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PSYCHICAL RESEARCH

By SIR W. F. BARRETT, F.R.S.

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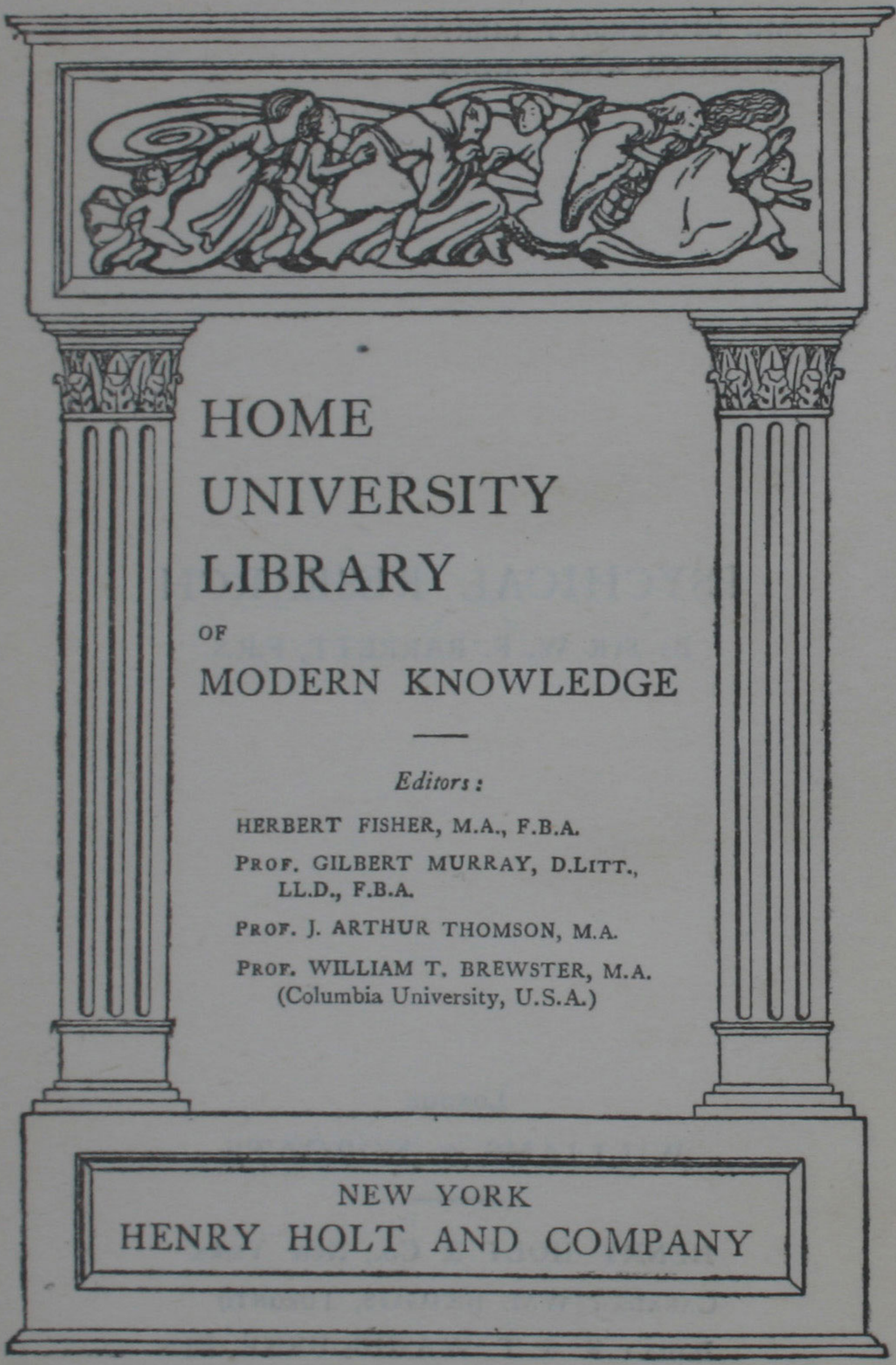

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PSYCHICAL RESEARCH

BY

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PROFESSOR OF EXPERIMENTAL PHYSICS
IN THE ROYAL COLLEGE OF SCIENCE
FOR IRELAND, 1873–1910

