

Anschein, als wäre alle Sicherheit und Objektivität wissenschaftlicher Forschung zerstört; bei wiederholter und genauer Prüfung löste sich aber die schreiende Dissonanz auf. So scheint jede Kritik fast immer Das, was wir für wahr und richtig gehalten haben, im Herzblatt zu vergiften und zu zerstören. Wenn wir aber *sine ira ac studio* mit Ruhe und Unparteilichkeit die Sache näher untersuchen, so zeigt sich, dass es nur die Form war, die zerbrochen ist; aus der zerstörten Hülle entfaltet sich dann die reifende Frucht. Das wirklich *Gute* und das echte *Schöne* kann allemal die scharfe Kritik der *Wahrheit* vertragen. Wenn die Harmonie dieses Dreiklages noch so oft zerstört scheint, wird sie sich doch immer wieder zu reineren und volleren Accorden vereinigen. Ebenso wenig kann aber auch die Wirklichkeit des Lebens von den Idealen unserer Bestrebungen getrennt werden. Mögen dieselben in noch so grellem Kontraste erscheinen, immer wieder werden die Gegensätze sich suchen und beeinflussen. Darum soll der Philosoph in der theoretischen Abstraction seiner Gedanken die Realität dieser Welt weder verachten noch ihre Macht und Feindseligkeit überschätzen und darüber an der Lebensfähigkeit idealer Bestrebungen verzweifeln. Ideal und Wirklichkeit gehen oft sehr weit auseinander, aber nur um sich desto sehnlicher zu suchen; den sie bedürfen einander und sind gegenseitig auf sich angewiesen.

## ON PSYCHICAL RESEARCH.

BY PAUL CARUS.

SO much is persistence the law of this world of action and reaction, regulated throughout with mechanical precision by the law of causation, that no event can take place without leaving forever its imprint upon the entire universe. The result of a commotion of any kind may be ever so infinitesimal and practically nil, yet it exists; or rather, it persists and will form forever and aye an indelible part of the cosmic constitution.

In this world of persistence where the sum total of matter and energy always remains the same, we ought to expect also a persistence of that wonderful element which is called mind, or spirit, or soul. In truth there is, among the large masses of mankind, no doubt about the fact itself. And indeed, if we regard the whole of life, we must grant that soul, mind, spirit, whatever you may call that feature of man which constitutes his superiority over the

rest of creation, is not only being preserved but conditions the very progress that is being made in life's evolution. The problem of immortality is not so much a question of fact as a question of how the preservation of soul is possible, and how it is accomplished. But in order to be successful in the solution of this problem, we must first and above all understand what we mean by soul, and how it rises into existence. Not until then shall we be able to understand, not only the nature of the soul, but also the laws of its preservation.

We have devoted a special book to the subject<sup>1</sup> and do not intend to enter here into the problem itself again, but will limit our discussion to a critical investigation of the most significant conclusions reached by the Society for Psychical Research, condensed and summarized in the stupendous work of the late and much lamented Frederick W. H. Myers, entitled *Human Personality and Its Survival of Bodily Death*, posthumously published in two stately volumes.

If in this labor of critique the results of the writer of this article will be negative, it seems desirable to state at once that he is not an agnostic, nor a negationist. On the contrary, he believes in affirmations and takes an affirmative position on this same ground. He trusts that in this world of facts, of positive occurrences, negations have only a transient significance. Even errors are actualities, and to know that a thing is not so is only the first station on the road to truth, which must finally give up the secret in positive terms.

In order to be fair, however, and to live up to the maxim *audiatur et altera pars*, we have deemed it best to incorporate in this very number a sympathetic review of Myers's work which contains the quintessence of psychical research.<sup>2</sup>

Psychical research, it is here contended, in spite of its painstaking investigations and voluminous publications, has so far published nothing that might be considered a success in proving the survival of human personality after death in the sense set forth by the leaders of the movement; but whatever we may think of the shortcomings of those that devote themselves to this special branch of inquiry, we must recognize the paramount importance of their unique undertaking. Even if their labors prove futile their work deserves the credit of a trial which ought to have been made, were

<sup>1</sup> *Hence and Whither*, 2d ed., 1903.

<sup>2</sup> [For lack of space, this review, by Mr. Albert J. Edmunds, will appear in a later issue of *The Open Court*.—ED.]

it merely for the sake of proving that the supposition on which their procedure is based must be regarded as an error.

The publications of the society and also the ponderous book of Myers have not as yet produced the effect upon the present generation, especially on the representatives of science, which the adherents of psychical research expect, and we, who have followed with keen interest their experiments and experiences, can very well understand both the high-strung expectancy of the leaders and their subsequent disappointment when they failed to excite that general interest among scientists and thinkers they had so ardently hoped for. The main reason must be sought in the fact that the evidence so confidently brought forth for a survival of human personality after death, is very unsatisfactory to critical minds.

The Society for Psychical Research, having started with bright hopes, left the expectant world disappointed; but their mistakes were so natural, their errors, based upon a conception of the soul that has come down to us from primitive ages, are so ingrained in our common notions that we should be grateful to them for having made a systematic, painstaking attempt to verify the conclusions that would follow from the traditional conception of the soul.

Mr. Myers, one of the main promoters of the society, came to the conclusion that orthodox science was too materialistic, and orthodox religion was too narrow. Both, he claimed, were wrong in their contentions: the former denied the reality of the spiritual world, while the latter, though postulating it, limited the proofs of its existence to ancient traditions. Thus, he and his friends, Edmund Gurney, William Stainton Moses, and others decided to search for the existence of spiritual manifestations in the living present, convinced that if the spiritual world is real, its revelations cannot have been limited to the past: it ought to manifest itself constantly, and we ought to find evidences of it in our own experience.

