? Although much ingenuity has been displayed in explaining away this prediction by those who have perceived its absurdity, it rings throughout the entire gospels: it opens and closes the Apocalypse: it is not only the leading belief of the first Christian centuries, but it was almost their whole belief: and it is by far the most important tenet of the first sixteen hundred years of the Christian church. The conflicting opinions as to the time at which Jesus said this event would take place are all lost in his assertion. "There be some standing here, which shall not taste of death till they see the Son of man coming in his kingdom"; "This generation shall not pass away till all these things be fulfilled." The source of this unmistakable belief can be traced to the Jewish apocalyptic writings, upon which the overwrought imaginations of the Hebrews of the century before Christ had fed, until the whole nation lived in a morbidly unreal world. The immediate consequences of this doctrine are to be seen in the early Christian Apocrypha, which give us the truest picture extant of the inward life of the new church. These apocrypha were rejected by the Greek church at the Council of Laodicea (A.D. 360), and since by all the Protestant churches in England and America, excepting the Church of England. They are too mystical and absurd to withstand even the very pale light which has been allowed to enter our sanctuaries. In repudiating this dream of Jesus, the Protestant church has taken away the whole superstructure of his teachings, and that which constituted the entire vitality of Christianity during the first two centuries of its existence.

¹ Matt. xvi., 28; xxiii., 36, 39; xxiv., 34; Mark viii., 38; Luke ix., 27; xxi., 32. See also Matt. x., 23; xxiv., xxv. entire; Mark xiii., 30; Luke xiii., 35; xxi., 28, et seq.; Matt. xvi., 24; Luke xii., 54-56; John xxi., 22, 23.

Thus it is that the word Christianity has been made to do service for all sorts of mutilated beliefs, until, in these days of scientific and historical criticism, when culture and unbelief have become convertible terms, we are calmly told that Christianity does not necessarily imply a belief in the divinity of Christ, a personal God, heaven or hell, baptism, the scheme of salvation, or the sanctity of the church: that Iesus and his disciples, the early Fathers, all the Christian councils, the Bible, and every form of ecclesiastical authority, were mistaken: that they gave but symbolic utterances to the great truths of a religion of humanity which is now voiced in the language of science and thought; that, had all these mediums of Christian enunciation spoken more plainly heretofore, they would not have been understood: but now that the world has been enlightened. Christianity suffers nothing by accommodating itself to the latest inductions of evolution, and by preaching not the gospel of the Nazarene, but that of humanity. Whether this is an utter rout of Christian dogma, or a disingenuous method of retaining possession of the emoluments of a church after renouncing its creed, we leave it to the fair-minded to judge. Infinitely more respectable are those Christians who stand or fall by an honest interpretation of the doctrines of Christ.

It is generally conceded that the beatitudes of Jesus constitute the most beautiful part of his teachings.¹ The Lord's prayer, which is a manifest attempt to generalize supplication, to rescue it from grovelling particulars by asking for as little as possible in the briefest manner, is a production which it is literally impossible for Christians to justly estimate; for to them it has a mystical holiness which makes it appear profane to criticise it.

The solemn injunctions of the sermon on the mount, when analyzed, give us but familiar maxims of practical life, a few

¹ It might be mentioned here that the English version of the New Testament has far more literary form and charm than the original Greek has. This fortunate accident has made the King James version a considerably more important book than the original.

moral precepts, and some absurdities of Jewish law: "Ye are the salt of the earth: but if the salt have lost his sayour." etc.: "Ye are the light of the world"; "Let your light so shine before men," etc.; "Whosoever shall say [to his brotherl. Thou fool, shall be in danger of hell-fire." Then follows the beautiful injunction of forgiveness: "First be reconciled to thy brother, and then come and offer thy gift." "Agree with thine adversary," or avoid lawsuits. "Thou shalt not commit adultery." either in mind or in act; which emphasizes the subtle relation between thought and action. either for good or for evil, and is therefore a most valuable ethical suggestion. "If thine eve offend thee pluck it out. * * * If thy right hand offend thee, cut it off, and cast it from thee: for it is profitable for thee that one of thy members should perish, and not that thy whole body should be cast into hell." Some critics think that these injunctions declare war against nature; others, that they advocate a rigid self-control. Then comes the declaration that divorce from one's wife for any thing short of unfaithfulness is a crime: and again, "Whosoever shall marry her that is divorced" also commits a crime. This is a social question which has more than one side, and cannot be subjected to any absolute rule without inflicting cruel injustice in some cases. All oaths are said to be productive of evil. This is also a question which has more than one side, and is open to discussion. Then comes the command to suffer injustice and injury without resistance; which is so repugnant to our ideas of duty that it finds no sincere adherents even among the most devout Christians. The principle of forgiveness and patience under trying circumstances, which we would call making a virtue out of necessity, is beautifully expressed: "Love your enemies, bless them that curse you, do good to them that hate you, and pray for them which despitefully use you, and persecute you; that ye may be the children of your Father which is in heaven: for he maketh his sunto rise on the evil and on the good, and sendeth rain on the

¹ See Matt. v.

just and on the unjust." No one will deny that this spirit can be exaggerated. The medium course, an equilibrium between love and hate, aggressiveness and benevolence, where both feelings are constantly under control, gives us the best and most admirable characters. The injunction to be modest in the exercise of virtues, not to advertise one's own benevolence and piety, were canons of good taste in ancient Egypt as they are in our own day. Our national virtues of prudence and thrift, made necessary by our climate and way of living, impel us to believe that to lay up no treasures on earth would be a criminal neglect of our welfare and that of others. We prefer to emulate the bee, not the lily.

The great question of how much wealth an individual can acquire without becoming immorally rich is one which we are earnestly discussing, and which the sermon on the mount has by no means settled. The virtue of singleness of purpose, illustrated by the impossibility of "serving two masters"; the injunction not to be hasty in judging others, but rather to criticise ourselves, so aptly illustrated by the figure of the mote in our brother's eye and the beam in our own; the invaluable advice not to "cast our pearls before swine." are particles of knowledge which we have no difficulty in recognizing as human. "Seek and ye shall find; knock and it shall be opened unto you," are encouragements to effort expressed in general terms; and the figure of the bread and the stone, and the fish and the serpent, are particular instances. "The strait and narrow way which leadeth unto life," is a beautiful aphorism, reminding us that virtue is attainable only by self-discipline or intelligent restraint. The false prophet or preacher, whom we are to recognize by attending to his conduct rather than to his words, is a familiar character in modern life; and the warning of Jesus in this particular, so far as his own church is concerned. is on an equality with any of the evidences of his prophetic vision.

This memorable sermon closes with the parable of "a wise

man, which built his house upon a rock"; which reminds us that the author of "Gesta Christi" has neglected to affirm that the universal prevalence of this rule in architecture is a direct consequence of Christianity.

To return to the Beatitudes. Who can resist their gentle influence? They call up our earliest recollections of purity and holiness. They contain a mother's accents, the solemn voice of a pastor, the vague impressions and charms of religious devotions.

"Blessed are the poor in spirit; for theirs is the kingdom of heaven." "Blessed are they that mourn; for they shall be comforted." "Blessed are the meek; for they shall inherit the earth."

The familiar melody of these words steals over the soul like the music of the prayer in "Zampa;" beguiling us away from thought into a dream. Who will be cold enough to measure their ethical value? Let some one analyze these sentences who has not been taught them by a Christian mother; who has not suffered those terrible reactions to which all thoughtful and earnest Christians of our time are doomed.

A careful criticism of the New Testament by able and conscientious scholars seems to have established the fact that our knowledge of the life of Jesus rests principally upon two original documents: first, his discourses collected by the apostle Matthew; second, the collection of the reminiscences of Peter concerning Jesus, which were transcribed by Mark, who was a follower of Peter and had never seen Jesus. The gospel of Luke is supposed to have been written at the same time as the Acts of the Apostles, and by the same author. This was soon after the siege of Jerusalem. Clement of Rome, A.D. 100, and Justin Martyr, A.D. 130, declare that Luke wrote under the general superintendence of Paul, and all authorities agree that this gospel is a compilation from anterior writings, and does not compare in authority with that of Matthew or of Mark. With regard to the gospel of John, suffice it to say that the best authorities find many reasons for doubting its authenticity, so much do the life and sayings of Jesus which it recounts differ from those given in the synoptics. There is abundant material in the other two gospels, however, to give us a clear idea of the principal facts in the life of Jesus.

The greatest mistake that can be made in studying the life of this great prophet is to attribute all that appears unnatural and absurd in it, to mistakes or exaggerations in the gospel narratives. It is quite common to hear people say that Iesus never proclaimed himself God, in the sense in which the Church uses the term: that he never laid any claim to supernatural powers, or made promises to his disciples of position or power in heaven. In short, they reason that, at all events, Jesus must have been an honest man, and that because he was honest, he could not have done these things: therefore the accounts which declare that he did, are false. Had Jesus lived in our time, these reasonings might hold, but as he lived in an atmosphere of almost indescribable ignorance and superstition, he believed many things about himself which we are unable to understand, unless we enter into his position, and remember the language, the literature, the associations of his immediate people.

The narrative of the gospels, we are told by high authorities, is substantially a true picture of what Jesus said, his method of life and teaching, the people he associated with, the places he visited, the claims he made for himself. The miracles, of course, are fabulous, and are doubtless, in some cases, attempts which Jesus made to exercise supernatural or mystical powers which others would have persuaded him that he possessed. The description which Renan gives of the first converts which Jesus made among the fishermen of Capernaum is a touching picture of the artless simplicity, childlike ignorance, and admirable sincerity of a people who were shut off from every means of enlightenment, and who saw in the moral and humane purpose and the singularly fascinating character of Jesus, what they were content to believe was the realization of their national myth, the prom-

ised "Messiah," a prophet of God. We may look to the Jewish sacred writings for the source of this belief: for those writings and the traditions of the lews held a distinct theory of a Messiah: and once this Messiah was found, all control over the credulity of the people was lost. tween the sacred writings, the traditions, and the words of the Messiah himself, what theories about him could not be advanced? We are not surprised therefore, to find Salome. the mother of two of the disciples, taking Jesus aside and inquiring about the places of honor that her sons were to have in the kingdom of God: nor that there were many and bitter disputes among the disciples about the share of power and glory which each was to enjoy when their master came into power. The Christian church seems to have settled these disputes among the disciples by assigning to each of the twelve a distinct standing and occupation. Was ever such a picture of simplicity presented to the world (for the foundation of a great religion), as a prophet decrying the pride of the world and his most intimate pupils cultivating the pride of heaven! Does it not appear as though this pride might be, after all, a very estimable sentiment, if subjected to proper restraints?

Nor was the kingdom of God merely a figure with Jesus. He continually gave his disciples the most definite assurance that they would sit near him on thrones, and govern the twelve tribes of Israel in a kingdom which was soon to come about. "The fundamental idea of Jesus was, from the first day, the establishment of the kingdom of God. But this kingdom of God, as we have already said, Jesus seems to have understood in very different senses. At times he would be taken for a democratic chief, desiring simply the reign of the poor and the disinherited. At other times, the kingdom of God is the literal accomplishment of the apocalyptic visions of Daniel and Enoch. Often, finally, the kingdom of God is the kingdom of souls; and the approaching deliverance is the deliverance by the spirit." "It is clear that such a religious society, founded solely upon the expectation of

the kingdom of God, must be in itself incomplete. The first Christian generation lived entirely upon expectations and dreams. On the eve of seeing the world come to an end, they thought useless all things which serve only to continue the world. Property was forbidden.¹ Every thing which attaches man to earth, every thing which turns him aside from heaven, was to be shunned. Although many disciples were married, there was no marrying, it seems, after entrance into the sect.² Celibacy was decidedly preferred; even in marriage, continence was commended.³ At one time, the Master seems to approve those who should mutilate themselves for the sake of the kingdom of God.⁴ He was in this consistent with his principle."

Christianity, therefore, as Christ taught it, was, according to overwhelming evidences, a community of Latter-Day Saints, as Buddhism was at first a society of monks and nuns. In both cases the theologies, or subsequent elaborations of belief, have made these faiths applicable to wider fields.

The rite of baptism, or ablution, is of very high antiquity. All degrees of superstition were attached to it by the nations of the East. Long before the appearance of the anchorite John the Baptist in Judea, baptism was an ordinary ceremony on the introduction of proselytes to the Jewish church. There was much less originality in the procedures of John the Baptist, therefore, than one would suppose from simply reading the descriptions of his marvellous doings and his success in making converts, which we find in the gospels.

The despair of the Jews in reflecting upon their national destiny caused them to seize upon any thing that promised a deliverer; the lives of the ancient prophets were conspicuous figures in their history. Representing the God of Israel, criticising the course of kings, and advocating the

¹ Luke xiv., 33 ; Acts iv., 32, et seq.; v., I-II.

² Matt. xix., 10, et seq.; Luke xviii., 29, et seq.

This is the constant doctrine of Paul. Comp. Rev. xiv., 4.

policy of the Theocracy, these prophets had risen to the level of supernatural beings in the minds of the Hebrews.

Elias was considered the greatest of the prophets. He who dwelt in "the solitude of Carmel, sharing the life of wild beasts, living in caves of the rocks, whence he emerged like a thunderbolt, to make and unmake kings," had become their ideal deliverer; and when John the Baptist, imitating the rigorous life and methods of Elias, appeared in the wilderness of Judea, a loud-voiced reformer denouncing the rich priests, the Pharisees, the Doctors, and all official Judaism, the despised classes naturally enough flocked to him. The prejudices of the aristocratic Jews were set at naught by the loud assertion of John that God could create "children of Abraham out of the stones of the highway." So democratic a notion could hardly fail of applause among the oppressed classes.