NEW AND REVISED EDITION

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PREFACE

To compress into a small volume such as the present an outline of psychical research has proved a more formidable task than I anticipated when the Editors asked me to undertake this work. The problems are so new and entangled and the results so startling that it is very difficult to present them in a brief yet readable and convincing form. A superficial sketch of the subject might have been given, but that seemed hardly worthy of the aim which the Editors have in view. I have therefore endeavoured to give a brief survey in separate chapters of the principal lines of work and of the results so far achieved by the Society for Psychical Research. One of the most difficult tasks was to compress into a chapter or two an intelligible view of the laborious work of the Society during recent years in the investigation of automatic writing and the evidence this may afford for survival of bodily death: a critical inquiry that extends over several bulky volumes of the Society's *Proceedings*. Happily my friend, Miss Jane Barlow, D.Litt., who has made a careful study of this subject and is one of

the Committee of Reference and Publication of the S.P.R., generously came to my aid. Her literary skill is seen in the two last chapters, wherein she has helped me to outline the salient features of this evidence and the general conclusions to which we have been led. I have also to thank Miss Barlow for much other kind assistance in the preparation of this volume. Mrs. H. Sidgwick, D.Litt., Hon. Secretary and a former President of the S.P.R., has also very kindly read the proof sheets and made some valuable suggestions which I have adopted. It must, however, be understood that neither Mrs. Sidgwick nor the Council of the Society for Psychical Research are in any way responsible for the conclusions stated and the opinions expressed in the following pages.

W. F. Barrett.

Kingstown, Co. Dublin,
August 1911.

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PSYCHICAL RESEARCH

CHAPTER I

SCIENCE AND SUPERSTITION

THE phenomena we are about to discuss in the present volume are characterized by many sceptics as a "recrudescence of superstition" (see *Nature*, vol. 51, p. 122), and on the other hand by many believers as "evidence of the supernatural." The average busy man, who has no time for critical inquiry, probably thinks that there is a good deal of truth in both these statements, and therefore prefers to give the whole subject a wide berth. But the scornful disdain of the *savant* and the credulous belief of the ignorant are now giving way to a more rational attitude of mind. A widespread desire exists to know something about that debatable borderland between the territory already conquered by science and the dark realms of ignorance and superstition; and to learn what trustworthy evidence exists on behalf of a large class of obscure psychical phenomena, the importance of which it is impossible to exaggerate if the

alleged facts be incontestably established. To satisfy that desire, in some slight and imperfect way, is the object of this little book.

The subjects to be considered cover a wide range, *from unconscious muscular action* to the mysterious operation of our subconscious self; from *telepathy* to apparitions at the moment of death; from *hypnotism* and the therapeutic effects of suggestion to crystal-gazing and the emergence of hidden human faculties; from *clairvoyance*, or the alleged perception of objects without the use of the ordinary channels of sense, to *dowsing*, or the finding of underground water and metallic lodes with the so-called divining rod; from the reputed *hauntings* of certain places to the mischievous pranks of *poltergeists* (or boisterous but harmless ghosts whose asserted freaks may have given rise both to fetishism and fairies); from the *inexplicable sounds* and movement of objects without assignable cause to the thaumaturgy of the spiritualistic séance; from the scribbling of *planchette and automatic writing* generally to the alleged operation of unseen and intelligent agents and the possibility of experimental evidence of human survival after death.

These phenomena, even if only a fraction of what is asserted by credible witnesses be true, open a new and vastly important chapter in the book of human knowledge. If established, they reveal a wide and wonderful extension of human faculty, and give us a glimpse of the abysses of human personality, of depths

that transcend time and sense and outward things, teaching us that "nature is not a soulless interaction of atoms, nor life a paltry misery closed in the grave."

But here we are met, on the one side, with the objection of many religious people, that these phenomena belong to the region of the *supernatural*, and therefore their investigation is a hopeless, if it be not an impious, quest; and on the other side with the complacent contempt of the superior person, who dismisses the whole matter with a shrug as pure superstition. Therefore, before discussing the evidence on behalf of these obscure phenomena, let us ask if there be any valid reason for describing them as either supernatural or superstitious.