The conclusion is logical. If the premises are correct, the proposition must be sound. If there is a spiritual world it must manifest itself. But *are* the premises correct?

We have to criticize Myers at the very start when he regards science as materialistic. But our criticism will not affect his real position, for it is purely verbal and we make it merely for the ulterior end of preparing our readers for an explanation of our own views. We insist (and Myers would perhaps not have de-

murred) that genuine science is not materialistic. It may be true that there are many scientists who see nothing but materialism in their several specialties, but for that reason we can and should not brand science itself as materialistic. If there is anything that recognizes spirit and the significance of spirit, it is science, for science is the highest efflorescence of spirit, and there is nothing so spiritual as science. Its very existence disproves the contention of materialism. We freely admit that science does not encourage belief in the objective reality of "spirits" in the sense of ghosts, but every one will grant that a repudiation of the belief in spirits is not yet a denial of the existence of spirit.

Spiritualists, however, do love to characterize the realistic spirit of science as materialism, and if their conception of materialism must be accepted, Mr. Myers may be right after all when he speaks of science as materialistic.

What is materialism?

Materialism is that view which denies the existence of spirit or soul or mind except as a production of matter, it regards matter as the only reality, and consequently looks upon this same matter as the ultimate principle of explaining the universe.

Materialism is an old theory, but it was first worked out in its boldest form by two French authors, La Mettrie and Baron d'Holbach. Both insist that matter alone is real and that the soul is merely a function of matter. Holbach is especially vigorous in combating the idea of God in every possible shape and regards religion as a morbid tendency of mankind and the chief source of all human corruption.

The apostles of materialism in Germany were Moleschott, Carl Vogt, and Ludwig Büchner. Though the latter has in later years modified his position, all of them contend that matter is the only reality and mean to explain from it alone the existence of consciousness and spirit. Moleschott uttered the famous aphorism, "No thought without phosphorus," and Vogt explained his theory most drastically by saying, "Thought is a secretion of the brain. Thought stands in the same relation to the brain as gall to the liver and urine to the kidneys."

In spite of the obvious crudities of materialism, science has proceeded successfully along materialistic lines and many great discoveries have been made by avowed materialists. For this reason, Prof. F. A. Lange, a thoughtful searcher for truth and a great scholar especially in the domain of the history of philosophy, came to the conclusion that materialism, though in itself untenable, may

be employed by the scientist as a good working hypothesis. Thus, while rejecting materialism in theory, he admits its claim on practical grounds and in this spirit has written his great and meritorious work on *The History of Materialism*.

As Professor Lange states, materialism is as old as philosophy itself but not older. With the attempt of giving a materialistic explanation of the universe, the day of science first begins to dawn, and science continues to flourish so long as it follows the materialistic principle. This is true exactly as Lange meant it. A great part of scientific work consists in measuring and weighing and may be carried out without any reference to the mental aspect thereby presupposed. In a word, we can ignore the epistemological problem without invalidating the results of the special science under consideration. But it is unsatisfactory to leave a fundamental problem unsolved. The very existence of consciousness proves that matter is not the sole reality, and no amount of dialectical argument will ever accomplish the task of explaining how consciousness can be derived from either matter or energy. The physicist operates with two fundamental concepts, viz., mass and motion, when contemplating changes of positions, and he calculates both the velocity of moving masses and their acceleration. But from none of these ideas, neither from mass nor from motion, nor from velocity or acceleration can he derive or explain, or elucidate the nature of consciousness.

The fact of consciousness alone is sufficient to upset the fundamental claims of materialism. Materialism will hold good in the narrow domain of specialties dealing with conditions of matter, but cannot be regarded as a solution of the riddle of the world.

By spiritism we understand a belief in spirits; by spiritualism, the theory that the world is spiritual. Spiritualism is a philosophy that, according to definitions, may be tenable, but spiritism, the belief in spirits, has never as yet made good its claim. Spirits may appear and may haunt the imagination of people who are either excited by special circumstances or are predisposed for spirits by an abnormal nervous constitution, but, as we shall try to prove, the objective reality of spirits rests on no solid foundation, and we do not believe we make too strong a statement if we say that so far there has never been forthcoming any evidence that may be regarded as universally convincing.

The claim of spiritism has been investigated again and again, and always with the same unvarying result: *non liquet*. Indeed, one



of the soundest and most philosophical minds that ever lived on earth inquired into the problem and dismissed it with a shrug.

Kant, as we know from a letter to Charlotte von Knobloch, had his attention called to Swedenborg, and he expressed his anxiety to see and question this remarkable man himself. He spent some money to get Swedenborg's books, but the result of his investigations was greatly disappointing. His book on the subject, *The Dreams of a Visionary Explained by Dreams of Metaphysics*, is in many respects unsatisfactory, for he seems to deem it beneath his dignity to investigate any one of the stories which had aroused his curiosity. Says he (Frank Sewall's translation): "The realm of shadows is the paradise of visionaries. Here they find an unbounded territory where they can settle at pleasure. The hypochondriac's vapors, the fairy-tales of the nursery, the miracles of the cloister will furnish sufficient building material."

And the question is settled indeed. Kant adds:

"Holy Rome holds there profitable provinces. The two crowns of the invisible kingdom support the third which is the fragile diadem of the sovereignty on earth, and the keys which fit the two gates of the other world, open at the same time, sympathetically, the money-chests of this present existence, and the prerogatives of the spirit world, whenever policy demands their justification, rise above all impotent objections of the sages, and their use or abuse has become too venerable to feel the need of being submitted to their despicable investigations. But the common tales which favor easy credence and are only partially disputed, why do they spread unutilized or unchallenged, and creep even into the systems of philosophy although they have not the argument of utility in their favor (*argumentum ab utili*) which is the most convincing of all proofs?"