Jesus was a very obscure man when he first heard of this evangelist preaching in the wilderness. A few disciples had gathered around him, and with these, and others who followed from curiosity, he went to hear John. In pursuance of his method of baptizing every one who would submit to the ceremony, as an initiation to his band of followers, John immediately baptized Jesus and his disciples.

Renan tells us that the great service which John rendered was that of "substituting a private rite for the ceremonies of the law to which the priests were essential, much as the Flagellants of the middle ages were the precursors of the Reformation, by taking away the monopoly of sacraments and of absolution from the official clergy. The general tone of his sermons was harsh and severe. The expressions which he used against his adversaries appear to have been of the most violent character. They were rude and incessant invective. It is probable that he did not remain aloof from politics. Josephus, who almost touched him through his master Banou, hints this in hidden phrase, and the catastrophe which put an end to his days seems to suppose it." After, as before, the mystic rite of baptism, the disciples of

Jesus remained distinct from those of John, but between the two young leaders 'a friendship sprang up so that they remained together for some time.

When Jesus returned to Galilee, he also began to practise the popular rite of baptism, and soon his baptism was sought almost as much as John's. We are told that the Jordan, for a considerable distance, was covered on either side with baptists, whose discourses met with greater or less success; which gives an idea of the amount of time people had in those days to devote to religious observances.

The arrest of John, who was a railer against the established powers, was to have been expected, and his tragic end is known as one of the dark crimes of history. Some believed him to be the expected Messiah, others thought that he was Elias risen from the dead: both were very common superstitions among the Jews of Palestine at the time. The sect which John established, and which still survives, entertained the latter belief. That the reformer Jesus was believed in by the common people and rejected by the educated classes, and finally, like John, put to death for the sedition, however pacific it may have been, which his teachings spread, is not to be wondered at, when we consider the religious and political state of Palestine at that time.

The incidents of the death of Jesus can never be appreciated when viewed from a superstitious standpoint. All our natural feelings of admiration for the great devotion of this man to his principles, are perverted by the contradictions and absurdities which postulate him as a God of infinite power. It is the man, not the God, upon whom we look with admiration and sympathy; nor can we regard his actions as perfect during the closing days of his career. There is a certain recklessness and aimlessness about them, which it is difficult to harmonize with a lofty and calm intelligence. They irresistibly suggest the blind self-

¹ The best authorities declare John's age to be about the same as that of Jesus, although some writers have endeavored to make the former appear much volder.

abnegation of the fanatic. We may safely admire, however, the firmness which enabled him consciously to submit to his cruel fate; for there are many reasons for believing that like Socrates he deliberately chose to die in order to emphasize and immortalize the principles which he had so faithfully advocated. Most justly did he estimate the power which such an example would have upon the world. What can be a more eloquent assertion, than the position which his name has held for so many centuries, of the humanity of the man, of his unselfishness, and (in the true sense) of his divine inspiration? For these qualities are merely other names for an appreciation of the vast power of moral influence, a vision of the utter dependence of man for happiness upon the highest principles of life.

Jesus had been a source of endless trouble to the conservative religious party at Jerusalem. Coming from the province of Galilee, followed by ignorant enthusiasts, who actually believed they were supporting the mythical Messiah of their nation, there is no language to express the hatred and contempt which these pretensions inspired in the haughty official classes at Jerusalem.

Jerusalem was indeed an "unbelieving city" to Jesus. A council convened by the high-priest discussed whether Judaism and Iesus could both live. Such was his popularity among the common people, that the question answered itself. They decided upon his arrest, knowing that, once in the hands of the law, they could do with him as they pleased; for the acquiescence of the Roman magistrate in the judicial decisions of this fanatical people, when the question at issue was one among themselves, could be counted upon. Jesus came to Jerusalem from Bethany. This, according to the fourth gospel, was after the miracle of Lazarus had been noised abroad, and had given him a still greater importance in the minds of his followers. It is to be remembered, however, that the raising of Lazarus is not mentioned in the synoptic gospels. The feast of the Passover was allowed to pass by the conspiring party, as they feared a riot; but on

the following night, aided by the perfidy of one of the disciples, he was apprehended. On entering Jerusalem, and up to the time of his arrest, he seemed to be perfectly aware of the danger which threatened him. He knew that he had powerful enemies, and that they had been driven to desperation by the anarchical influences of his teachings. This same party had caused the brother of Jesus, called James, to be stoned but a short time before, under circumstances not unlike those attending the death of Jesus; and there is no doubt that the defenders of the ancient religion had the precedent of law, and the authority of their own consciences, to support them in the course which they pursued.

In thus tracing to the simple events in the life of Jesus the chief beliefs of Christianity, philosophy has accomplished its task. The principles of knowledge have nothing to do with

the internal disputes of a religious organization.

No sooner was the body of Jesus laid away in his sepulchre than these disputes began, and the tale of blood and misery that has followed them proclaims their inhumanity. Whether the popes of Rome were the true representatives of Peter. the Galilean fisherman, or whether the liturgy now used in the Church of England was employed at the Last Supper: 1 whether the theology invented by the Alexandrians is Roman Catholic or Protestant; whether forms of worship should be complex or simple, artistic or rude; whether the wars of the Reformation, the cruelties of the Inquisition, or the narrowness of Puritanism, are Pagan or Christian, or what constitutes the exact difference between Paganism and Christianity, are questions which in no sense depend for their solution upon the knowledge of the scope of language or the nature of perception. Even to feel interested in them requires a party spirit which is entirely outside of philosophy. initial error of Christianity, its conception of God, is to be found in the mind of Jesus, and is clearly a product of the Hebrew life and religion. Through this medium the super-

¹ I recently heard a sermon by a young Episcopal clergyman, which aimed to establish this doctrine.

stitions of prehistoric times have been disseminated throughout our civilization, and we thus have the terrible consciousness of not only inheriting the conceptions of savages, but of regarding them as divine.

The most striking examples of ignorance which we meet are sometimes the most instructive. When we find a mind of average intelligence ignorant of very important facts of history, we naturally conclude that the society in which that mind has been developed is, in a measure, dead to the influence of these facts. I once heard an intelligent business man, who had lived in one of the principal towns of Connecticut for the greater part of his life, say, that Roman Catholics were not Christians. When he saw the surprise which his remark occasioned, he qualified it by saving that they were not recognized as Christians by the Protestant denominations. The ignorance of the true history and nature of Christianity which this opinion demonstrated prevails to a greater extent among even cultivated Americans than one would readily believe. The wars and controversies which have marked the relations of the Roman and Protestant branches of the church are so interwoven with the history of Europe during the last four centuries,—the opposition between these parties has become so deeply rooted,—that they are both physically incapable of seeing how very little difference there is between them. The pomp and ceremony of Christian worship, which were, for the most part, devised as a means of attracting and converting the barbarians of Europe who overcame the Roman Empire, do not fail still to charm and please the ritualists of England and hundreds of fashionable congregations in this country. The art of this worship is imitated, as far as denominational precedents will allow, by the great majority of the ultra-Protestant sects. Thus the power of art asserts itself in worship as in every other sphere of life. The differences to be found between the theologies of Roman and Protestant Christianity are insignificant, simply because all legitimate Christian theology was formulated long before the church was divided. The

great lights of Protestantism, therefore, as is well known, are not dissenters from the fundamental canons of Christian theology, but from certain minor details of worship and belief, and from certain methods of ecclesiastical government, which to their minds had wrought harm to the church and to the world. It is the ambition of both these great branches of Christianity to go back to the time of Christ and his apostles for the authority for all their beliefs and practices, and as a consequence they vie with each other in torturing the significance of the simple events of the life of Jesus. When, therefore, through the agency of historical criticism, the veil is lifted from the first acts in the drama of Christianity, and we see a man of high moral purpose, but many delusions, employing imperishable moral principles and narrow, inadequate ideas of life in the formation of a religion, we can see how truly the errors of Christianity have emanated from Christ himself: and we can see that all the great principles which enter into the formation of a true religion were powers in the world long before his time, or even the beginning of that civilization of which his mind was so faithful a type.

But let us look around us and see to what extent Christianity is really believed in, in America.

On every hand we hear apologies for Christian beliefs, and these apologies are growing more frequent, more elaborate, more sweeping in their renunciation of the old faith. Prominent among the more recent of these is an article by the Rev. Dr. J. H. Rylance, in *The North American Review* of January of the past year, entitled "Theological Readjustments." "No intelligent man," says Dr. Rylance, "believes now in the right or the competence of the church to impose the opinions of her scholars, touching matters of which they were often densely ignorant, as articles of belief, upon the reason and conscience of mankind. All men of right reason concede to-day that modern science must therefore be left free to prosecute its researches whithersoever it will, and to formulate the results at which it may

arrive; the church accepting in a spirit of proper submission all such discoveries and conclusions as shall be shown to be duly authenticated; theology accommodating its prescriptions and demands accordingly." This is a graceful admission that religion is but an aspect of knowledge, that it enjoys no special privileges in matters of belief, that its facts must accord with the universal canons of truth; an admission which it would seem impossible to question, and still which is fatal to all those special revelations and other mysteries upon which the Christian faith absolutely depends.

Touching the absurdities of Christian theology, of which it must be admitted that Jesus was, for the most part, innocent, the same writer says: "We must not confound the speculations of our scribes with the doctrines of the Divine Master; for this confusion, the Christian church is responsible, in claiming equal reverence from men, for the speculations as for the doctrines."

But what is the nature of these doctrines of the Divine Master? Will they bear criticism any better than the "speculations of the scribes" which have been regarded by all Christians until very recently as inspired? Is it not fair to ask whether there were not many "matters" of which Jesus was "densely ignorant," and whether his theories of the "kingdom of God" were not speculations? Is it fair to apply the methods of a conscientious criticism to the writings of all the great and good men who have contributed to the mass of Christian beliefs, and to fail to apply the same tests of truth to the teachings of the first prophet of Christianity? Can any one read the "DOCTRINES" which Jesus promulgated without detecting in them the elements of thought or speculation? No theological readjustments can ever harmonize the doctrines of Jesus with the knowledge of life which our age possesses, however earnestly such a result may be wished for. Instead of "theological readjustments," the Christian church must crumble away under the weight of its venerable untruths, and it behooves the true men and women who belong to it to prepare for the change.

No one can listen to the best class of Christian preachers in this country without being impressed with the fact that the conception of God is gradually becoming purified among us;—that it is assuming the form of an ultimate generalization. Cultivated or sensitive minds naturally shrink from the logical sin of attributing the limits of personality to a conception which unites the infinite and the absolute.

I remember recently listening to a sermon by a Christian minister (a Congregationalist) upon the worthlessness of repentance itself. The discourse aimed at exposing the false belief, so prevalent among Christians, that a mere state of mind which the world calls regret, has any intrinsic value. This minister argued that morality is righteous action, not a subjective state, and that it is demoralizing to teach that any thing short of actual reform is meritorious, or that any amount of repentance can cancel even the slightest sin. All repentance which falls short of this standard of action is imaginary, and a mere mockery of virtue. This man was an indifferent speaker, but his words had the ring of common sense, and carried conviction. He was unconsciously preaching the religion of philosophy,—that life is action, not imagination, and that God must be worshipped through deeds, not words. It was observable that every reference he made to God was purely an ultimate generalization—a fact expressed in terms as far as possible removed from particulars. He no doubt would have been very much surprised had he been told that his simple, manly discourse (which had nothing of the metaphysical about it) was a very acceptable solution, from a practical standpoint, of the great. problem of the categories of thought, and that his words had impeached in unanswerable terms the mysticism of Christianity.

The deepest truths assert themselves through the sentiments, long before they are clothed in symmetrical language and receive a definite form.

If we would get into difficulties with theologians, we have but to demand of them a more refined and logical expression

of their beliefs than they are capable of giving. If we would live in harmony with them, we must submit to the more sensuous expressions of truth to which they are accustomed; for instance, Mr. Clarke, in trying to justify the practice of conceiving God as a person, says: "No doubt there is anthropomorphism in Moses. But if man is made in God's image, then God is in man's image too; and we must, if we think of him as a living and real God, think of him as possessing emotions like our human emotions of love. pity, sorrow, anger, only purified from their grossness and narrowness. Human actions and human passions are, no doubt, ascribed by Moses to God. A good deal of criticism has been expended upon the Jewish Scriptures by those who think that philosophy consists in making God as different and distant from man as possible, and so prefer to speak of him as Deity, Providence, and Nature. But it is only because man is made in the image of God that he can revere God at all. Jacobi says that 'God, in creating, theomorphizes man; man, therefore, necessarily anthropomorphizes God.' And Swedenborg teaches that God is a man, since man was made in the image of God. Whenever we think of God as present and living, when we ascribe to him pleasure and displeasure, liking and disliking, thinking, feeling, and willing, we make him like a man. And not to do this may be speculative theism, but is practical atheism." 1

Here is the plain assertion from an eminent American theologian, that we have the choice of denying God or of regarding him as a person. The authority Mr. Clarke has for placing the world in this dilemma is the familiar dictum that "man is made in the image of God." The most cursory examination of the facts of morphological development, however, compels us to extend this comparison to so many species of the vertebrate kingdom, that the argument loses all force. The image of man is one of the most prosaic facts in nature. As we succeed in tracing the peculiarities of his structure to the simplest mechanical laws, we find it more

^{1 &}quot;Ten Great Religions," vol. I., p. 416.

and more difficult to perceive any mystery in the human form. "This fundamental tenet of theology" may imply a vast compliment to the Deity, but if this is so, why should art so invariably endeavor to represent the movements of "divine beings" as independent of those laws which are so faithfully expressed in our physical developments? Does not this show that our ideals of the Universal Principle naturally rebel against the tendency to confine them within the limits of the statical or structural aspect of life?