In the childhood of the race every rare or inexplicable event, whether in the heavens or on the earth, was regarded as supernatural. Eclipses, comets, meteorites, and other unusual meteorological phenomena, were a supernatural portent or the direct interposition of the Deity. But the progress of knowledge has shown that these and all other phenomena —however mysterious and at present inexplicable they may be—are part of the order of nature, are natural and not supernatural. Even a couple of centuries ago, many of the marvels of modern scientific discovery would have been classed as supernatural. To know what was happening less than an hour ago at the Antipodes, or to listen to the voice of, and interchange conversation with, friends in

different countries—the commonplace of the telegraph and telephone to-day—not to mention the transmission of wireless messages across the Atlantic and the instantaneous photographic record and reproduction of rapidly moving objects, all these would have been thought impossible or miraculous.

The religious mind is ever apt to forget what Bishop Butler pointed out in the first chapter of his *Analogy*, that our notion of what is natural grows with our greater knowledge, so that to beings of more extensive knowledge than ourselves "the whole Christian dispensation may to them appear natural, as natural as the visible known course of things appears to us." Miracles, as most theologians, from St. Augustine onwards, have said, do not happen in *contradiction* to nature, they are not supernatural events, but only transcend what is at present known to us of nature. We cannot pretend to determine the boundary between the natural and the supernatural until the whole of nature is open to our knowledge. If at any point scientific investigation finds a limit, what is beyond is only a part of nature yet unknown. So that, however marvellous and inexplicable certain phenomena may be, we feel assured that sooner or later they will receive their explanation, and be embraced within some part of the wide domain of science.

Nor can we restrict these considerations to the visible universe. The vast procession of phenomena that constitute the order of nature

do not come to an abrupt conclusion when they can no longer be apprehended by our present organs of sense. Science already takes cognizance of the imperceptible, imponderable, and infinitely rare luminiferous ether, an unseen form of matter wholly different from anything known to our senses, the very existence of which indeed is only known inferentially. As an eminent scientific writer has said: "In earlier times the suggestion of such a medium would probably have been looked upon as strong evidence of insanity." The law of continuity leads us to believe that whatever unknown and perplexing phenomena may confront us, in the seen or in the unseen universe, in this world or in any other, we shall never reach the limit of the natural, and never be put to intellectual confusion by the discovery of a *chaos* instead of a *cosmos*. At the centre and throughout every part of this ever expanding and limitless sphere of nature, there remains—enshrouded from the gaze of science—the Ineffable and Supreme Thought which alone can be termed Supernatural. For the very term phenomenon, which is only the Greek word for appearance, means something brought within the cognizance of the senses and of the reason, thereby it ceases to be supernatural and becomes another aspect of the creative thought of God. Hence the supernatural can never be a matter of observation or scientific inquiry; the Divine Being alone can transcend His handiwork.

To talk, therefore, of apparitions and

spiritualistic phenomena, etc., as supernatural is obviously incorrect. Even if established they would not lie beyond nor outside nature, but merely beyond our ordinary normal experience. They are, in fine, *supernormal* phenomena, and that word, first suggested by Mr. F. W. H. Myers, will be used throughout this book to denote the objects of psychical research.

Then arises the question, is it worth while to spend time on subjects which the scientific world has until lately regarded as relics of superstition, and which are still so regarded by many? It is true that there is now a growing and marked change of opinion in this respect among many of the foremost men of science in every civilized country. But official science as a body still looks askance at psychical research and speaks of its adherents as more or less credulous and superstitious. What is meant by superstition? Etymologically it means the standing over an occurrence, in amazement or awe; shutting out the light of inquiry and reason. Where this light enters a mystery is no longer enshrouded by helplessly standing over it, but we begin to understand it. Superstition is, therefore, the antithesis of understanding, and of that faith in the intelligibility of nature which forms the foundation of science and the hope of all intellectual progress.