Kant proposes the question: "Shall we wholly deny the truth of all such apparitions, and what reasons can we quote to disprove them?" If we admit only one of these stories, how important such an avowal would be. If, therefore, we want to demolish any or all of them, we shall have to point out the fundamental fallacy from which the most inexplicable ones would seem to flow.

The miracle of life is consciousness, and consciousness, as we have seen, is a factor that cannot be subsumed under the caption of physical phenomena. Consciousness is a function, but it is not a motion, still less a product consisting of matter. Thus it is neither a substance nor a fact of dynamics, but a state of its own.

This one basic fact disposes with one fell blow of materialism. The truth of materialism is that all objective bodies can be reduced to volume and mass: they consist of a definite amount of something that can be weighed and measured. We have only to add from the philosophical standpoint that objectivity and concrete materiality are identical terms. Anything objectified appears to us as body, as matter and motion, and its constitution as well as movements can be weighed, measured, and described with the usual methods that characterize the natural sciences. By common every-day experience we have become so well acquainted with matter that we seem to know all about it. Our own body consists of matter, thus it is perfectly legitimate, albeit one-sided, to say that we consist of matter.

Yet we must not forget that we know matter only as if it were something outside; we never penetrate into its inside. We know matter as it affects our senses, and the terms "matter" and "sense-perceived" are identical. *Vice versa*, nothing can be represented in our senses except in the shape of material bodies. If I think of Plato I may in my mind form an abstract idea of his philosophy; in that case I think of Plato's philosophy in intangible, abstract thoughts which appear as a string of words. These abstract thoughts, however, are absolutely empty unless they reveal concrete realities, which means sense-woven images. As soon as I become conscious of the meaning of abstract thoughts, images rise in my mind which are pictures of concrete things. Thus, Plato appears before me as a dream-image of a real man. The picture may be vague but it is always sense-woven and appears in the senses as the picture of a material body. In other words, we are absolutely powerless to represent anything except in terms of matter. Our abstract thoughts have no significance unless they are applicable to concrete material instances. Thus it appears that materiality is indispensable for any actual objectified existence, which means for any entity which is not a mere subjective fiction but forms a part of the objective outside world, interconnected with it through the law of cause and effect. A part that can be acted upon can react upon its surroundings.

Materiality is not the whole of existence but for objective reality it is indispensable. Other features of existence may be and, indeed, are more important from a human standpoint, but materiality is, as it were, that which makes them actual, and although not dignified by those superior qualities which constitute the worth of higher and nobler forms of existence, it is the material feature in everything existent, bad and good, noble and vulgar, high and

low, which is common to all and without which they would be non-existent or mere dreams.

If believers in ghosts think of spirits they cannot help thinking of them in the shape of some concrete bodily appearance. The substance of ghosts may consist of a material that lacks qualities which we expect in concrete things, but it is after all conceived as a substance of some kind. It may be, like vapor, visible to the eye, but is impalpable, not tangible to the hands. It may be assumed to be endowed with force like electric currents, the material substratum of which is as elusive as the ether, the presence of which is imperceptible to any one of our senses. Still we cannot think of an objective thing without attributing to it a substance of some kind, a bodily shape consisting of volume and mass.

One fact, we said, which cannot be deduced from matter is consciousness. But what is consciousness? If we take the existence of matter and the material universe for granted, and if we start in philosophizing from our notion of matter as that which resists our touch, that which can be weighed and measured, we are astonished to see how a material body such as ours can be endowed with that wonderful quality of picturing the world in sensation. Physical science informs us of ether-waves that with incredible rapidity are transmitted through space. It computes the different lengths of its waves which originate by refraction from different bodies. Everything is ether in motion, yet the sensation which corresponds to it is the warm glow of a world of color, a panorama of moving pictures full of life and beauty. The objectivity of a tumult in the ocean of ether that surrounds our eye is transformed into the subjective mirage of a beautiful picture which forms in our material constitution the world as we see it.

The same is true of all other senses. Inert, clumsy bodies resist our touch, and we feel them as hard or soft, as flexible, warm, or cold, or whatever it may be, and contact with objective things is transformed into the subjective sensation of touch.

The air around us is in constant commotion, and if we neglect here the currents produced by the wind and consider only the waves which sometimes stir the physical constitution of this gaseous mixture, now condensing, now expanding its molecules, we can depict it as a system of globular waves that are being propagated from a multitude of places where simultaneous commotions call them into being. Suppose we listen to a symphony played by an orchestra; every touch of a string, every blow of a horn compresses one portion of the air in such a way as to produce a commotion that is propa-



gated in all directions, and the airy spheres which thus fill the air pass through each other without disturbing each other. Our ear is the recipient of all of them simultaneously if they reach the drum of the ear at the same time, successively if they touch it one after the other,—yet how different is the subjective sensation from the objective fact! Every commotion is felt as a definite tone of a definite pitch with definite undertones which produce what in acoustics is called “timbre.” What a life is here, non-material, reproducing a world of commotions in analogous terms of sensation, and although all of these tones intermingle in one concussion of the drum, the delicacy of the ear is such as to analyze all the tones into their elements and perceive every one of them in its own peculiarity.

The senses of smell and taste are a little different in their constitution. Here some external bodies actually enter into our bodily constitution and combine into chemical compounds which produce the sensations of taste and smell. Thus in these lower senses, parts of matter actually enter and are amalgamated with the constituents of our own bodily system. It is a partial assimilation of solid, or liquid, or gaseous bodies that touch our tongue or the mucous membrane of our nose.