Some years ago, a large and influential congregation in one of our Western cities was presided over by a minister who was celebrated for his ability. The mind of this man was cast in the mould of Presbyterian theology, but his sentiments were so elevated and his culture so liberal, that he was continually trying to push out of sight the infelicitous and angular beliefs of his sect in the hope of making religion more attractive and instructive to his people. He believed in Christ, a personal God, and the immortality of the soul; but in a manner so indefinite that his teachings could not be made to conform to the type of theology which he was supposed to uphold. A sort of modern inquisition was therefore organized, and he was excommunicated. This greatly increased his popularity. Some of his own people followed him, many others joined them, and he has preached to a full house ever since. friends are unable to define his religious beliefs; which is very good evidence that he is unable to do so himself; and yet, they feel that they are morally and intellectually benefited by hearing him. Such is the power of a good life, such is the influence of example in thought and feeling, that one need not be categorical in order to teach the highest truths.

The beautiful church-building remained, however, and the congregation maintained its organization by filling the places of the absentees with people of more definite, if not truer, conceptions of God. They called different ministers, but for various reasons they did not stay; and at last a committee of the church decided to get a regular orthodox man,—one who knew what he believed, and who believed the creed of

their church. They found the man. He was ministering over a faithful flock in the East, and had won a reputation as a stout defender of the faith. They called him. He declined. Then such was their longing to be freed from the unrest of unsettled religious belief, that they went and took him almost by force. To look at him, you would have thought that he was a great teacher, and, in a way, he was, A craggy countenance, with lines and ridges which laughed at all kinds of opposition, lighted by moral purpose and self-discipline. He was a man of convictions, and, if unable to convince others, he was, at all events, utterly inconvincible himself. He preached Christ crucified, as a means of salvation for all who believed in him, and perdition to those who did not. This scheme of salvation was laid down in detail, and was declared to be the central feature of existence. The Bible was sacred and absolutely true. God was a person of alternate wrath and love, to be propitiated. loved, and obeyed. Christ was God, not metaphysically, but actually. God was infinite and absolute; to know him was eternal life, providing we knew Christ also: but this latter knowledge was of a peculiar kind, partaking more of blind trust than deliberate conviction. Actions were of no avail, excepting the action of belief, or faith, which must be pure and free from personal motives, and yet the incentive was declared to be the desire to save ourselves from eternal perdition. This and many other eminently logical doctrines the good man preached. He was not only consistent, but aggressive, championing the cause of Christian faith against all assailants. His congregation at first rallied about him in admiration of his firmness and courage; then some of the gentlemen began to lose interest, and sought other kinds of instruction on Sunday morning. The children became less frequent at church, and at last the faithful women lost heart under the terrible monotony of his appeals. The committee then saw their mistake; and finally their pastor, one of the most prominent examples of Christian fortitude in America, resigned his post. He was an accomplished man in many ways, and not an ungraceful speaker; but he was so honest in expounding Christianity, that he became repugnant to the most devout Christians.

There was a Unitarian minister, who held his charge for many years, also in a great Western city. He was highly esteemed at home and abroad. At last he vielded to persuasion and went to another church. His congregation was desolated, and in vain, attempts were made to fill his place. Candidates succeeded one another, but to no avail. The deep-minded man, schooled in Germany, and having great resources of metaphysics at his command: the earnest man. who preached about the beauty of the mind, and in fact the beauty of every thing; the fiery reformer, who sought to voice modern thought in Christian metaphor; the man of wide scientific acquirements, who could beguile the mind away from too difficult questions by employing such ultimate terms as God, life, and eternity, so deftly as to produce no noticeable logical discords;—all these failed to please. At last came a man of great organizing power, who declared that the church was a society for ethical culture, for social and moral co-operation and encouragement, and that the object was not to agree upon religious beliefs, but to promote the amenities of every-day life. This man was accepted, and at once created an interest. A year afterward I heard him preach his anniversary sermon to a large congregation. After a description of his methods and aims, which were almost entirely confined to the details of parish work, he declared that morality and religion were separate departments of life: that if by any act of his he could make all his congregation of one mind with regard to religion, he would withhold the act for fear of destroying their individuality. could not help thinking that it was fortunate he had separated religion from morality, for otherwise he would have been obliged to advocate the same confusion in ethical, as in religious principles. Upon asking one of the most enlightened members of the congregation what he thought of this separation, he replied that it was perfectly right;

that there was no use in trying to make people agree upon the ultimate questions of religion, and that the usefulness of the church was quite independent of religious belief. ing to discover whether this wonderful independence of the benion influences of divine unity of life and mind was any thing more than a compromise with difficulties. I asked a young lady of the same congregation whether all Unitarians were not agnostics. She seemed very much surprised at the question, and replied that she thought scarcely any of them were. I then asked her to define agnosticism, to which she replied that she had understood, it signified a want of faith in any knowledge, which was not confirmed by the senses. then asked her if all our knowledge and all our beliefs were not indissolubly connected with the evidences of the senses. A gentleman present suggested that the Unitarians believed in an infinite God, but as the mind was finite, we could not understand this infinite God, we could only believe in him. I then asked him if this was not pure agnosticism, or ancient skepticism: for how can there be any belief that is independent of the understanding? In a word, we cannot believe in God and not know him. Agnosticism is simply the assertion of the unreality of human knowledge; and Unitarians. like the skeptics of old and the agnostics of our day, may think it impossible to unite life and mind, or morality and religion, in a divine synthesis; but no argument can remove the fact that the deepest need of life is the realization of this harmony.

A short time before this I visited an Episcopal church, accompanied by a friend who was a devout member. We heard the minister read, in impressive tones, the story of Daniel in the lions' den, then the parable of the lord who forgave his servant a debt of about twenty million dollars (10,000 talents), and was outraged because the released debtor imprisoned some one else who owed him eighteen dollars (10 pence); whereupon the lord delivered the unforgiving man "to the tormentors until he should pay all." At the allotted time in the service, the following declaration

of belief was made in a solemn manner by the congregation. who hore every evidence of being cultivated and sincere people, capable at least of understanding that, with a well-ordered mind, knowledge and belief should be the same thing:-"I believe in God the Father Almighty, maker of heaven and earth: and in Jesus Christ his only Son our Lord: who was conceived by the Holy Ghost, born of the Virgin Mary: suffered under Pontius Pilate, was crucified, dead, and buried: he descended into hell; the third day he rose again from the dead; he ascended into heaven and sitteth on the right hand of God the Father Almighty; from thence he shall come to judge the quick and the dead. I believe in the Holy Ghost. the holy Catholic church, the communion of saints, the forgiveness of sins, the resurrection of the body, and the life everlasting. Amen." Imagine the knowledge which such a stupendous belief as this should require!

The text was Matt. xviii., 22: "I say not unto thee, until seven times, but, until seventy times seven."

A picture of divine forgiveness was drawn according to the ideals of holy writ. We were told that God reckoned with us as he reckoned with Nineveh when Jonah walked its streets; that there was a limit to the forgiveness of God, although the figure of the text and the enormous debt cancelled by the lord in the parable made it appear practically infinite. "We are hopeless debtors to God," continued the minister, "by the fact of our existence." "God's forgiveness was given to Christ for all the world, and by the death of Christ, God's reckoning with his son was satisfied; but his reckoning with us is not satisfied, unless we accept this forgiveness. Now, how is this acceptance to be made? By believing that Christ is God, and by forgiving others as we are forgiven." "Thus the principle of reckoning is completed throughout the divine economy, and in accordance with the same principle 'Ye shall be judged without mercy who do not show mercy."

I looked around to see what effect this reasoning had upon the minds of those present. No one seemed to show any signs of discontent, or surprise, or even to be conscious that they were listening to about as grovelling a theory of the universe and the relations of God to man as it would be possible to imagine. Who could help seeing that the whole scope of the religious thought and feeling pictured by this minister hardly rose above the emotions experienced in an ordinary business transaction? Excellent feelings, no doubt, but hardly general enough to serve for a religion. While walking home. I asked my friend whether he believed the creed that he had recited. He replied rather dejectedly: "I am supposed to." Nothing more was said upon the subject, but I felt very deeply that it was not real religion that I had seen, but only the dead form of what was once a religion, and that it was preserved, not because it was really believed in, but because those who professed it knew of nothing better.

It is hard to deal with these facts with the reverence which the religious knowledge of the age imperatively demands; for the knowledge of religion among Christians has hardly risen, as yet, above the intangible form of sentiment; hence the almost universal separation of what should be the same thing—knowledge and belief. The least we can do, however, is to demand that the sentiment of religion shall be elevated above the commonplaces of life, and that the relations of man to God shall not be illustrated by inadequately conceived commercial transactions.

What is the sentiment of Religion? What, after all, is this feeling of adoration which springs alike from the savage and the civilized breast,—this religious impulse expressed in so many ways, animating the whole human race? Is it not that view of life which accompanies the thought or worship of God? Whether the Mussulman cries to Allah from the minarets that dot his empire, or the Angelus summons the Christian worshipper to prayer; whether the canticles of praise are intoned in the gorgeous cathedrals of Europe, or the patient minister doles out his quota of theology from

the unassuming pulpits of America; is not that which remains constant in it all, after the historical particulars of each faith are laid aside, a thought of human life magnified by the thought of God? How striking that savage men should attempt this great induction! How natural that civilized men, of every race and nation, should imagine, each in his own sphere, that he has perfected it, and that his thoughts of life and God are as broad and intelligent, as humane and true, as they should be! How little any of us appreciate the development of which these higher sentiments are capable!

Those who discover in religions logical infelicities, and are without the grand inspiration of faith, pit their undeveloped facts against the sublime force of religious sentiment, and wonder that the world of faith does not capitulate. Those who have learned religion by rote, and are powerless to distinguish symbols from ideas, regard others who are outside their special beliefs as severed from them, in the purest and highest of human relationships, the sympathies of devotion. And thus we have powerful elements of discord counteracting the benefits of faith and the moral force of knowledge; elements of discord which will only yield to the commanding synthesis of a universal religion.

On a beautiful morning during the past autumn, while enjoying an early walk, I came in view of a church, which, from the side approached, had a somewhat sombre and forbidding appearance. The masonry was of granite, and massive, the windows small and apparently insufficient to light such a structure, and the walls flanking the corners were embrasured in a way that gave a vague idea of defence. The front of the building was in the Grecian style, with fluted columns running to the roof, which was surmounted by towers and a dome of no mean proportions.

Although it was Monday morning after eight o'clock, the doors were open and the voices of the choir were audible in the street. Attracted by the strange contrast presented by the bustle of the beginning week, children going to school, men hurrying to business, and this unusual worship, I en-

tered and found myself in the Roman Catholic Cathedral of Baltimore.

The priests and acolytes were celebrating mass; the worshippers were few and scattered throughout the auditorium. The measured tones of the celebrant rose and fell, and the responses of the choir and organ re-echoed the invocation and praise.

Although conscious of the surrounding art, I was impressed. The calculations of the effect of light and sound were plainly visible, but scarcely interrupted the dreamy revery which the place invited. The picturesque robes of the priests called to mind the reforms made by Michael Angelo in sacerdotal vestments; the flaming crucifix, the swinging censers and ascending incense, the altar bells, the holy sacrament, and the movements of the priests, all suggested the worship of a civilization thousands of years anterior to Christ; but this only increased the interest of the ceremony and added to its mysterious charm. Still there was an earnestness about it which was unusual, and bending forward I perceived a pall-covered coffin lighted by candles at the extremity of the aisle, and suddenly realized that I was witnessing the solemn ritual of the dead.

There lay a human being,—whether man, or woman, or child, I knew not, but as far as humanity was concerned it was dead. Yet how unwilling the mourners would have been to admit this indisputable fact!

If there is any language in motions, the attitude of the congregation and the movements of the priests bespoke supplication to some power, propitiation of some will. They were praying that the soul of the departed might pass safely through purgatory and thence ascend to heaven, the realm of eternal bliss.

I knew that all I saw about me, from the massive cathedral, with its wealth of symbols and devotional devices, to the thoughts and feelings of the worshippers, were the consequence of beliefs, and that these beliefs were so far removed from the facts for which they stood as to be prac-

tically untrue; and yet the ceremony so harmonized with the natural feelings of commiseration for the bereaved that it was almost a pleasure to take part in it.

Then I wandered from the scene, and through the medium of memories retraced the development of our feelings toward the dead. I thought how, in those areas of humanity which the tides of civilization have passed by, where man has preserved that mental and moral condition which preceded all social reform, and language has remained so undeveloped as to admit of scarcely any generalizations, the belief in the existence of a soul after death is almost without exception: how the advancing definiteness of language, following upon enlarged human experiences, or the actions and reactions of civilizations, has made possible the distinction between the idea of individual and of general existence,-between the idea of personality and of God. Then I asked myself: Would it be possible to impart to these worshippers this higher knowledge of life, to teach them the religion of philosophy? And the purity and sincerity of the surroundings, and the deep significance of the occasion, answered, Yes.