In a lecture on Science and Superstition which the writer heard the Rev. Charles Kingsley deliver at the Royal Institution in

London in 1866, and which was published in *Fraser's Magazine* for June and July, 1866, superstition was defined as "fear of the unknown." This is the frequent accompaniment of superstition, but the ancient Greek, "who believed that every tree or stream or glen had its nymph, whose kindly office men might secure by paying them certain honours," was a superstitious man, though he did not in this case exhibit fear of the unknown. Superstition may be more accurately defined as a *belief not in accordance with facts, where no connection exists between the cause ascribed and the effect imagined, and issues in superstitious practices when such a belief is regarded as affording help or injury.* Some trivial occurrence may once have been followed by disaster, and forthwith it becomes an omen! Thus a chance coincidence is to the superstitious a law of nature. Not only amid the culture of ancient Greece and Rome, but right down the ages to the present time, we find this irrational habit of mind. Nor is it confined to the credulous and the ignorant. Voltaire went home out of humour when he heard a raven croak on his left. Many gallant officers and clever women dread to sit down thirteen to dinner, just as the peasant dreads to hear the screech owl. Omens and portents are still as rife throughout India as in ancient Rome. Superstition is the arrest of reason and inquiry, an ignoble and groundless belief. But in every case where science comes in at the door superstition flies out of the window. And so

to-day if we wish to rid ourselves of the many silly and mischievous superstitions which abound in our midst, we must bring to bear upon them the "dry and clear light" of science.

How, then, can the scientific investigation of psychical phenomena be regarded as superstitious folly? Difference of opinion may exist as to the interpretation of the phenomena or as to the weight of evidence required to establish a definite conclusion. But no one disputes the need of inquiry, nor that numerous painstaking and competent investigators have been convinced of the genuineness of many of the phenomena we shall describe and the vast importance of the issues they foreshadow. This being so, the charge of superstition rests upon those whose scornful and irrational habit of mind leads them to a belief not in accordance with facts, and to a practice of rejecting the weightiest evidence and accepting the flimsiest—just as it suits their preconceived notions of the possible and the impossible. These are the superstitious.

There remains a more common form of disbelief in psychical phenomena, based upon the fact that they have not been witnessed by the objector and cannot be reproduced at will to convince him. Neither have many of us witnessed the fall of meteoric stones to the earth, yet we believe in their existence in spite of the impossibility of their reproduction at our pleasure. The reason why we believe is, of course, the testimony of many trustworthy

witnesses to whom we have given attention. In fact there are some phenomena in physical science which are as rare, elusive and inexplicable as those in psychical research. That strange phenomenon, to which the name of fire-ball or globe lightning has been given, is an example. "As we have hitherto been unable to reproduce a fire-ball by our most powerful electrical machines, some philosophers have denied that any such thing can exist! But as Arago says: 'Where should we be if we set ourselves to deny everything we do not know how to explain?' The amount of trustworthy and independent evidence which we possess as to the occurrence of this phenomenon is *such as must convince every reasonable man who chooses to pay due attention to the subject.* No doubt there is a great deal of exaggeration, as well as much imperfect and erroneous observation, in almost all these records. But the existence of the main feature (the fire-ball) seems to be proved beyond all doubt." These are the words of that eminent and genuine scientific man, the late Professor Tait, and the words I have italicized are equally true of the principal phenomena of psychical research. There has been, no doubt, much "exaggeration and erroneous observation" in connection with this subject, but this can also be said of the early stages of other new and striking additions to our knowledge.

The fact is, our reason leads us to be instinctively hostile to the reception of any

evidence which cannot be readily fitted into the structure of existing knowledge. We are all apt to overlook the difference between evidence which involves only a wide *extension* of our knowledge and evidence which involves a flat *contradiction* of well-established laws, such as the law of the conservation of energy. If telepathy, clairvoyance or even the existence of discarnate personalities be experimentally established, a vast extension, but surely no contradiction, of our present knowledge would be involved. Moreover, an entirely new discovery, such, for example, as the properties of radium, could never be accepted if, adopting Hume's argument against miracles, we refused to credit it on account of our previous experience having been uniformly opposed to it.

Perhaps, however, the chief obstacle to the general recognition of psychical phenomena is to be found in our disinclination to accept in this region, the experience and testimony of other observers, however eminent and competent they may be. The splendid and startling discoveries made by Sir W. Crookes in physical science were universally received with respect and belief, but his equally careful investigation of psychical phenomena were dismissed by most scientific men as unworthy of serious attention. It is true the former were more, and the latter less, accessible to experimental verification; but one would have thought that at least suspense of judgment, awaiting confirmatory evidence, and not

scornful contempt, would have been a truer scientific attitude.