This difference between the objective and the subjective is characteristic of all of our life whenever we are confronted with objective facts that are translated into subjective sensations. *Vice versa*, whenever a subjective conception is represented as actual we have no other means but to represent it as an objective, concrete sense-perception, that is to say, in objective and bodily form. This digression is perhaps redundant to our readers since the facts ought to be presupposed, but it is necessary because we must bear it in mind when we come to consider the reality of so-called spiritual phenomena. This world of ours consists in and through the contrast of bodily existence and sensation. The two are one and inseparable. We can rightly repeat, though perhaps in a little modified sense, Schopenhauer’s maxim: “There is no subject without object, no object without subject.” When the materialist claims that the world should be explained from matter alone he is philosophically crude, and when the spiritualist thinks that spirits can exist without matter he is strangely mistaken. The truth is that there are neither pure materialists nor pure spiritualists. Materialists, so called, only deny that spirits can exist without matter, and in this statement—theoretically at least—spiritualists will not oppose them; *vice versa*, spiritualists claim that spirits can exist in a material form different from the material constitution of the bodies which (dualistically

speaking) we at present inhabit. The truth is that all materialists implicitly must spiritualize matter while spiritualists materialize spirit. Believers in spiritistic phenomena accordingly speak of "materializations" and the criticism is quite justified that spiritualists are truly more materialistic than are materialists.

But let us consider the nature of our mental life more closely. We can understand why natural laws, according to the law of form, constitute one great cosmic order. We can understand how in organized life, a definite progress is possible, building up from primitive beginnings the wonderful structure of the human brain which reflects the surrounding world so accurately as to allow man to adapt himself to conditions, to foredetermine future events, to prevent coming dangers, and to regulate the course of events according to his needs. This quality of foresight and adaptability, the formation of design, the realization of purpose, is the characteristic feature of mental life. We can on the basis of natural law and of the cosmic order understand its origin, but the ultimate facts of concrete existence will forever remain the wonder of the inquiring philosopher. We can trace the "Why?", we can explain that all facts must be such as they are, but that they are at all remains and will forever remain a truth which cannot be deduced by any logical argumentation but must remain a mere matter of fact. An objective world mirrored in subjective consciousness exists as a relation, subject-object relation, in which the two are so intimately interwoven that the thinking subject feels itself to be moving about in its own objective surrounding. *Vice versa*, we endow all the objects with which we are confronted with the same subjectivity that possesses us. But there is a difference here. The savage may think that every moving body is alive, is animated with a soul like ours, but when science advances we come to the conclusion that objective bodies are similar to us only in proportion to the similarity of their bodily constitution. We assume that beings of the same human constitution are possessed of the same human feelings, the same aspirations, etc., of our soul. Mammals of a lower kind, which we know to be deprived of the higher faculties of abstract thought, are yet similar to us in so far as they are possessed of sentiments and are subject to pain in the same way as are our bodies. The whole scale of life is conceived to be analogous to our own constitution and we see the dimmest shadow of a feeling originate in the most primitive structures of living animal substances. Such is the structure of the universe as to the relation between soul and body, spirit and matter, subject and object; and what a grand result is the mind of

man which is at present the highest result of the cosmic life on earth as we know it.

The delicacy of the interrelation between subject and object is such that materialism, barring its philosophical one-sidedness, is perfectly justified if its claims be limited to the fact that nothing is real except it be material and that all concrete events are mechanical motions mechanically determinable, mechanically caused, and of a definite mechanical effect; yet all subjective phenomena are spiritual and the most delicate features of this grand universe of ours are representable in ideas which in their physical aspect are commotions in the brain.

The wonder of life is our normal soul-life as we know it in our daily consciousness but also as it appears in dream and subconscious states.

So long as the soul was regarded as an abrupt unity the facts of double personality had to be regarded as a strange mystery, but since evolution has thrown a light upon the development of this soul we know that it is not a unity but a unification. The soul is not the ego possessed of thoughts but a rich commonwealth of memories, of emotions, and of impulses, organized not unlike a great nation under a central government. Consciousness is only one small portion of the whole being, that portion of psychical activities which comes to the notion of the central government. The innumerable subconscious centers of soul-life also affect consciousness, but they never rise into a clear comprehension unless forced to the front by some abnormal complication and even then they remain dim and vague and mostly also inexplicable unless their condition can be formulated in words.

The higher life of man, his spirituality, consists of that portion which finds expression in language. Man is the speaking animal, and any animal that would develop speech would become human, would develop reason, would be capable of abstract thought, would be capable of generalizing concepts, would be capable of thinking in abstract terms.

Just as the rise of the nation is the basis of the powers and the operations and the opportunities of the government, so that part of our soul which rises into consciousness and which is crystallized around the ego-idea, is dependent upon the resources of the first psychical domain which remains unconscious almost throughout our entire lifetime, and yet the latter is the basis of the former and there is a constant interchange between the two domains.

The ego-idea seems to be the center of all, but it is in itself an empty thought without any reality. When we say: "I do this." "I have done this." "I propose to do that." "I have an idea," "This is my hand and this the rest of my body," the ego-idea is only the thought "I" which by its constant repetition and innumerable relations is swelled up out of all proportion into undue significance. The little word "I" stands for the whole personality, just as a king may represent his whole nation; but *vice versa*, just as the king is, after all, only one man in a nation, so the word "I" is only one word—important though it may be through its relations to other words among the entire host of a man's vocabulary. The word "I" is a representative word. It means the entirety of the organism, and this representativeness constitutes its importance. Aside from this, it is a pronoun which has no more import than the words "thou," or "you," or "that."