CHAPTER XXIII.

THE SCIENCE OF MORALITY.

An Ultimate Analysis Essential to an Understanding of Morality—The Scope of Moral Perceptions—The Effect upon Conduct of the Belief in a Personal God and a Future Life—Language and Intelligence as Factors in Morality—The Origin of the Idea of Duty or Obligation—The Questions of Personal and of National Purity.

At the very outset of the great problem of morality we have need of a knowledge of the limits of language and the nature of perception: for we cannot proceed until we determine the relation of thought or individuality to general existence. In this problem, above all others, a most delicate and accurate understanding of ultimate terms is required. Universal life or divine existence must be distinguished from human life taken as a whole, and the sum of human life must be distinguished from individual existence. Thought must be recognized as the relation of humanity to God, and language as the vehicle of this relationship. dividual life or conduct, it must be remembered, is not an ultimate fact; for God is the ultimate fact, in which all lines of thought and feeling converge. Hence we must not seek to express conduct in ultimate terms, but rather to show that each action has a place in the unity of life. It is by this analysis alone that actions can be properly classified, that conduct can be truly estimated. It will not do to say that God inspires goodness or that sin is opposed to God; for if we insist upon identifying goodness with God we are compelled to call all activity good, and the distinction we would make is lost in an ultimate generalization. Good, to have any meaning, must signify less than God or

general existence; it must be a relative term, employed to designate the sum of human life.

The conventional way of studying morality has been to divide conduct into four classes of relations,—the relations of the individual to God, to nature, to man, and to himself. These divisions, it can be seen at a glance, are superficial: they are all included in the first and also in the second, and the third and fourth include each other. leaving us but one moral relationship which it is possible to express,—to perceive or make intelligible,—which is that between humanity and God, or between human life and general life. If good means human life, the distinction between good and bad, or morality and immorality. corresponds with our notions of what promotes or opposes human life. We cannot conceive of any thing better or more moral than the progress or life of humanity. To this end we are to direct individual conduct, and by this measure we are to judge all the activities of nature. Imagine, for instance, if we doubt these limits to language or perception, the difficulty of estimating the moral value of a cosmical catastrophe which should sublime the earth by the heat produced. We know whether cyclones are good or bad with regard to ourselves, but we cannot otherwise determine their moral qualities. Morality, therefore, means humanity. We cannot give it a wider meaning; we dare not give it a narrower one.

The deepest and most interesting question of morality is that of the latitude of individual conduct. Have we a choice between good and evil, and what is the range of that choice? To what extent is it free? Here again an understanding of ultimate terms comes to our assistance. Freedom, in this case, means the activity of individual life; hence it must be relative or conditional freedom, for individual life is the function of certain conditions. The limits of moral freedom are measured by man's ability to oppose or to favor humanity. The most degraded type of conduct is the opposition of the individual to society

for his own imagined good; for, conscious injury of both self and society is not properly called conduct: it is considered so abnormal as to be placed, by common consent, in the category of insanity. The highest type of conduct is happiness in the good of others, the benefiting of society for society's sake,—this we call impersonal happiness. lowest meaning of good, therefore, is purely personal happiness; the highest meaning of good is impersonal happiness. Thus in selfishness and unselfishness we have the antitheses of sin and virtue: neither of them being an ultimate fact. for they are both relations which begin and end with human life. Hence it is readily seen that the freedom of the will. or, "moral agency," is the function of well-defined conditions. Its limits are individual and social existence. The whole current of life sets toward happiness: it is a movement in the direction of personal and impersonal good. Even the suicide indirectly seeks this end by destroying pain. We have the opposite extreme of conduct in the one who destroys himself to benefit others (not an uncommon event in life), this act affording the greatest of all luxuries.—the consciousness of imparting existence to others.

To those who have made a study of the different systems of ethics which have been offered to the world, the value of this ultimate analysis of being will at once appear. A just conception of God is the only key to the problem of morality. If we imagine that God means a person, we are bound to attribute to him personal motives, a divine will, and in the exercise of this will we are compelled to recognize a special providence. These beliefs at once throw the question of morality into hopeless confusion, and the difficulties to any understanding of conduct become insuperable. For example, we speak of a divine goodness, and when we analyze good we find that it is but another name for human life. To postulate good and bad as ultimate principles or facts, therefore, is to distort all the higher logical perspectives, to descend to the level of such beliefs as a per-

sonal good God and a personal bad Devil, (for they are necessary correlates) to represent all the solemn harmonies of existence, in the imaginary relations of preposterous beings.

Then to postulate an infallible moral sense or conscience. "a special and original power of distinguishing right and wrong," is another instance of mistaking a relative for the ultimate fact. Conscience is merely the name given to the capacity of intuitive judgment. Our unconscious reasonings concerning actions (which reasonings are themselves actions) are indistinguishable from the complex or sum of individual existence. The individual is clearly a centre of activities which we may denominate will, or conscience, or life, as we regard it from different standpoints: but none of these names suggest an ultimate fact, they are clearly the function of many conditions, moving equilibria related to universal life. Conduct, therefore, must be both explained and measured by its conditions: the freedom of the will is relative, and simply means the latitude of individuality to which the most positive restrictions arise on every hand. To appeal to the moral sense, to cultivate habits of right living, is to bring the individual into better harmony with his surroundings, to advance his knowledge of God.

The Utilitarians and Intuitionalists are the materialists and idealists of moral philosophy. The former regard usefulness, or conduct designed to ameliorate human life, as an ultimate principle, and the latter regard the *moral sense* as an ultimate principle; whereas universal life, or God, alone is ultimate, and the amelioration of our existence, and moral sense, are but relative facts, the expressions of familiar conditions.

The Utilitarian school is right as far as it goes, but it stops short of that ultimate generalization which satisfies the highest ideals of life and mind. The Intuitional school encounters a metaphysical difficulty before it has fairly embarked in its analysis, and never gets beyond it. This difficulty is the erroneous assumption that a faculty of the mind justi-

fies itself, or is ultimate. "The Utilitarians proudly remind us that no dignity, however sacred or august, however ready to take its stand on unquestioned or superhuman authority. can conceal its weakness when required to produce as credentials a proof that the world is ascertainably the better for it." Is conduct the less dignified because it can only justify itself by proving that it is a benefit to humanity? The limits to the meaning of morality are described by the limits of humanity: but our ideas of life extend beyond these limits, and show us that morality is the human figure of divine unity. This supplies to morality that dignity or superhuman justification which devout minds so long for. Such statisticians as Quetelet and H. T. Buckle would show us that all human conduct is the function of physical conditions: that marriages and births and the different orders of crime follow the values of the crops and the influences of the seasons with unerring regularity; in short, that the highest moral inspirations are akin with the movements of the tides of commerce, and of the ocean.

This induction is imperfect, the synthesis is not complete. Who doubts the presence of physical causes in moral phenomena? But who will be satisfied with them as an explanation? If either matter or spirit were an ultimate fact, we might have to accept one or the other as an explanation of all human phenomena; but as in the simplest cosmical event there are infinite perspectives, so in every human action we can trace the presence of divine influences; hence, instead of degrading life by reducing it to the level of mechanics, we see in all nature, whether viewed from a material or spiritual standpoint, an exalted co-operation and sympathy.

Passing from these first principles of moral science, we confront the great problem of society. We must judge human misery by ultimate principles; we must determine the cause which the poor, the ignorant, and the suffering have before the bar of God. If there be no personal God to ad-

^{1&}quot; Mind," vol. XXX., p. 231, Prof. W. Wallace.

judicate upon our lives, where are the oppressed to find redress, when will the virtuous be justified or the wicked punished?

These conflicting sentiments are but the murmurs which come up from the great ocean of human life: when its surface is troubled, they are louder, when it is calm they subside, but they have no meaning to the universe beyond. The weal of humanity is its own affair. We must gain a knowledge of those inevitable conditions of which our race is but the expression, and we must make the best of them. All the control we can gain over life, is over that portion of its activities which centres in our own existence. We have no power over the world excepting that which we derive from power over ourselves.

If the spirit is at rest, there is no trouble which can hide from it the outlying calm; there is no grief which has not a horizon of hope and joy. Happiness and misery are not entities, they are not absolute facts which we can control; they are respectively but the harmony or the discord with which our natures respond to the activities of life; they are but other names for the *quality* of our existence.

First in the order of the great social problems constituting practical morality, we have that of the influence of religious beliefs upon conduct. As explained above, the belief in a personal God implies a contradiction in terms, a fact which, in itself, is certainly a sufficient condemnation. To postulate a "divine will" as a guide for action confuses the whole question of conduct. Who is to interpret this divine will? Who is to find language for it? Is it those who think so poorly that they are still lisping the earliest superstitions of our race?

Again, Will is a complex, derivative, or relative fact; the function of certain conditions. God is the ultimate fact. Is it not clear, therefore, that the "will of God" is a contradiction in terms, an impossibility? What can be more immoral than to build our ideas of duty and self-control upon so illogical a foundation?

Then comes the question of the effect upon conduct of the belief in a future life. If morality is well-reasoned conduct,—conduct which expresses harmoniously the conditions of life,—a just appreciation of the great facts of existence is an advancement of morality. It is a very common faith among Christians that the belief in a future life is a help to virtue. The conventional way of reasoning upon the subject is about as follows: "What! believe that I am to die like a dog!—that this life is to be the last of me! What encouragement have I to deny myself any thing here if there is no heaven to strive for? Why not 'eat, drink, and be merry,' why not disregard all the future, if we are sure of no life beyond the grave? In a word, what is the use of being virtuous if we are to have no reward for it in another life?" And these arguments are supposed, by a large class of intelligent men and women, to be conclusive. They are reiterated over and over again in the pulpit, in conversation, in literature; and so decisive are they held to be, that unbelief in immortality is looked upon as an abandoned state of mind, which leads directly to recklessness. To state the case of the immortalists plainly, they reason that a disbelief in a future life engenders a disregard of the consequences of our actions in the present life. They do not say how much future life we have to believe in, in order to enable us to exercise prudence, forethought, and self-denial. I have never found an immortalist yet who would say, when made to think carefully about it, that the future life was to be absolutely eternal. A personal life must suggest some limits to the most reckless thinker. When we consider it, it will be found that the future part of our actual life is but a very vague conception. We count over the years which it would be natural for us to live, and think we fully comprehend our future; but when we try to fill in this empty symbol of time with events, we find that we have practically an infinite time before us after all. Is it not a question whether those who have their minds constantly fixed upon an imaginary future

state, do justice to the present; whether they have a full appreciation of actual life, of the tragical reality of each day, each hour of their existence: of the enormous consequences which their daily actions involve; of the boundless opportunity for good or for evil which the humblest existence commands? The realization of the limits of individuality which a rational view of life cannot fail to fix in the mind, is a talisman of the highest order,—not a gloomy forecast of a dreaded catastrophe awaiting us, dampening joy, lessening hope. This fate has the power of magnifying time (not of belittling eternity as the immortalists do), of calling us from the ravings of fancy into the stirring presence of reality, showing us a life teeming with activities and opportunities which we at best can but imperfectly appreciate. Knowledge does not threaten us with death, it makes us conscious of life. As for the argument that ignorance of the true nature of personal existence is conducive to virtue, it is so at variance with all the great canons of morality, that it is a matter of amazement how it has influenced so many minds and endured so long. What is morality but unselfishness, a vastly extended sympathy, a sublime devotion to the welfare of humanity? Are we to suppose ourselves indifferent to the future of our race because we are not to share it? Are the lives of our children and our children's children nothing to us because ours are not to accompany them? All our better thoughts and feelings rebel against so gross a theory of virtue as that which demands a perpetual existence in order to be upright, to do good, to be humane. When we examine this theory in the light of the scope of language and the nature of perception, it is found to be utterly without excuse; for to confuse the subjective aspect of motion (time) with the fact of individual life is a logical monstrosity. To postulate that such an assumption is essential to the harmonious development of our nature is a sin against life as well as mind.

The mandates of nature do not spring from intelligence or thought; their support is universal. They merely find expression in mind. The power of example is as omnipresent as crystallization or gravitation. It rules in consciousness and out of consciousness. It is as deep seated in nature, as widespread in its procedure, as the relative form and weight of bodies. "For the great bulk of mankind," says Prof. Wallace. "the validity of their moral * * * principles must depend, not on their scientific acquaintance with the principles of morals, but on constant familiarity and contact with great and good examples, on the generation in them of a moral taste which instinctively recoils from evil and aspires to live with the fair and good. * * * The sense of duty is the recognition that every act, instead of standing alone, is confronted, as soon as it emerges into being, with the laws of a great spiritual kingdom, of which man, as a reasonable being. is a citizen, and to whose general aims and regulations he is bound to conform. It is this feeling of a higher and better world, of a truer self, which conscience bears evidence to. * * * Here in the conception of a universe, to which every act must be relative and subordinate, the human soul seeks a law to limit its extravagances and to consolidate its efforts after right. * * * Very early in the growth of consciousness, in most men, the character settles into a condition of stable equilibrium, or of adaptation to the immediate environment. The mind becomes moulded in a stereotyped form which resists any attempt at modification. The reaction of this fixed self against new influences is what we call con-The meaning of this is, that the individual is an exponent of certain powers. The enormous complexity of these individual powers is such as to raise the idea that nothing but a superhuman power can control them, whereas it is only by an approach to, or imitation of, the more perfect individual types that imperfections are lessened, and the harmonious life of the whole, or humanity, is secured.