Certainly the treatment of hypnotism and of its courageous pioneers by the medical profession, down to a comparatively recent period, is a warning of the grotesque follies into which science may fall when it rests its opposition to any new departure not upon evidence, but upon prejudice and negation. Unfortunately, science has been too often the friend of systematic negation. Facts, as the late Professor W. James has remarked, "are denied until a welcome interpretation is offered, then they are admitted readily enough." No one is omniscient, and of late we have had to accept so many things once deemed impossible that we ought by this time to have learnt the axiom of that distinguished philosopher, Sir John Herschel, who tells us "the natural philosopher should believe all things not improbable, hope all things not impossible."

CHAPTER II

UNCONSCIOUS MUSCULAR ACTION

THE PENDULE EXPLORATEUR—AUTOSCOPES

From time to time there comes into vogue, not only in England, but in widely distant countries, an amusing but mysterious game known as the "magic pendulum," or in France as the *pendule explorateur*. It consists of a finger ring or little ball suspended from a thread which is held between the fingers. It is held as steadily as possible, nevertheless the ring soon begins to oscillate, swinging to and fro like a pendulum, in spite of the effort of the holder to control it. If the holder clasps with his free hand a person sitting by his side, the direction of the oscillation may change towards that person. Or, when requested so to do, it may set up a rotatory motion, either in the direction of, or opposed to, the hands of a watch, according as the holder is touched by a lady or a gentleman. If the ring be suspended within a tumbler it will usually strike the hour of the day when so requested. If the letters of the alphabet widely spaced be arranged in a circle and the ring suspended over the centre, it will frequently

spell out answers to questions addressed to it by oscillating towards successive letters. The holder of the ring, in order to keep his hand steady, may rest his elbow on the table, passing the thread from which the ring is suspended over the ball of his thumb; a pendulum about nine inches long is thus formed and not the least motion of the holder's hand is discernible. It will be found that with certain people of either sex the motions of the pendulum are vigorous and respond to any question, but with other persons the pendulum is sluggish or inert. No apparent reason can be assigned for this difference, for sensitives are often found among the most sceptical.

What is the explanation of this mysterious pendulum? Simply this, the person who holds the suspended ring is unintentionally and unconsciously the source of its motion. Through the imperceptible and uncontrollable tremors of his hand or arm the ring or ball begins to vibrate, and the mode of the vibration will correspond to his intention. The curious thing, however, is that the sensitive cannot, by any intentional voluntary act, make the ring carry out his wishes, except in the clumsiest manner and with obvious movements of his hand or arm. But he is able to do involuntarily and unconsciously what he cannot perform voluntarily. That his own muscles are really responsible for the mysterious motions of the *pendule*, is seen by suspending the thread and ring from a rigid support.

such as a gas bracket. However strongly the company may now will the ring to move, it will remain absolutely motionless, except for currents of air, which may be prevented by letting the ring depend inside a glass.

In fact, we have in this present-day pastime a convincing illustration of what has been termed "motor-automatism," that is to say, muscular actions performed without the concurrence of conscious thought and will. We all know that our life depends on the automatic action of the heart, lungs and digestive system, which go on involuntarily and unconsciously. In the oscillation of the *pendule* we have the automatic actions of muscles, usually under the control of our conscious thought and will, unexpectedly responding to the unconscious, or barely conscious, wish of the holder of the thread. An interesting illustration of this was recently given by Professor Hyslop in America, who used a sort of plumb-bob suspended by a chain. Holding the latter between his finger and thumb and resting his wrist on a fixed support, he found the ball promptly oscillated, or rotated in any direction, when he mentally wished it to do so, even when he closed his eyes. Yet he tells us he was absolutely unconscious of giving any motion whatever to the ball and could not detect the least muscular movement of his hand. Even coherent messages may be spelt out by the pendulum without the intention and to the great amazement of the sensitive whom we may now call the *Automatist.* How

these involuntary and intelligent muscular tremors come about we can only surmise. A theory which accords with these and other mysterious automatic phenomena is that our conscious self has a subconscious or subliminal self associated with it, a sleeping partner as it were, that only speaks through these automatic actions.