But let us now consider the significance of the subconscious domain. Consciousness is not the primordial beginning of the individual development but its final result. Sentient beings begin with many disconnected feelings which are gradually developed into a psychical organism of great complexity and well-functioning inter-connection of higher and lower, coordinated, superordinated, and subordinated stations, changing a rich multiplicity of feelings and thoughts into an orderly commonwealth.

If our entire soul were to acquire consciousness, the central government of our soul, the ego, would not be fit for any ordinate business. It would be as if the President of the United States would have to be in formal connection with every one of the ninety millions or more of the inhabitants of this country. He would find it impossible to attend to the affairs of the State. Thus, nature has limited the range of consciousness and allows only such events to rise into its limited sphere as demand a special settlement by conscious deliberation. A great number of subordinated local centers are not at all connected with consciousness. The heart moves without receiving special orders from the ego and so the stomach attends to the work of digestion. All the neural ganglions of the sympathetic plexus which constitute an important part of the nervous system of man are absolutely independent of the cerebrum and have no direct connection with consciousness. Nevertheless, as the condition of the farmers of a country is of great importance to the central government and may render it at critical moments either powerful or weak, so the subconscious centers of man's nervous constitution have an unfailing influence upon his mental

disposition and make him, even without his perceiving it, pessimistic or optimistic, buoyant and jubilant or depressed and sad.

There is no need here of entering into the evolution of man's soul, how it has been built up from small beginnings, and how the different centers were established in the course of the natural evolution of the human organism. Suffice it to say that unwittingly now and then, the lower centers modify the rise of the central government, and their influence appears to be mysterious and sometimes inexplicable.

If we limit our field of investigation merely to the ideas which have once been conscious we are confronted with many strange events which suggest to the unsophisticated the idea that some supernatural agency manifests itself in our life. Many prophetic dreams and strange coincidences find through a consideration of these facts their natural explanation. We are told that the Chicago fire had been foreseen in dreams and that other great events cast their shadows before them in sensitive minds, and this is not at all impossible. In fact, any one who had his eyes open would have thought of the danger whenever he considered the many wooden structures of the original city of Chicago. We might say it is more astonishing that people did not foresee the danger to take measures against it in due time.

When I once landed at the Hoboken pier at the North German Lloyd wharf, I remember the remarks made by some one who in his business had acquired an eye for the danger of fire, that if by some accident a fire were started on this pier the flames would rapidly spread over the whole wharf. If this comment had been made by a mystic it would have been considered as a remarkable prophecy of the fire that actually took place and caused the terrible loss of so many lives. The conditions of the danger were present for a great number of years but the people who worked on the spot were so accustomed to it that they were unmindful of it and were thus taken by surprise when the accident happened.

Now, it frequently comes to pass that the central government of our soul is so engrossed with the humdrum of the occurrences of daily life that it has no time or leisure or restfulness to listen to the warning voice of our subconscious impulses. Suppose that the actually prevailing conditions of a constant danger impress themselves on our subconscious observation, they remain unnoticed because our conscious self is preoccupied in other quarters. Yet the impulse has been made in the shape of an undefined feeling of uncomfortable apprehension which is as little heeded as was the



voice of the seer who warned Cæsar of the Ides of March. Sometimes, however, this dim foreboding of a coming danger gains strength during sleep and then takes the shape of warning dreams. These dreams may either be a direct warning or assume the shape of apparitions which originate in our subconscious imagination under the general influence of this special uncomfortable apprehension.

We are told by psychologists that frequently solutions of problems are discovered in dreams, that poets who during the busy day do not find the necessary leisure to compose a poem with which their mind is pregnant, will suddenly find the correct expression in their dream and find themselves fully disposed to write their thoughts down when they wake from a refreshing slumber. The effects which our subconscious life thus unexpectedly produces in our conscious life are sometimes so marvelous that they seem to justify the ancient belief of an intercourse of divine beings with mortal man, and yet these phases in the life of man find their natural explanation if we only consider the dependence of the conscious central life of the soul on its subconscious resources.

Mr. Andrew Lang recounts an interesting instance of it in the dream of Professor Hilprecht which I am glad to say is as far superior to many other psychical experiences enumerated in the reports of the Society for Psychical Research as a scholar of vast learning and great ingenuity is superior to the average believer in spiritual phenomena. We quote from Mr. Lang's well-known book on *Dreams and Ghosts*:

*The Assyrian Priest.*

Herr H. V. Hilprecht is Professor of Assyriology in the University of Pennsylvania. That university had despatched an expedition to explore the ruins of Babylon, and sketches of the objects discovered had been sent home. Among these were drawings of two small fragments of agate, inscribed with characters. One Saturday night in March, 1893, Professor Hilprecht had wearied himself with puzzling over these two fragments, which were supposed to be broken pieces of finger-rings. He was inclined, from the nature of the characters, to date them about 1700-1140 B. C.; and as the first character of the third line of the first fragment seemed to read KU, he guessed that it might stand for Kurigalzu, a king of that name.

About midnight the professor went, weary and perplexed, to bed.