Thus the activities of the moral world are akin to universal activities, they are purely natural phenomena, and the more we study them, the less need have we for a fundamental mystery, or a supernatural will, by which to explain them.

Instead of this being a mechanical view of morality, it is the most spiritual view that is possible, for it rises to a conception of the general through the particular, the whole through its parts, which is the highest order of thought or induction. The study of practical morality includes all phases of duty, and therefore of life, but only in the sense in which religion includes all phases of life. The great social problems are largely questions of expediency; questions of how to reform society without dissolving it; questions of the degree in which the end can justify the means, for it is precisely this degree which determines the moral quality of all actions, the beneficence of all reforms.

Looking at the experiences of other nations, it is clearly to be seen that our only hope is in religion; but in order to make this proposition intelligible, religion must be identified with morality. Morality and knowledge, using the latter word in its broadest sense, are the same thing. To act and think according to the laws of man and God, is knowledge as well as morality. Men and women who allow themselves to be imposed upon are indirectly imposing upon others. dolence of mind is closely allied to indolence of body. and that neglect of the higher orders of facts, so often found in what passes for religion and virtue, is a vicious element in society, and borders upon what might be called criminal ignorance. As we are all judged according to our opportunities, it becomes an interesting question how obtuse or dead to facts a mind may be without incurring the charge of immorality. There are thousands of families of culture and refinement in the United States who are believers in the mysteries of Christianity: the question arises: How many of these families are intellectual criminals? how many are endangering the morality of their children and the safety of their country, by failing to open their minds to established truths? Are they to be judged by their opportunities?

The most prevalent mistake made by the professional

¹ A common metaphor.

reformers of society, from Plato to the well-known Christian socialists of England, is that they are unable to see that the whole world is a social experiment, and that evolution itself is feeling its way along the path of time. Considered as experiments, the Chinese and Egyptian civilizations may seem a little tedious, but they have been only vast experiments; and unless we would fall to the level of teleologists, we are compelled to believe that the whole life of the race is but a huge trial of causes and effects. This should not deter us from making plans of life both for individuals and societies; but it should remind socialists that it is not practical to plan out in the mind a complete set of conditions for any civilization, or to isolate a community by cutting it off from those natural relations with the world upon which, after all, its moral life depends.

The chemist who watches a small quantity of carbon or oxygen react over and over again in definite ways without showing the least variation becomes a thorough believer in the integrity of the forces of nature, although he may never have thought of applying the rule to society. Commonsense, or the "genius of humanity," seems to be the only faculty which enables man to fully appreciate the reality of natural forces in society; as a consequence, severely commonsense people very seldom become reformers of any kind. is well known that it is impossible to represent an effect to the mind without supplying to it a cause. The value of a reformer's suggestions can be measured by his grasp of conditions or causes. Common-sense carries with it an intuition of the fact that the causes of social phenomena are so firmly established as to be practically immovable. This teaches that a society cannot be reformed from without. All hope lies in elevating the moral character of its individuals. This end should be accomplished by disturbing as little as possible the structures of society, for they have natural causes beyond our control, and to disturb them produces but artificial effects. If you would reform a nation, convey to it a knowledge of the true God by removing the thraldom of superstition, the darkness of mystery, from its high places. The true God can only be addressed through actions. We need not approach the universal principle through hymns of praise or self-abasements, which are but indirect and artificial forms of worship. Morality is a deeper and truer symphony, a more divine language.

To continue the study of practical morality in the direction of the individual, we come to the problem of personal purity. With regard to this question, it is difficult to speak with sufficient delicacy and yet with the needed frankness.

What is the great evil of our society? Immorality! And what is the first idea which this word suggests? It calls up a host of offences: but which of them is the foremost? The word immorality does not necessarily suggest general crime, but it always suggests the greatest evil that society is heir to, namely—the crime against chastity. This is the greatest crime, not because it is the most revolting, or that it suggests the greatest degree of abandonment, but because it is the widest in its range; and notwithstanding the misery which it engenders it is the most generally condoned. look at society as it really is, no one but a dreamer would think that this crime could be successfully attacked, much less brought under control. It is so closely connected with the deepest instincts and the highest sentiments, that notwithstanding the fact that we find among the most degraded savages a recognition of the difference between physical purity and impurity, in what we call our higher civilization there is a general lack of clear ideas upon the subject. true that promiscuous intercourse between the sexes before marriage is not regarded by some savages as wrong, although there are many tribes that do condemn the practice, but infidelity to the marriage vow is regarded by almost all savages, where there is any approach to family life, as a distinct crime. In short, even the most degraded races acknowledge in their laws and customs that immorality attacks the basic institution of the race, which is the family. The honor of women is a perfectly distinct ideal among us. No one imagines that

this honor is less delicate before marriage than after, or that it is less binding in youth than in maturity. Neither widows nor spinsters nor divorced women claim any exemption from the rigor of the moral law upon any pretext; but the chastity of men seems to be a question about which our minds are not made up; society lacks clear conceptions upon the subject. Not that Christian ethics, or any other accepted code of morality, hesitates to condemn all forms of impurity in either sex, but there is a public opinion which seems to condone certain orders of incontinence among men. instance, among men of the world, a young man who preserves to the married state the same continence which is a condition of respectability with young women, is almost a curiosity. I have heard it confidently asserted by men that no such being exists. Of course this is a gross mistake. We all know that there are pure young men, but do we realize the shocking state of things which makes the question possible? Do we realize that we live in so barbarous an age that our boys are compelled to grow up under examples which are almost certain to corrupt them; that the corrupt man is the rule, not the exception, among all classes alike? Do we realize that our daughters are compelled to marry men who have not even clear ideas concerning personal purity, who only acknowledge to themselves in the vaguest manner the sacred vows they make? The misery which this state of things produces is beyond description. The disease which is almost the inevitable accompaniment of unclean lives is alarmingly prevalent among Americans and Europeans. It is a common thing to find men carrying this disease in their

¹What can be more horrifying than the following incident, recounted to me recently by a physician, who affirmed that it was not an unusual occurrence in our large cities? A beautiful woman married a "man of the world." They had two lovely children, who grew up in perfect health. The third child was an imbecile, the fourth a cripple. The father, after trying several physicians, at last went to a doctor of great reputation with this crippled child, and asked for a written opinion on the case. The doctor examined the little sufferer and sent in the opinion that it was a case of degeneration of the heart, and of other organs, caused by congenital syphilis,—a disease indescribably insidious and loathsome, which never invades a pure home excepting by the rare accident of

system for years, perhaps for a lifetime, as the result of a lack of proper principles. There are differences of opinion as to whether it can be thoroughly cured; but there are none concerning its revolting and insidious nature, and its liability to be communicated from generation to generation, providing it assume certain forms. It is of little use to address young men upon the subject. They admit the danger, but if they are corrupt they are practically unconscious of it. There is but one class who can successfully attack this crime. They may not be able to eradicate it, but they can oppose it by demanding the same standard of respectability from men that is required of themselves. If they doubt their power let them consider their own lives and the lives of their children; if they doubt their ability, they should remember that it is woman who has the most reliable intuitions concerning morality.

The laws which underlie family life are too simple to require any extended generalizations. They are the expression of the most familiar facts of our existence.

Upon the relation of man and wife our whole civilization depends. This is one of those great truths which escape us on account of their very simplicity. The true principle of union between man and woman is that of equality; any assumption of superiority on the part of either militates against the family institution. Upon this principle of equality is based the law of chastity, from which spring all the virtues, and without which morality cannot exist.

In perfecting language we have the most direct method of purifying life. By the help of an ultimate analysis we discover the source of life or conduct in God, or general existence, and its end in personal existence extended so as to embrace humanity. The part which intelligence plays in morality is obscured in individual cases by the action of example, the reactions of acquired habits, and the force of

inoculation,—a misfortune which can be compared in its consequences to death. Soon after the child died. It had never seen a day of happiness, and its father was indirectly its murderer. But this is not all. The faithful wife, who had been a fresh, bright, and strong woman, fell a victim to the consequences of the same crime and became a wretched and hopeless invalid.

inherited tendencies. If it were possible to place two individuals in exactly the same position with regard to antecedents and surroundings, the swiftness and accuracy of their judgments would determine the question of moral ascendency between them: but so varied and complicated are the conditions of life, that the only means we have of judging conduct is by its influence upon the individual and society. This, of course, is a very imperfect measure, as it leaves too great a latitude to the individual. The high value which is placed upon what are called good impulses, irrespective of their completion in conduct, is a recognition of our inability to estimate conduct solely through its consequences.

Moral success depends largely upon power and accuracy of representation, in the calculation of future events. have an example of this in the inability of children to estimate the consequences of conduct. Two little brothers. very fond of each other, are playing at archery. The younger happens to stand in front of the target at which his brother wishes to shoot. He calls to him to stand aside, but for some reason known only to the mental economy of little boys, he persists in keeping his position. He is warned again, but to no purpose. The elder boy lets fly his arrow, surely not at his brother's head, but, as he afterward insists, at the target. The arrow strikes his brother just over the eye, cutting the skin and only just missing the organ of sight, and sending him crying to his mother, who finds the intrepid archer as much overwhelmed with grief as his wounded brother.

The mollusc enjoys his life while sparkling on the crest of a furious wave. This scarcely sentient organism has no fear of being dashed, a moment later, on the rocks and desiccated in the sun. The humming-birds of South America alight again and again upon the flower that is being peppered with dust shot by the hunter, too innocent to suspect any harm to themselves. Young men meet in the evening; the restraints of the day are joyfully thrown aside; the tide of conviviality rises. One thing leads to another, and they

sally forth with the avowed intention of having a good time. Away they go, risking their social position by visiting gilded halls where lewd women come and go. Their personal discipline may keep them aloof as mere spectators; but they ignorantly hover on the brink of vice, enjoying the very danger. If these men possess any refinement they readily admit, in their better moments, the utter emptiness of dissipation or vice as a means of enjoyment; and still they would feel very much injured if informed that they were incapable of reasoning upon the subject of conduct: that they were incapable of representing to themselves the full consequences of actions, or of even connecting the day and the night in their minds. If they were charged with lack of co-ordinating power, they would say: "We did not reason at all; we were merely moved by the force of example; we drifted along with the current." We will admit the plea: they were aiming at pleasure, and their reputation, their real happiness, stood in the way. It was not a brother, it might have been a sister, a mother, or a wife, that they risked wounding; but what matter? The imagined pleasure of the moment rules their lives; their powers of representation are so feeble that they cannot adequately co-ordinate such spaces as the club-room and their homes, such intervals as night and morning. They are molluscs or hummingbirds, tossed about in the currents of life, guilty because too innocent of the world as it really is, too ignorant of the laws of true happiness.

Was there ever so great a fallacy as the idea that men must be dissipated in order to know the world? One can learn more of the world as it really is from children than from the roue; for the mind of the child is newly strung by the hand of nature, and vibrates to the most delicate influences, while the mind of the "man of pleasure" has lost its power of answering to the higher harmonies of life.

There are all degrees of mental incapacity. The confirmed immoralist may deeply feel the beauty of purity,—so deeply that he is ready to worship it; but habits determine

his actions, and he is powerless. If he cannot sufficiently awaken his imagination to make it perform its natural office of lighting his path a little way ahead, he is lost. His doom is not a future hell,—he need not wait so long for his punishment; he occupies and has the full benefit of the only hell that is prepared for him,—the dire limits of an immoral life; for discipline of the mind and character alone opens to us the full measure of existence.

The importance of culture as a factor in moral life is conspicuous. "Education," says Taine, "draws out and disciplines a man; fills him with varied and rational ideas; prevents him from sinking into monomania or being excited by transport; gives him determinate thoughts instead of eccentric fancies, pliable opinions for fixed convictions; replaces impetuous images by calm reasonings, sudden resolves by the results of reflection; furnishes us with the wisdom and ideas of others; gives us conscience and self-command."

It cannot be denied that the best culture is that which is begun in childhood. Children who are accustomed to hear questions of wide and remote interest discussed at home, unconsciously acquire large sympathies and elevated tastes. When our fathers explain to us the living questions of the day, or describe the course of ancient politics; when we hear from our mothers the story of Dido's love, or of the sad fate of Hector; when we fight over in our boyish imaginations the classic wars and personate in play the mediæval heroes, suffering, hoping, and loving with centuries passed; in maturer years the drama of life breaks upon us with a freshness and interest only possible to trained hearts and minds.

True culture does not necessarily belong to those who read Latin "without tasting it," or who write Greek with ease; for culture, like morality, is simply a vastly extended sympathy; but in order to feel for our race, we must know the story of its life; in order to give play to our sympathies we must acquire knowledge.

If intelligence is a factor in morality, how clearly does the perfection of the relations between the sexes depend upon education! The superstition that the knowledge of nature is injurious to young women is slowly yielding to a more truthful notion of what womanly purity is. The healthful action of the mind is the first requisite of integrity; for integrity is simply rectitude, or right conduct,—conduct which is not perverted by ignorance or superstition. There is no mystery in sex. As soon as a young girl is able to appreciate the sentiments of family life, she is prepared to study organic life in all its phases. If she is under the influence of a true mother, she can never fail to regard all the ordinances of nature in a wholesome manner, and she will thus gain a true moral command over herself and others.