With that sleeping partner in our personality we are not concerned at present, but only with the mode in which it reveals itself. The *pendule explorateur* is not the only way, but it is perhaps the oldest way of doing this of which we have any historical record. For it goes back to the augurs of ancient Rome, who sometimes used a sort of magnified *pendule*. The augur stood in the centre of a circle, round which were arranged the letters of the alphabet, and holding in his hand a string from which an iron ring depended, he asked the gods for an answer to the question addressed him. Whereupon the ring began to oscillate first to one letter and then to another and the message was spelt out. It is said that one of the later Roman emperors thus obtained from the augurs the name of his probable successor, who was thereupon promptly put to death.

Coming down through the Middle Ages to the present time we find an amusing periodic revival of the magic pendulum. Each period believes it to be a wonderful novelty, just discovered, and that its motions are due to an occult force of surpassing interest and mystery.

The British Museum has a rich collection of continental and English books, going back some centuries, devoted to the investigation and wonders of the *pendule explorateur*. Italian, German, French and English writers, many of them of considerable learning, tell us of its mysterious movements and its scientific value. Even in the *Philosophical Transactions* of the Royal Society of London for 1736, a paper was published on the remarkable orbital motions of a little ball suspended by a thread held in the hand. Mr. Grey, who made these experiments, was a famous man, a pioneer in electrical investigation and a Fellow of the Royal Society. He fully believed that from these experiments would arise a new theory to account for the planetary motions; for he found that the little suspended ball always moved in the same direction as the planets moved round the sun. He acknowledged, however, that "he had not found the experiment succeed if the thread was supported by anything but a human hand." Dr. Mortimer, the then Secretary of the Royal Society, repeated Grey's experiments with success and hoped much from them, but Priestley tells us in his *Electricity* (published in 1775, p. 60) that a contemporary *savant*, Mr. Wheeler, after long-continued trials came to the conclusion that the unconscious desire to produce the motion from west to east was the true explanation, though he was not sensible of giving any motion to his hand.

At the beginning of the nineteenth century the German philosopher, Ritter, thought he had discovered a new force—Siderism, he called it. This, however, turned out to be only unconscious muscular tremors given to a suspended ball or other object lightly held. Some years later Mrs. De Morgan in her *Reminiscences* (p. 216) describes how interested Lady Byron and other notable people were in the wonderful gyrations of the little pendulum, believing it to be "the birth of a new science." Even within the last year an able journalist tells the public of a "new invention" whereby the sex of eggs can be discovered by the mode of oscillation of the magic pendulum! Nor is the widespread illusion of the wonderful gifts of the oscillatory ring confined to the civilized world, as among the Karens a ring suspended by a thread over a metal basin is used to indicate the one dearest to some deceased person.

In some parts of France and America a watch, or a ball, depending from a chain or fine wire, is carried about by certain persons who profess to locate underground ores or springs by its oscillation. The usual method, however, employed by the "diviner" to discover underground ore or water, is by means of a forked twig, the two ends of the fork being grasped one in each hand. Here we have another means of indicating slight involuntary muscular movement, for the twig is held in neutral or sometimes unstable equilibrium, and a very slight muscular tremor will cause

its sudden gyration. Sometimes it will move either upwards or downwards as the holder approaches or recedes from the object of his quest.

In the South of France during the seventeenth century the "forked rod" was employed for an endless variety of purposes. A learned Jesuit, Father le Brun (*Histoire critique des pratiques superstitieuses*, Paris, 1702), tells us it was used to track criminals and the fathers of foundlings, to find lost treasure and lost boundaries, and it was generally appealed to instead of courts of justice; in fact, its use became such a scandal that Cardinal Camus invoked the authority of the Inquisition, and early in the eighteenth century its use in the *moral world* was rightly prohibited. I will return to the history and discuss the value of the so-called divining- or dowsing-rod in the chapter devoted to this subject. The only point that interests us now is the sudden and mysterious motion of the rod, or the *baguette* as it is called in France. We owe the first clear demonstration of the true cause of its motion to a well-known French scientist, M. Chevreul, who in 1854 published a work entitled *La Baguette Divinatoire*, in which he shows how closely related are the movements of the *baguette* to those of the *pendule explorateur*, and that both were due to unconscious muscular action (see also a letter from Chevreul in the *Revue des deux Mondes* in 1833).