"Then I dreamed the following remarkable dream. A tall, thin priest of the old pre-Christian Nippur, about forty years of age, and clad in a simple *abba*, led me to the treasure-chamber of the temple, on its south-east side. He went with me into a small low-ceiled room without windows, in which there was a large wooden chest, while scraps of agate and lapis lazuli lay scattered on the floor. Here he addressed me as follows:

" 'The two fragments, which you have published separately upon pages 22 and 26, belong together [this amazing Assyrian priest spoke American!]. They are not finger-rings, and their history is as follows:

" 'King Kurigalzu (about 1300 B. C.) once sent to the temple of Bel, among other articles of agate and lapis lazuli, an inscribed votive cylinder of agate. Then the priests suddenly received the command to make for the statue of the god Nibib a pair of ear-rings of agate. We were in great dismay, since there was no agate as raw material at hand. In order to execute the command, there was nothing for us to do but cut the votive cylinder in three parts, thus making three rings, each of which contained a portion of the original inscription. The first two rings served as ear-rings for the statue of the god; the two fragments which have given you so much trouble are parts of them. If you will put the two together, you will have confirmation of my words. But the third ring you have not found yet, and you never will find it.' "

The professor awoke, bounded out of bed, as Mrs. Hilprecht testifies, and was heard crying from his study, "It is so, it is so!" Mrs. Hilprecht followed her lord, "and satisfied herself in the midnight hour as to the outcome of his most interesting dream."

The inscription ran thus, the missing fragment being restored. "by analogy from many similar inscriptions":

"To the god Nibib, child  
Of the god Bel,  
His Lord  
Kurigalzu,  
Pontifex of the god Bel,  
Has presented it."

But in the drawings the fragments were of different colors, so that a student working on the drawings would not guess them to be parts of one cylinder. Professor Hilprecht, however, examined the two actual fragments in the Imperial Museum at Constantinople. They lay in two distinct cases, but, when put together, fitted. When cut

asunder of old, in Babylon, the white vein of the stone showed on one fragment, the gray surface on the other.

Professor Romaine Newbold, who publishes this dream, explains that the professor had unconsciously reasoned out his facts, the difference of color in the two pieces of agate disappearing in the dream. The professor had heard from Dr. Peters of the expedition, that a room had been discovered with fragments of a wooden box and chips of agate and lapis lazuli. The sleeping mind "combined its information," reasoned rightly from it, and threw its own conclusions into a dramatic form, receiving the information from the lips of a priest of Nippur.

Probably we do a good deal of reasoning in sleep. Professor Hilprecht, in 1882-1883, was working at a translation of an inscription wherein came *Nabû-Kudûrru-usur*, rendered by Professor Delitzsch "Nebo protect my mortarboard." Professor Hilprecht accepted this, but woke one morning with his mind full of the thought that the words should be rendered "Nebo protect my boundary," which "sounds a deal likelier," and is now accepted.

What better illustration of our point of view could be found! Dreams are most wonderful phenomena, and it would be worth while for any one who wants to understand the nature of psychical life to pay special attention to their nature. When the central station of our soul, the headquarters of consciousness, takes a rest, when sleep sets in, other departments of our mental life still continue to function and the shapes they produce are naturally and necessarily of the same nature as our waking experiences. They are their revival, hence the similarity which, for all practical purposes, is a sameness in kind, exhibiting a difference only in clearness and strength. Dreams as a rule are weaker than sense-impressions during the waking state, but their objective interpretation is exactly the same. This may seem mysterious, but it is a matter of course, for wherever they appear to be original they are in fact merely combinations of elements which have first been furnished by sensations. Thus, things which we find in dreams are like the things which we find in reality. Bodies which we touch in dreams present the same sensation of resistance as bodies which we touch in the waking state. Even tastes, odors, and voices perceived in dreams are as actual as those perceived in the normal waking state. We must bear this in mind in order to know that the usual spiritualistic phenomena are not at all miraculous or even strange. Anything that is represented in our mind as actual assumes the shape of bodily concrete-

ness, and our dreams are simply a revival of old memories. Whatever new there may be in dreams, whatever greater beauty or originality dreams and visions may present, their elementary materials are always furnished from the storehouse of memory.

We are so accustomed to these features of our normal life that they do not appear to us as wonderful; but when we are confronted with abnormal experiences we are set to thinking, and we become better aware than otherwise of the spirituality of our existence. Some examples will explain.

I have among my friends many believers in spiritual phenomena, but I have never quarreled with any one of them, for I am too deeply convinced of the importance and the seriousness of the question to try to settle it that way. Moreover, I learn through their information and I positively know that they have not the slightest doubt as to the reliability of their own experiences. One old friend of mine, a lady highly advanced in years, who is the last survivor of a family well known all over the English-speaking world, derives much comfort from the development of her spiritual powers, and whatever may be the facts, it seems to me that this comfort alone is a justification of my proceeding, at any rate in her own case. For reasons which I need not specify I shall limit myself to quoting from a letter of hers which she wrote to me a short time ago, and which in part reads as follows:

"My own psychic powers are now so developed that I have been able to form what we call a 'study class,' consisting of myself and Mrs. F., a cousin about forty years of age, on this side, and Sir Benjamin R., M. D., chairman on the other side; and every morning after my cup of coffee and a roll in bed my hand writes questions and answers—the one as easily as the other. By this means . . . my husband who died nearly three years ago, and my father and mother, and all my brothers and sisters (ten of these—and I am the last on earth) are able . . . to give me their experiences in spirit life. I have become so familiar with that life that like Paul I have sometimes to say whether in the body or out of the body I cannot tell.

"Again we have a private medium who for many years has given us, in complete trance condition, communications from souls on the other side that are of themselves proofs of identity—as for instance nearly all the judges of \* \* \* with whom my husband was in intimate relations for thirty years—referring to legal questions, etc., and I have taken notes of these—word for word—so

that if I could just publish these notes the whole question would be settled of the possibility of communications of a reliable character. But this can never be, because of the privacy—so I live almost alone in the midst of revelations that are so enchanting I can only wonder why they are not a part of the ordinary human experience. I could read to you pages on pages that would sink deep into your heart, but probably shall never have the opportunity."