One of the marvels of our civilization is the perfection to which woman has attained, if we consider her past oppression. Slowly and patiently she has conquered our brutality and ignorance by her instinctive loyalty to the highest needs of life. Is it because of her moral superiority that we fear to accord to her social equality?

How much the race owes of that physical discipline known as purity to the example of woman! The nature of woman is such as to enable her to co-ordinate the causes and effects of certain orders of conduct more perfectly than man. The power of example is such as to inspire in man the refined ideals of the more delicate sex; and thus, by living in the presence of women, we are elevated and humanized. What an imposing chemistry is this, which imparts to all the individuals of a race the magic personality of its highest types!

A little boy, who had heard his companions talking disrespectfully of some of the physical economies, asked his mother, who happened to be a physician, whether it was true that he was once a part of her. The mother took the child upon her lap and said: "Yes, my son, you were once a part of me; you were close to my heart; so close, before you were born, that even if you were to become the most wicked of men, I could never cease to love you. That is why, if you are not good, my love will be a sorrow; otherwise it will be a joy." Is it not likely that this boy will grow up with a due

reverence for the simple truths of nature, and an appreciation of the evil results which spring from a disregard of the fundamental restraints of manhood?

It is widely believed that morality cannot be taught theoretically,—that it must be communicated by example; but an example which is supported by correct reasoning is always more powerful. Woman is the most prominent example in our universe of a pure life. From this example have sprung the ideas which have developed into moral philosophy. To live in the presence of this example is to feel a tremendous influence for good which can be seconded, but never replaced, by thought.

The idea that woman is a tempter or demoralizer, which plainly underlies the myth of the Garden of Eden, and the idea that family relationships are impure, which originated the mystery of the Immaculate Conception, are barbarous. The sex-worship of the ancients, which regarded generation as a divine mystery, was more religious than the Christianity of Origen, the prudery of asceticism, or the theory of a divinely ordained celibacy; for sex-worship honors nature, while these perverted beliefs, so deeply rooted in Christianity, degrade the life and influence of woman.

The question of *Commercial Morality* has long been in an unsatisfactory condition. Not that there is any wide-spread confusion of ideas with regard to duty in the business world. On the contrary, it is in the business world that we find one of the best schools for practical morality. In no field do we find integrity, self-control, and even intelligent benevolence more fully appreciated and richly rewarded. A comprehension of the real nature of business would readily expose the sophistries about its deceit and selfishness. The first principle of organic life is a limiting membrane, the principle of separation or resistance between units which we call individuality. Morality could not exist without this fulcrum of conduct. It is not the purpose of

¹ Origen supposed that the form of self-mutilation which he adopted was recommended in Matt. xix., 12.

ethics to destroy individuality, but to secure to this first principle of life a true development. It is only by perfecting individuals that society can be perfected. The social state implies social obligations, but they in no wise militate against individuality. The first sign of organic life is given by the process of assimilation. Is it immoral for the "speck of protoplasm" to exercise its affinity for surrounding substances, or, in other words, to assimilate or grow? There is no danger that it will grow too large for the welfare of its neighbors; the laws of generation which account for its tiny structure will cause it to fall into pieces, to divide itself into other individuals, as soon as its time has come. These processes of assimilation, growth, and reproduction are too simple and natural to suggest any of the vices of human life. The idea of suffering or selfishness has no place in the primitive organic economies. It is only when organisms achieve a vast complexity, when their structures and functions become complicated, that the idea of duty or obligation springs into existence. Duty, therefore, is not a mystery, but the result of many and apparently conflicting conditions. To act according to the laws of our nature, to complete our true destiny, is acknowledged to be right. As life for us rests upon individuality, morality must study the weal of individuals, or the good of all. Selfishness is a forgetfulness of this first principle of life, and is, therefore, in the broadest sense, self-destructive. To see that our lives are true assertions of our nature, to feel that that nature cannot have a full expression in one individual, but that it must be studied from the collective side, which we call humanity, as well as the individual side,—this is morality.

He who is careless of assimilation must rely upon the assimilation of others; he who does nothing but assimilate is very apt to interfere with the rights of others. Enormous powers of assimilation must be balanced by other and higher powers in proportion, or the individual becomes a menace to society.

The thoughtful philanthropist admits that it is an exceed-

ingly difficult thing to do good by giving, for so delicate are the adjustments of society, that to take from others, directly or indirectly, the exercise of any of their natural functions. is apt to create demoralization instead of good. Again: the wealthier classes are beginning to find that a plethora of resources limits the development of many of the higher faculties; and that a few generations of idleness produce an aristocracy of unmanly men and unwomanly women. What successful man, whether in art, or science, or affairs, will not testify to the enjoyment he has derived from well-planned and sustained endeavor,—a pleasure which is entirely apart from that of acquisition? It is the enjoyment of welldirected effort. When one's affairs assume great proportions, and the individual becomes an autocrat, this enjoyment does not cease, but it seeks wider and wider fields of activity, until a business magnate, if he be truly human, insensibly becomes a great philanthropist. If the mind and character of a great assimilator are built upon too small a scale to admit of these higher developments, he becomes an enemy to society; for large resources give to purely selfish men the power of doing harm. Thus it is that a public opinion is growing up which punishes the undeveloped voluptuary by neglect, and the inhuman capitalist by restricting his operations.

For the poor man of this country to hate the rich is an unspeakable folly, since the wealthy classes contain a majority of his wisest and truest friends. Besides, are not the higher enjoyments of life within the reach of all who are capable of self-discipline? In a free country, all the capital an individual requires is a high-born nature, for freedom is merely the removal of all hindrances to self-control.

The deception and selfishness so much decried in the business world are relics of barbarism, but the general state of society is responsible for them. The ignorance and prejudices of consumers are a direct premium placed upon all forms of commercial deceit. Frauds in business are no more frequent than in society, in proportion to the number

of transactions, and, if any thing, they are more severely dealt with when exposed.

Already, among truly developed people it is safe to live in a perfectly generous mood; for the more one tries to do for the best people, the more they try to do in return, which makes it necessary to be guarded in dispensing kindnesses for fear of being overwhelmed with kindness. It will require a great development for the social world to rise to this level, but there are abundant signs of the presence of the same order of feeling throughout the whole human race, a disposition to give to merit its full reward. The feeling, of course, can never gain ascendency until it becomes as difficult to persuade men to accept unmerited advantages as it now is to obtain for services to society a just recompense. What is chiefly needed is a greater intelligence or social sensitiveness, and a higher standard of independence.

This study of the chief questions of morality would be incomplete without an impeachment of the superstitions connected with the sentiment of love. What demands a higher logical discipline than love! How can we hope to control this mightiest of passions, unless we can test conduct by universal principles? Long before we arrive at that maturity of thought which can be said to constitute a full consciousness of being, we find ourselves moved by feelings too deep to be understood, having an apparent legitimacy, a command over destiny, which leave us powerless to criticise them. And so insidiously do these feelings blend with our most exalted ideas of life, that we become morally helpless when under their influence. If the circumstances of the passion happen to be propitious, we never discover that we have overestimated its sanctity, that we have accepted too easily the wide-spread delusion that love is a divinely inspired feeling which justifies itself. If the circumstances of the passion prove unpropitious, we make the discovery at the bottom of some abyss into which we have plunged, and in our dismay and disgrace we may be happy if we have not dragged another with us.

Nothing can be more demoralizing than thus to overestimate the sancity of love. Love is not a thing apart from

life, it is the emotional tendency of our being, and depends absolutely for its justification upon the physical, the social. and the moral laws of life. No thought or feeling can be right which will not bear completion in conduct; hence the quality of no life can rise above the quality of its actions. Thus philosophy opposes idealism in every phase of life. The great moral canons are so omnipresent in the social atmosphere, that, like the colors of the sunlight, they are invisible until refracted. Thousands of imperfectly moral lives pass away without even suspecting the stupendous power of these forces, so well are they equipoised, so seldom really challenged. But the soul that, doubting their existence, provokes them to activity, is seared by their vivid power. If you doubt that there are magnetic currents which course in the veins of society in the right lines of virtue, do not thwart their path, for the lightning may dry up in you all susceptibility to truth, and you will never know that you have been dest, oyed. All the movements of life are groups of personal phenomena in which the ultimate principle is but remotely discerned. We must not, therefore, confound a human sentiment with the divine principle. No feeling can be so exalted as to justify itself: it is at best but the function of conditions, and must depend on these conditions for its justification. To enjoy constant love, constantly recurring conditions must be provided, for in these it is that the love really exists.

Passing from the greatest of personal to the greatest of impersonal sentiments, from the love of individuals to that of right government, the same principles apply. A recent experience will illustrate my argument. While seated in the office of a leading business house in Chicago, recently, a gentleman entered, and as he happened to fall into conversation with me, I noticed that he had been followed in by an individual whose actions were somewhat mysterious. The new-comer went through a pantomime which plainly indicated that he was soliciting money from my interlocutor. This performance was accompanied by the question: "Do you want the nomi-

nation for alderman in our ward?" The man who represented his ward so disinterestedly was apparently of Irish extraction, and had an unmistakable air of the dissolute about him, a lack of the dignity belonging to legitimate occupations. No one can confuse the appearance of an honest workman, however besmirched his person, with the uncleanliness of idleness and vice. The man thus approached was a well-to-do manufacturer. He seemed to be acquainted with the ward magnate, and, rather pleased at the question, "Yes," he said, "I want to run for alderman in our ward, and I think if I do I will be elected."

"Well," said the other, "it will cost you one thousand dollars to get the nomination, but there is the best chance for an alderman, this election, that we have had for some time."

"How is that?"

"Why the —— Railroad wants to get into Chicago, and they are going to spend one hundred thousand dollars to do it. Of course that makes a nice divide for the aldermen."

"Well," said the manufacturer, in an absent sort of way, as though he had not heard the last remark, "I will give the one thousand dollars, and I would just as lief pay you to work for me as any one I know of."

At this juncture I interposed the remark: "What a pure government you have in Chicago!" This only provoked a good-natured retort from both men, and, shaking hands warmly, they parted.

The whole thing was done so openly, and with such apparent innocence, that it took me some time to realize that I had witnessed an instance of that deep-laid corruption for which our country has become so famous, and which threatens its existence. The clerks who overheard the conversation evinced no more surprise than if the men had consummated an ordinary business transaction; the manufacturer resumed his conversation with me in perfect unconcern, and the pothouse politician went on his way rejoicing. The former was, as I afterward ascertained, an American; the latter, the son

of Irish parents, who had brought him to this country when a child. Neither of these men had any notion of the duties or true nature of citizenship. The uneducated Irishman who comes to America is not so much to blame. He has no high ideals of government. To his people, government has been a symbol of enmity and oppression for ages. He regards it as a power that plunders him, and he is only too glad to plunder it. He comes among us and assumes the functions of citizenship, but he does not realize that in so doing he becomes an integral part of our government, and if he be corrupt he poisons our national life. But the American who has no ideals of pure government has no rag to cover his disgrace. His nature is too narrow and grovelling to take in his true status in the world. He is dead to the pathos, to the appeal of human history. The rightful heir to inestimable privileges, the son of a race who freed themselves and established a great civilization upon the imperishable prin-

I am assured that a majority of the aldermen are disreputable characters, gamblers, and dissolute men. True "fathers of a city!"

A stockholder in a gas company in the same place informs me that they pay one hundred thousand dollars per annum to the board of aldermen to keep out electric-light companies, but the moment the electric-light companies will pay a larger sum they will be allowed to enter; while the president of the same company admits that they paid a large sum to the same board of aldermen to secure the privilege of laying their pipes. These business men, in making these admissions, did not seem to be aware that they had committed crimes against the community they were living in.

¹ While this is going to press, six months after the occurrence related above, a condemned murderer, who had the indiscretion to shoot one of Chicago's specimen aldermen in his own drinking-saloon, revenges himself upon his companions in political vice, who he thinks ought to have enabled him to escape, by disclosing a truly frightful state of corruption in the voting of this great city. He describes methods of wholesale repeating of the boldest description, the altering of municipal records to suit the purposes of the party in power, and the open co-operation of the police in securing fraudulent balloting. Upon the day this is written, October 12, 1884, a leading Chicago journal announces that "out of one hundred and sixty-five polling-places ninety-four have been located in saloons, some of them very disreputable." (Is it any wonder that women shrink from universal suffrage?) I am informed that in this city it is impossible to elect any member of the party not in power, when the office is needed by their opponents, even in wards where an overwhelming majority is known to exist in favor of the candidate.

ciples of purity and freedom, he is corrupt himself and is willing that all his liberties shall be endangered by his self-ishness. He knows no public good which does not in some way exalt his powers of assimilation. He does not know that purity and honor in public affairs are as essential to the life of a nation as virtue is to the life of a family. He excludes from his idea of government all moral, all humane sentiments. He is a torpid, impure, poisonous member of society.