The truth of these spirit experiences is that the personalities with whom we have been in actual intercourse and who have impressed us with their personality, are and remain actual presences with our spiritual life so long as we are capable of reviving their memories. The memory of a dead mother often is and always can become a factor for good in the life of her son which in moments of temptation may guide him in the right path. Thus, it would be wrong to say that the dead are absolutely dead as if they had never been. They continue to influence the course of affairs on earth, and it frequently happens that the dead man killed, perhaps slain by his enemies a martyr of his cause, will be a greater power than he ever was in his life. It is true enough that those friends of ours who have quitted this life continue to be spiritually with us. They still play an active part in our lives, and the advice which we may derive directly from them through our memories may be as typical as if they came from their own mouths while they were still in the flesh.

Some time ago I met at a banquet of the Chicago Press Club a venerable judge of good social standing with an excellent record of his judicial career, who was drawn into a conversation concerning spirits. It was Judge B. Being asked by his neighbor whether he believed in spirits he answered, "I do not merely believe in them, I know that they exist, for I have seen them and spoken with them, and I know that they exist as well as I exist myself, or you, or any other person whom I have met." The lady was quite startled and knew not at first whether to take him seriously or what to make of him—so rare is it (in this so-called materialistic age) that a man of scholarly education has visions acoustic as well as ocular. Judge B. was serious in his explanation, and among his friends he is well known for this particular feature of his bodily and mental constitution.

Judge B. believes in the objective reality of his visions, and I will not quarrel with him on the subject. To him certainly they are as real as the normal sight of actual things that are reflected in his eye. Details are indifferent, for visions are not exactly alike



in different persons. Judge B. informs me that the spirits he sees are impressive personages, a little taller than ordinary mortals and surrounded with a light which may be called a halo. They do not walk but hover in the air and glide along noiselessly. They speak like ordinary mortals, only their voice is more musical, but the sound is as plain and natural as the voices of his friends who are still in the flesh.

I mention this case because it is the best instance known to me of the faculty of vision taking place in the waking state. We may assume that in primitive society, among Indians or among people not touched by the pale cast of thought, by scientific considerations and the self-criticism which forms part of our educational system, instances of the same kind are much more frequent. Not only do they develop more frequently, but wherever they develop they are more conspicuous because they are regarded with awe and reverence. Communications received through visions are supposed to be of a reliable character and often are accredited with superior wisdom and a more complete knowledge than is commonly allowed to mortals in the flesh. Visions play an important part in primitive society and almost every Indian tribe, be it ever so small, can boast of one or several men or women who are visited by ghosts and gods and other spiritual personages. People who have never investigated spiritual phenomena are apt to be bewildered by facts of this kind whenever they are suddenly confronted with them, but a physiologist or psychologist of wide experience is not. They know that visions are phenomena which are neither more nor less remarkable than waking dreams. There are persons who are subject to waking dreams which are frequently, but not always, of an oppressive nature so as to be premonitions of nervous attacks, but sometimes they are of a less dismal character and reflect either indifferent or even beneficial, or simply irritated states of mind. Pleasant visions as also pleasant dreams are frequently indications of a recuperation of health after a severe illness. In a man like Judge B. they are parts of his normal mental constitution, and if he sees visions they are not oppressive to him and not indicative of any hysterical condition.

The instances which he has to relate I need not all repeat, but for completeness' sake I will mention some additional facts. Thus, he fancied he saw an archangel when, after a severe illness, he had "died," or let us say, after he had been under the impression that he had already passed through the transition from the mortal to the immortal state. He saw the archangel before him and heard

him ask the question whether he was a singer and could join the heavenly choir. When Judge B. answered in the negative, the angel replied that at present he could not be fitly employed in heaven and so should go back to earth, whereupon he recovered the consciousness of his body. The crisis of his disease had set in and his life was saved. Judge B. made these statements when some one asked him if he was musical, and he answered: "If I were I would not be here. Because I was not musical I was sent back to the world when I had died."

Experiences of this kind are certainly remarkable, and many a reader will say, just as I did, Is it possible that a man who is a judge of good standing, to whose judgment frequently decisions of great importance are submitted, is so abnormally constituted that he sees spirits as plainly as people with whom he is surrounded? So when I met the judge again I asked him whether he had the confidence that communications which spirits made to him are reliable. He answered, "Indeed they are," but suggested that discrimination should be used, for even spirits are not always trustworthy, and in the spirit world there are also liars and humorists, and they are not less than we subject to error. I further inquired of the judge whether, say for instance in criminal cases, he would be influenced by spirit communications, and he admitted that he would be apt to be thus influenced, but that he would try not to be and that he would exclude evidence derived from that source. When I demanded his reason he said, "There is no other reason except that their use is not sanctioned in our legal proceedings," but he did not hesitate to say that if it were he would deem it right in a judge to make use of spirit communications.

Here the practical sense of the judge kept him from going astray, for consider that, if spirit communications were admissible evidence in court, all doors would be open to prejudice and to proceedings upon visionary grounds which could easily endanger not only property but even life. There is scarcely a murder committed without some medium or prophet informing the police that he is in possession of the secret, and if such testimony were admitted as evidence we might have a renewal of the methods of legal procedure during the time of witchcraft and witch-persecution. Accordingly there can be no question about this matter in the opinion of any justice-loving person, and even if spirit communications could be proved to be reliable they should not be admitted as evidence in court.

This, of course, does not exclude the possibility that a judge

or a juror serving in a criminal case may be deeply impressed with significant interrelations of facts, neglected by attorneys, which during the trial assume the form of extraordinary dreams or other mental phenomena, and that such visions more or less accurately express the real character of the situation. Charles Dickens has described a case of this kind in his two ghost-stories in the volume entitled *Christmas Stories*, to which we refer the reader.

The truth is, which can be denied only by those who have no insight into psychical phenomena, that there are persons who actually see ghosts, not only in states of hysterical excitement, but sometimes also when they are in a calm state of contemplative restfulness. If we call such conditions abnormal we must also confess that they vary merely a little and in insignificant details from the normal conditions of every healthy man whose psychical life consists in seeing things as, we may say, nature intended him to see them,—remaining unmindful of the many after-images and waking dream states which he might have if he were to develop that faculty of his soul which is slumbering in almost every one of us; for those people who have no waking dreams have dreams while they slumber, and if we only consider that our dreams might rise before us in broad daylight we will easily understand a whole class of spirit phenomena.

Our memory-images are faint reproductions of the sense-impressions which they represent, and the fixedness of a rising memory-image depends very much, not only upon the constitution of different individuals but also upon time and occasion. In some individuals it is sometimes as realistic as the original sense-impression and thus can actually become an illusion. People of a vivid imagination, artists, poets, or other persons of a high-strung nervous system are apt to see their own artistic creations bodily before their eyes, and this quality frequently enables them to describe purely imaginary scenes as vividly as if they related self-experienced events. Among famous people I will here mention only the inventor Nicola Tesla who says that when he was a child he used to see the things of which he spoke. If for instance his nurse spoke of a cat he saw a cat before him, and it was an actual torture to him to get rid of these pictures which he knew to be illusions. When he grew older and stronger his nervous constitution became sufficiently settled so that he acquired a mastership over the powers of his imagination, and he could now call them and discharge them at will. Even now he is not in need of making draughts of machinery when working on an invention, but he can so realistically picture

things to himself that he can actually measure machines he sees in his imagination bodily before him.

The fact that our mental images are or at least may become so very realistic seems strange, and yet it is only what we ought to expect considering both the origin of our memories and the nature of our mental constitution.

The sense of a hallucination is in itself real enough. The unreality of the hallucination consists in the error of its interpretation. Suppose for instance we gaze intently upon a red spot. The rods and cones of our retina are thereby subjected to a chemical disintegration which is subjectively felt as a red sensation. This sensation in form corresponds to the spot in a similar way as the picture in a mirror is similar in form to the outside object. When we cease gazing at the red spot a green after-image appears in our field of vision whithersoever we may turn our eyes. This after-image is due to the conditions of the retina after being exposed for a certain time in one and the same spot to red color-waves. The sensation is no longer red but appears in the color complementary to red and the commonly accepted interpretation is that the one part of the chemicals which produces the red sensation has been consumed, thus leaving those which will produce its complementary color. It is merely an affectation in our organ of sight which corresponds to one that produces the green color effect. The illusion does not consist in the sensation being untrue, but in the wrong interpretation which we are apt to impute to it. While the red spot is caused by an objective event, viz., the red color-waves proceeding from the red spot, the green after-image is due to an internal disturbance, though according to the established habits of our organs of sight it appears to exist in the outside world in the same way as the red spot. When we try to grasp it or touch it, it eludes our hand and does not justify the anticipations which we generally have concerning those objects of our experience which we call real; hence we call it unreal or an illusion.

Dreams are illusions. They are, like the after-images, internal disturbances of our mind having their physiological seat in the brain where every vision, every dream, voice, every hallucination of taste and odor or other sensations has its physical seat. Dreams considered in themselves are as real as are sensations. Dreams are unreal only in so far as they would not be verified by our senses in a waking state, nor are they real to the experiences of others. While Macbeth in the excitement of his evil conscience sees the ghost of Banquo, his guests declare that he stares into the empty

air; they see nothing. The event is surely subjective. It is real enough to Macbeth but it is an illusion so far as the object outside of Macbeth's mind is concerned.

The brain is a very delicate organism and it responds more readily to external impressions than the daintiest mechanism of artificial manufacture. As the colian harp resounds when the wind passes through it, so the human soul vibrates in sympathetic response under the innumerable impressions that touch it. The suffering of one of our own fellow-beings calls forth in our own heart a similar disposition, the "fellow-pain" called *Mitleid* or co-suffering in German, *συμπάθεια* in Greek. Thus ideas, pains, sensations, illusions can easily become sympathetic. Some hysteric person may have a vision and impress others that are somehow predisposed for similar illusions so vividly with the picture oppressing him that they too see it; for instance, when the sentinels in the castle of Elsinore have an apparition which they consider to be Hamlet's father's ghost, they will easily find among those who are of a similar mental constitution, some who, when conducted to the haunted spot, will also swear they see the ghost of the late king who died in some mysterious way. Shakespeare's representation of the ghost-scene is characteristic enough for a description of a genuine vision, Horatio and the young prince are specially prepared for the occasion by having their imaginations stirred through the accounts of the sentinels. Thus we see that even two or several minds may have an illusion which to all outer appearances is the same—and yet there is no reason to assume that there is any ghost outside of these several visions.

## SCIENCE, THEOLOGY, AND THE CHURCH.

BY PAUL CARUS.

NOT very long ago in all Christian churches the Bible was believed to be the word of God in the literal sense of the term, but it is now treated by all Christian theologians, viz., by all those Bible scholars who lay claim to being scientific investigators, as a collection of books of Hebrew literature which is to be studied by the same methods and according to the same rules as any other literary products of ancient or modern times.

It goes without saying that the Bible has not lost its venerableness, its sanctity, its significance, either in the churches or in secular