And what are the ramifications of this impurity? Corporations make deliberate appropriations to buy dishonest votes in municipal state, and national government. They say they cannot get their common rights without employing corrupt means. Railroads raise corruption funds to buy their way into cities, and competing lines raise other corruption funds to keep them out. Where does it end? The spectacle is appalling; we are rotten throughout the entire structure of our society.—so rotten, that our very ideals of purity are disappearing. With vast accumulations of wealth, we have no recognized class of young men growing up who are preparing themselves to devote their lives to the public good upon high and unselfish principles. In a country teeming with opportunities for education, we have no concerted effort to educate men either morally or scientifically for the responsibilities of office. Our universal citizenship is employed in a vast struggle for the spoils of office, for the opportunity of sucking the public blood. We are a nation of parasites, and the poor frame which we are preying upon is dying of the great American disease of public corruption. No appeal to history will avail. Americans have no fear of history; they regard their country as a new departure in humanity, and as not subject to any of the great maladies of which other nations have suffered and died. Thousands seek our shores who have no ideals of pure government. They come to assimilate; and, too ignorant to distinguish the luscious fruit from the limb that bears it, they eat into the structures of our body politic and set up a national decay. Too many Americans, who have forgotten the high principles of their forefathers, join in this unholy carnival. The sound of our church bells is powerless to call them off; they are dead to the inspirations of culture, to the grand sympathies of moral life; they are content to bequeath to their children a corrupted state, diseased by the impurity of their own lives.

I have visited a great many Roman Catholic churches and listened attentively to the sermons, but have never heard a priest denounce to his congregation the political corruption from which we are suffering. I have heard Protestant ministers speak upon the subject but very rarely, and never with the warmth which it demands. The Roman Catholics cannot be blamed for not becoming political reformers. The great stem of the Church of Christ which they represent has always had distinct political ambitions, impossible to reconcile with the highest ideas of government, and they cannot be expected to resign these ambitions in America. The Protestant denominations are too divided to control any great political influence: so that, so far as religion takes an interest in our politics, we are in the power of the Church of Rome.

But the Church of Christ has no great and pure political ideals. To Jesus, politics was a thing apart from the kingdom of God, which he represented. He believed that a supernatural change of all earthly conditions was necessary to the establishment of a great moral life. His conception of life was so primitive and unreal that it has ever since been an impossible ideal. The interest which his church has taken in politics through the reign of the popes of Rome has been of such a narrow and selfish order that Protestantism has sprung into existence, mainly as a protest against it; and so inadequate are the Christian ideals of human government, so little do they answer to the real conditions of life, that the separation of church and state has become a fundamental tenet with a large body of Christians, a majority of whom are Protestants.

What have we, then, to look for, from Christianity, in the way of ideals of pure government? With the great Roman

Church actuated by selfish plans for ecclesiastical dominion; with the Protestants jealous of any interference in state affairs on the part of their religion, holding up the sickly visions of a sect of Latter-Day Saints as a model for human life;—what have we to look for, from Christianity, in the way of ideals of pure government?

Political ideals are but enlargements of personal existence. Purity in the sphere of government must spring from personal purity, hence the high value which is placed upon character in public life.

A true religion can alone give us true politics; a great and good national life can come only from discipline of character and mind.

Morality is the study of divine law with respect to social duties. It is the casting of the true perspectives of life and mind. There is a popular notion that religion is something higher and even purer than morality.

Religion and morality are different views of the same thing; true religion is the highest thought and feeling; morality, the embodiment of both in action. The religion of philosophy is broad enough to shape the future of humanity, to secure to our children the advantages of freedom and the true glory of a moral life. This religion would exalt principles, not persons; methods of life, not individuals; it enshrines no saints, it bows to no mystery, for it gathers its inspiration from the general life and mind.

CHAPTER XXIV.

APPEAL TO THE WOMEN OF AMERICA IN BEHALF OF THE RELIGION OF PHILOSOPHY.

The Question Considered with Regard to Nations and Men—The Question Considered with Regard to Children—Religion is the Highest or Most General Thought and Feeling; Morality, the Embodiment of Both in Action—The Home is the Citadel of Individual and National Purity.

PHILOSOPHY claims no prerogatives; its organization is purely intellectual and moral; it is the critic of succeeding civilizations, of social progress, and of moral development. Occupying this position, it has a right to demand reasonable reforms. Not unmindful of the slow methods of actual life, or of the disparities of intelligence and sensibility between nations and classes, it regards organized religion as indispensable to the world,—as the central feature of every civilization. But religion must always represent the highest knowledge of the race, the purest view of life interpreted in the most fitting language for each nation of worshippers. As the thought and feeling of the world learn to respond to those symphonies of life which declare the human race to be a great unit, and its origin and destiny but obverse aspects of the single fact of development, religion must take up this refrain and repeat it to its followers. It must repeat it in language which has the dignity of simplicity, the power of truth. A religion which under any pretext falsifies life is immoral and must decay. As the realm of religion is that of thought and feeling voiced in language, purity and integrity of speech should be its first consideration. It has no right to employ vague symbols when the ideas which they represent can be more truthfully expressed by the use of

direct terms. If a creed has life, it must progress; if it is wholly dead, it must be discarded. Philosophy would do no violence to living faiths, but it will ever seek to remove those decaying structures of belief which encumber society and threaten its welfare. The extent of the religious reform which each age demands can be measured by the degree of confusion which prevails among the people with regard to their most general conceptions. However simple and primitive the religious ideas of a people may be, providing harmony prevails, morality is comparatively unaffected. But when from great disparities in intelligence and education there is a continual clashing of religious opinion, morality, which is the expression of the highest logical harmony of our lives, is sure to suffer. Above all, when that class which represents the widest culture and deepest thought of a nation withdraws from its dominant faith a reaction is sure to follow, for this class embraces the true religionists of each age. In response to their deeper thoughts and purer feelings creeds must yield, beliefs must widen and deepen; nothing can resist the silent energy of their reforms. The language, the sentiment, the life of their epoch they unconsciously control; they fix the ideals, pass the judgments, determine the scope of their civilization, for their convictions and their lives constitute the philosophy, the morality, and the religion of their time. In the past, this class has belonged chiefly to the church: in our time, through the medium of general culture and the higher refinements of life, this class is entering and transforming the homes of America; and the day is approaching, if it has not already come, when women shall constitute its most numerous members.

The Christian religion is widely understood to be a religion of love, and is therefore supposed to have peculiar claims upon women. It is by no means manifest, however, that woman has had a greater share in the sentiment of love than man, for history shows that she has wielded its power rather than submitted to it. But can a

religion be successfully based upon this sentiment of love? Does experience show that in this respect Christianity has succeeded? Have the passions of men and the intrigues of nations been controlled by its power? Is it not rather to the broader sentiments of justice and humanity that we are slowly yielding? Are not justice and humanity truer names for that universal solicitude for our race which makes it physically and morally a single being? In a word, does not that affection which extends itself until it recognizes no individuals, until its object is the *single* individual of humanity, cease to be what we call love? For the purpose of illustrating this principle, contemporaneous events are quite as useful as history. Let us, therefore, look about us and examine the degree of moral authority which the religion of love exercises over Christian nations.

The practice of bleeding, which was once so popular in medicine, has been discontinued, because the doctors came to the conclusion that the physical strength of a patient could be utilized in his treatment, and was seldom if ever an obstacle to his recovery. Might not the same reform be adopted in the domain of international pathology? It is well known that no Christian people ever engage in a war which has not a distinct humanitarian principle at bottom, or, at the least, which cannot be clearly identified with some of the designs of Providence. Is it not a well-known fact that modern wars are principally undertaken for the spiritual amelioration of the weaker nation? Have we not abundant evidence for this view of the case in the justifications which Christian nations almost always offer for such wars as they may feel called upon to wage? To be impressed with the prevalence of this belief, we need but to glance at that part of contemporary literature which deals with international relations. A striking proof of the existence of this tacit understanding between the nations of Christendom, that all national policies are at bottom humane, and even religious, is to be found in the speech of the Emperor of Germany in commemoration of the results of the benevolent interest which his people sorecently manifested in France. In one of the leading New York journals of last September the following notice appeared:

A GERMAN MEMORIAL.

THE NATIONAL MONUMENT UNVEILED.

THE CEREMONIES WITNESSED BY CROWDS.

Great crowds gathered at the Niederwald, Germany, yesterday, to witness the unveiling of the National Monument, which has been erected as a memorial of the German victory [over France] of 1870-71. The Emperor William was present, and expressed much satisfaction with the arrangements. He was enthusiastically cheered by the people as he passed through Wiesbaden to attend a banquet at the royal castle. A counterdemonstration was held in Paris at the statue of Strasbourg.

POPULAR CELEBRATION AT NIEDERWALD. CASTLES AND VILLAGES ILLUMINATED.

Rudesheim, Sept. 28th.—The Germania Monument was unveiled to-day at Niederwald, in the presence of a great crowd of persons, who came from all parts of the empire; besides, the German Princes, the Princesses, the Mayors of Hamburg, Bremen, and Lubeck, and nearly every prominent person connected with the military and civil government, were present. All the German Sovereigns and Princes assembled before the monument, and the ceremonies proceeded in accordance with the programme. The villages and castles along the Rhine were illuminated, and bonfires and blue-lights were burned on all the heights. The total cost of the statue was over one million marks. The inscription upon it says: "In memory of the unanimous and victorious rising of the German People, and the reëstablishment of the German Empire—1870–1871."

SPEECH OF THE EMPEROR WILLIAM.

The following is the text of the Emperor William's speech at the Niederwald unveiling:

"When Providence desires to signify its will with regard to mighty events upon the earth, it selects the time, countries, and instruments to accomplish its purpose. The years 1870 and 1871

were a time when such purpose was indicated. Our threatened Germany arose in its love for the Fatherland as one man, and, with princes at the head, stood in arms as the instrument. The Almighty conducted these arms after sanguinary conflicts from victory to victory, and United Germany takes its place in the history of the world. Millions of hearts have raised their prayers to God and given Him humble thanks, praising Him for esteeming us worthy of accomplishing His will. Germany, to the remotest time, desires to give constant expression to this feeling of gratitude. In this sense the monument standing before us was erected. In the words spoken at the laying of the foundation-stone, words which my late father, after the wars of liberation of 1813–15, bequeathed in iron to posterity, I dedicate this monument: 'To the fallen, a memorial; to the living, an acknowledgment; to coming generations, a source of emulation. May God vouchsafe it!'"

On concluding his address the Emperor unveiled the monument.

COUNTER-DEMONSTRATION IN PARIS.

As a counter-demonstration to the unveiling of the statue of Germania on the Rhine by the Germans, a crowd of Parisians assembled around the statue of Strasbourg, in the Place de la Concorde, and indulged in patriotic cries. The demonstration passed off without any disorder.

The question naturally arises: What were the feelings of these citizens of France with regard to the German designs of Providence? Mark how familiar and natural the language of this speech sounds to us! how little we suspect its full significance! The facts are, that France and Germany act and feel toward each other as hostile feudal lords did in the middle ages. They are enabled to wield vast military organizations through the agencies of national revenue, and debt, and indemnities from conquered nations, instead of an army of retainers supported by levies upon the surrounding country and the plunder of their neighbors. Instead of family feuds, with a chain of murders and pillages to avenge, we have the history of nations, with defeats to turn into vic-

tories, and cities and provinces to recover; instead of legends of war and love, recounted over mediæval hearths, and sung to knights and ladies by wandering bards, our feelings of avarice and hate are idealized and vivified by the public voice, the literature, and even the art of our time. What was courage in the olden time, is now patriotism; for a sublimer sentiment is needed to sustain the more mechanical mode of death; what was once allegiance to a lord, is now national pride or spirit; but worse than all, religion is made subservient to the most brutal passions of men, and it is in the name of God that the worst national crimes are committed; and this with the sanction, not of half-civilized men and ignorant women, but of nations who boast of the greatest culture, the highest refinement in the world.

The removal of these great evils is not to be accomplished through courts and legislatures; the cause must be pleaded at the bar of the divine unity of life, or God. We must not look for the reform of these abuses in the mandates of tribunals; they must be achieved in the minds and hearts of individuals by the development of a truer knowledge of life and humanity than is expressed in our civilization or taught by our religion. The religions of faith and love may be employed to inflame passions and perpetuate the discords of humanity, but the Religion of Philosophy is based upon too deep a knowledge of life and history ever to be perverted to such ends.

If the right of the stronger nations of the world to carry out their ideas of the "designs of Providence" cannot be successfully tried before the bar of any existing religion; is it not time to establish a faith which can enlighten the world upon such questions, and which will, in time, create a public opinion, in the form of universal sentiments of humanity and justice, too strong for any power to disregard? When the history of Europe of the nineteenth century shall be written, the responsibility of Christianity for our failures will appear greater than we are now willing to believe. The designs of Providence, which are being so faithfully carried

out by each nation according to its own understanding, will be seen to belong to an idea of Deity which is little better than savage. Should it not be the ambition of all wellmeaning people to see the closing pages of that history brightened by the dawn of a broader and clearer understanding of life?

The great question before us is, What are the conditions of a religion that can become universal? In the first place. it must be founded upon an understanding of life which shall command the respect and adherence of the cultivated and intelligent world. The sciences furnish us abundant data for such a comprehension of life, and their unification into a single organon of truth, which shall be proof against the delusions of any possible combination of words, is to be achieved by establishing a common understanding with regard to the significance of ultimate terms. The beginning of this achievement is the solution of the metaphysical problem, which we venture to hope has been successfully performed in the foregoing pages. This, however, is but the beginning of a movement which is subject to all the accidents and misfortunes of human progress. To accomplish any great moral reform, the lives of individuals, not of nations, must be the arena of activity. Literature must hold up purer ideals of taste and sentiment, art must second this attempt by enlisting in the struggle for truth and beauty, and the religions of faith must rise above the darkness of superstition and the misinterpretations of history, to a fuller appreciation of the facts and possibilities of life. Through these established channels alone can the populace be reached; and it would be unnatural to believe that those who preside over the higher departments of knowledge, should refuse their sympathy to so needed a reform. As yet the aristocracy of learning have but a distant influence upon the masses, especially in Europe, and reformations which with them are practically immediate are slow in working their way into the national life.

In America, the chief hope of such a reform is with its

women. It is becoming a recognized fact that the women of this country, as a class, are better educated than the men. This is a natural consequence of the comparatively greater amount of leisure which the women of the middle and upper classes enjoy. It has long been acknowledged that our most disinterested reforms, our unobtrusive charities and intellectual enterprises, are chiefly encouraged and sustained by women; and it is a rule, not only in this country, but throughout the Christian world, that organized religion, not virtually but actually, depends upon woman for support.

Recognizing, therefore, the ascendency which woman is gaining in the intellectual, and which she has always had in the moral, world, it is with the women of America that we would plead the cause of Philosophy, which is the only true religion. We would submit to them the question whether they can afford to disseminate through the medium of their influence, incorrect views of life, inadequate theories of morality; whether they fully estimate the consequences of such a course. We would ask them whether they are not aware that the religion of our country is losing the affection and respect of the men, and is ceasing to be, to them at least, a moral inspiration.

The remedy for this greatest evil of our age, the divorce of thought and action, of intellect and morality, is in her hands. She should demand a more strict accounting from those who assume to teach religion to the world; and in order to do this effectually she should acquaint herself with the history of religion, of science, and of thought. From the facts thus acquired she can draw all the conclusions necessary for the guidance and inspiration of society. It is true that it requires some courage to inaugurate and sustain such a criticism, but the hearts of women have never failed humanity; it is now a question whether her mind shall prove wanting.

The need which woman already feels for a higher mental discipline is shown by her demands for admittance into our colleges. If she but knew her power, she could establish

universities which would soon outshine any that we now have, and afford her an opportunity of returning good for evil, by throwing open their doors to all seekers of knowledge without regard to sex.

But now that we have considered the ability of the religion of faith and love to make men and nations moral, and have pointed out how woman can use her power to benefit the world in this respect, let us consider what are the claims of children upon society for a higher religious education

There is no mystery in a mother's love; it is as natural and boundless as the sunlight. Who ever heard of a child reproaching its parent for the defective character or constitution which it has inherited? The belief that these conditions of life are beyond the parents' control exonerates them from responsibility; but there is a limit to this exoneration. All those who think about what they are, or what they might be; all who are not hopelessly satisfied with themselves, or who have not lost interest in life, know that what they are is chiefly due to their early education, to the direction which was first given to their thoughts and feelings. Who can over-estimate the influence of a mother? The child is but a perpetuation of her existence, and if she be a woman of sentiment, of deep feeling, she stamps the impress of her life upon her offspring. She is not only a most powerful example to them; her opinions and her sentiments constitute for her children, unconsciously, a religion. Thus it is that the accidents of life determine so largely our happiness. But accidents are only relative chances; there is no absolute uncertainty. Far beyond the reach of ordinary perception the inevitable laws of development control the averages of events, and to these obscure influences can be traced all the changes of our existence, however fortuitous they may seem.

In considering the duties of a mother, therefore, we must allow for all those circumstances which are so far beyond her control as to be practically fore-ordained. I have seen a mother struggling under difficulties to possess her soul in peace for fear of affecting the disposition of her unborn child; and long afterward I saw in the face of that child the hope and victory of a brave woman. Such experiences as these, which are multiplied on every hand, forbid us to be fatalists, which is but a name for those who believe in some mysterious control of their existence, a control in which they have no voice. Philosophy teaches us that we *have* a voice in every measure that affects us, and if we but study to gain an influence in the enactments which prescribe our career, the power to be gained over ourselves is practically infinite.

When our existence is passing out into that of others, when our types of character and mind are silently determining the lives of children too young to take any part in the legislation of life, our responsibility manifestly grows in an increasing ratio. The men and women of a nation are chiefly what their mothers have made them; it is in the minds and characters of our women that we are to read the future of our people. If our mothers cling to primitive superstitions, we must grow up with the beliefs of savages, and all the afterlearning which we can control will be powerless to eradicate these rude mysteries from our lives.

But what hope have we in appealing to women? They, of all members of society, are respecters of constituted authority. To them, organized religion, no matter how accidental may be its beliefs, is a despotism which is almost beyond the comprehension of men.

I have seen men who, to all intents and purposes, were scoffers at religion, who would reject, when reasoned with, every important dogma of the Christian faith, attend church regularly because their mothers had asked them to, because in so doing they felt that they were perpetuating the hallowed influences of early life; and still they disagreed from beginning to end with the creed and the whole religious polity of their church. Of what avail is knowledge against such a power as this? And if it is sufficient to control the actions of men who have become disaffected in every true

sense with their religion, what must be the power from which emanates this influence! What must be the reverence in which women hold religion!

There are many instances, in such great religious centres as Mecca and Rome, of functionaries of the church laughing at the innocent devotion of pilgrims, although their reverent offerings are never rejected. If woman would look up from her prayers into the faces of the great ecclesiastical dignitaries who are the autocrats of her beliefs and the beliefs of her children, she would see a compassionate smile; not because these men are insincere, but because all despotisms are in themselves an expression of contempt for the oppressed. Give to man an illegitimate power, whether it be in religion, or in society, or in civil life, and he accepts the gift by surrendering his respect for the giver; and it requires far more character than even our men of God possess, to decline this homage of the multitude.

We are constantly reproaching the cultivated and socially decorous Jews of Palestine for not believing in Christ. What were John the Baptist and Jesus if they were not railers against the constituted authorities in the name of humanity? Their conceptions of life were narrow, but they had the weal of humanity at heart; and none of us will dare to say that they were not truer exponents of all that is worth emulating in life than the orthodox classes of their country. The mothers of Judea taught their babes the sacred mysteries of Judaism. and through all the vicissitudes of their people this influence has lasted, and in our own country the same Moses and the same God that were worshipped in Jerusalem are adored by the children of Israel. Will the mothers of America thus cling to the superstitions of Christianity, and shall we have to wait until another people arise out of the failures of our own. to see our best thought and feeling become a religion? Have wars and pestilences and the death of nations always to intervene between the oscillations of our religious progress?

But what are the constituted authorities that govern the

beliefs of our women? They are the official sectaries of Christianity. Do they agree among themselves? Only sufficiently to allow their followers to live in comparative peace: a condition of society upon which even superstition depends for sustenance. Are they seekers after truth, or are their best energies absorbed in striving to enlarge the sway of their separate convictions? If all these sects are worshipping one God, is it necessary that religion should be so divided? Has not each denomination its own prophets, and are they not all regarded as inspired men? Have not these petty subdivisions grown up among us until our religion has lost all the dignity and simplicity of a universal faith? Do not these accidental influences, operating through the religious instincts of mothers, make heathens of us in our cradles? Are we not all duly labelled according to the denomination in which we are born?

If the light of God is to be so refracted among us, what will become of those delicate principles of morality which appeal to us only through the divine unity of existence?

But who are the autocrats of our mothers' beliefs, and what do they teach? They are our "men of God," and they teach the grossest superstitions. If our mothers believe in a personal God, a God-Christ, and a God-Spirit, and are told that their union into one being is a mystery which they must not question, what better are they than the Hindoo mothers, who worship Brahma, Vishnu, and Siva? If our mothers believe in an eternal life (a flagrant contradiction in terms), what better are they than the mothers of ancient Egypt, who were more anxious that their children should pass the judgment after death than that they should become true men and true women?

The life which a mother gives her child is its only life. This is the verdict of science and of thought; it is the law of nature; it is the law of God. When a fabulous life is believed in, it detracts from the hopes and possibilities of actual existence. If we are taught to look to heaven for justice, (which is the highest human sentiment,) shall we not be less

apt to accord it, and to demand it, upon earth? If we are told that our natural ideals of love, purity, and humanity can only be realized in some distant world, what courage shall we have to strive for their realization here? And thus it is that our mothers, from whom we are supposed to gain our best principles, and truest conceptions of life, dedicate us to the slavery of superstition, almost before we are born.

And who are they that conspire with our mothers to teach us narrow and imperfect views of life: who advocate a puny morality which has been proved insufficient for the use of men and nations; who pretend to represent the highest intelligence and virtue, and who really teach us savage beliefs and the morality of primitive races? They are the priests and ministers of the religion of Christ, and they stand impeached before the bar of humanity for this great They may plead ignorance, but it will be of no avail. The laws of thought and feeling are universal, and they have not studied them. They know that God is not a fiction, but a great fact, and they have closed their eyes to that science which builds its truths upon facts, discountenancing all mysteries. They know that morality does not rest upon a superstition, but that it springs from the simplest experiences of life, and they have been content to question life at the oracle of a personal God. They know that literatures are the work of man, and they would have us believe that their primitive literature is the fiat of a God. They accept the emoluments of sacred office, the homage which we offer to our greatest benefactors, and they live in darkness and superstition, and would cast disgrace upon those who refuse to follow their example. They profess to represent an infinite love and a sublime humanity, and they are the Pharisees, who in the pride of office and the stiffness of custom, would stone those who seek the truth for its own sake. "Woe unto you scribes and Pharisees, hypocrites!" Christ were among us and had escaped the slavery of your education; if he had drunk the clear draught of knowledge from the best and purest minds of his race, he would indeed

condemn you, and you would be just as innocent, and as outraged, and as clamorous for his disgrace, as the conservative doctors and sacred priests of Judea. Among those doctors, there were sincere and pure men, who thought that they were doing right in perpetuating the dogmas of the Theocracy. You are perpetuating this same Theocracy among us.

To the priests and ministers of the religion of Christ I make no appeal. They hate reforms and despise reformers.

It is with the mothers of America, who look to the established Church of Christ for their inspiration and their guidance, that I would plead the cause of our civilization. I would warn them against the despotism to which they are submitting. There is only one despotism which justifies itself.—to which man can with honor and safety intrust his happiness,—this is the absolute despotism of morality. the power of this autocracy alone, can we surrender our freedom of action and of will, for in its laws are expressed the principles of free agency, of absolute duty, of divine control. In its conditions we recognize inexorable fate—the predeterminations of existence,—and in rendering homage to it, we can alone accomplish our destiny. In the enactments of this despotism, duty and happiness are harmonized: egotism and beneficence become but opposite phases of the fact of personal life; for morality is the only power which can unite the instincts and the intelligence of man under a single government.

That the mothers of America should believe that they require the aid of superstition or mystery to teach their children morality, is a proposition too absurd to be entertained. This would be an instance of modesty surpassing even womankind. Can woman, who has set the example of purity to the race, from whom all moralities have taken their inspiration,—can she be so unconscious of her power? There is not a tenet in Christianity which can surpass in moral value the natural impulses of a mother's heart for her children's welfare; or the sacred influences of home.

It is to be remembered that all the great writers upon ethics, from Plato to those of the present day, seek to find the source of morality in the nature of man. Some call it a moral sense or intuition, some a divine instinct, others think it is one of two conflicting elements of life; but none believe it to be an external fact. They may all regard the source of morality as a mystery, but they think that mystery lies somewhere within us. Following this universal suggestion, we must seek for moral principles in the natural activities of life, viewing life in its widest sense; and in deference to the age we live in we must disown the common belief that these principles are unknowable, and that their secrets are in the keeping of men who deal in mysteries.

There are no generalizations in moral science which have a deeper or higher source than the simple idea of Justice universally symbolized by the device of the balance. There are no ideas of right conduct which are more than enlargements of the natural relations of family life. All crimes are crimes against humanity, all virtues are but developments of life which consider the well-being of others. How few there are who can imagine the moral order of society progressing. or even surviving, without the great machinery of religion which we see about us. Who is able to separate in the mind, the solemn forms of worship, and the sentiment of duty? Think for a moment what worship is. Why is it that your heart warms to the appeal of your priest or minister? Has he touched some of your human sympathies? Has he aroused vour indignation at the sin of others, or your repentance for your own shortcomings? painted for you some picture of heaven in which your experiences of life reappear in brighter colors, or has he frightened you by some threat of mysterious vengeance, which you vaguely feel that you deserve? Or is this man of God compelled, by the intelligence of his audience, to keep in the background his myths and mysteries, and appeal to your altruistic sentiments, your love in ever-widening circles for your fellow-men? Does he, in a word, simply awaken that

infinite sympathy in which we find the principles of love, humanity, and justice? Lift from him, then, all the appurtenances of superstition, and he stands before you simply a man pleading the cause of humanity; appealing to those sympathies which begin at home and develop into universal benevolence. Infinitely more dignified and powerful for good would this man be without his superstitions.

Has not the world tried the religions of mystery long enough? Has not the time come, at least in our land, when we can dispense with this dishonesty? Do not think, therefore, that you are advancing the cause of right-living by perpetuating the superstitions of the world; do not flatter yourselves that by so doing you are serving your family, your country, or your God.

The religions of mystery have been tried, and they have been found wanting. Egypt lived under their influence for ages, and she has left but monuments of oppression and misery. India has believed in mystery, and her people are crushed and divided by the iron rule of caste. China has turned away from the simple morality of Confucius, and in childish ignorance her millions of people worship artificial gods. The savages are superstitious, and they believe in and fear the shadows of their dead. The Christian nations have perpetuated the mysteries, and they worship a human God. Their history has been one of ignorance and bloodshed, and we are still living under the same régime. Is it not time, at least in America, to try some other religion? Will not every phase of our existence be exalted by the formation of a true conception of God?

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