Chevreul, however, was not the first to dis-

cover the fact that in some unconscious way the holder of the forked twig really moved it. Two centuries earlier a learned Jesuit, Father A. Kircher, one of the founders of experimental science, proved that the "divining-rod" was inert if balanced on a fixed support and moved only when held by a living person (see Kircher's folio *Magnes sive de Arte Magnetica*, 1640, p. 724, and his later work, *Mundus Subterraneus*, vol. ii., p. 200). Moreover, Chevreul, though he cleared away the follies that had clustered round the *pendule*, was himself mistaken in thinking the holder of the thread pendulum or the *baguette* consciously intended it to move in a certain way. This is not the case. As Professor Pierre Janet points out, these automatic actions take place independently of any conscious volition on the part of the operator ("Sans le vouloir et sans le savoir," *L'Automatisme Psychologique*, by P. Janet, Paris, 1889, p. 373 *et seq.* See also Professor C. Richet's *Des Mouvements inconscientes*, Paris, 1886).

A study of these unconscious movements has recently been made by several experimental psychologists in France, Germany and America. The conclusion was reached that if the attention can be given elsewhere, it is possible to cultivate in many persons automatic movements often of great vigour and complexity, which respond to slight unconsciously-received suggestions. Furthermore, as Professor P. Janet says, in certain cases more knowledge is exhibited in these

automatic manifestations than is possessed by our conscious personality, and the study of the source of this knowledge forms a large part of psychical research.

We may summarize what we have said as follows. Our conscious self always speaks through various voluntary muscular movements, ideas chiefly expressing themselves in articulate language. Behind the conscious self lies the large unperceived background of our personality, which reveals itself through involuntary muscular actions to which ordinarily we give no heed. Either they are internal and concerned with the movements and physiological processes of the organs of the body, or they are external and, generally speaking, too small to be perceptible.

Some instrumental means, as we have seen, is therefore necessary to render visible these minute unconscious external automatic actions. It is desirable to give a generic name to this class of instrument, and I have suggested the term *Autoscope* or " self-viewer." Two autoscopes we have found in (1) the little portable pendulum and (2) in the forked twig, but there are others. (3) A pencil, lightly and passively held so that it can write freely on paper, forms an excellent autoscope with some persons, and (4) a little heart-shaped wooden table mounted with three legs, two furnished with small rollers and the third with a pencil, is a common form of autoscope and goes by the name of planchette. The sitters place their fingers lightly

on planchette, and presently it begins to scrawl out letters and sometimes long coherent messages, or answers questions. (5) The so-called "ouija board" is another autoscope; here the letters of the alphabet are pointed out by a little travelling board on which the sitters' hands are placed. (6) A small table, round which a few persons can sit with their fingers resting lightly around the tip of the table, is a common form of autoscope. The table begins to turn and often to tilt and rap out messages according to a prearranged code. Faraday, with that quick insight and wonderful experimental skill he possessed, long ago showed that the unconscious muscular action of the sitters—when their fingers ever so lightly touched the table—was sufficient to account for its motion. But here, as elsewhere, the muscular hypothesis fails when the table moves without any one touching it, as we shall see is sometimes the case. In the middle of the last century in Guadaloupe, a chair formed a similar autoscope and went by the name of Juanita; prose and poetry were spelt out by the chair, much to the astonishment of those touching it. (7) A simple and efficient autoscope could easily be made out of a poised index or lever, the longer end pointing to the letters of the alphabet and the shorter end having a cross-piece attached to be touched by the sitters. (8) Passive living persons can also act as autoscopes when they are lightly touched by another person. This, as shown in a succeeding chapter, is the

explanation of the "willing game" and of the success of professional "thought-readers" like Bishop and Cumberland a generation ago. There are also other autoscopes which give rise to *sensory* hallucinations, such as the visions seen by gazing at a translucent object like a ball of glass.

Now as language, which need not be speech but any form of *expression*, is necessary for our conscious thought and reason, so autoscopes furnish a means whereby the hidden part of our personality, the dumb partner of our life, can outwardly express itself; a means whereby an intelligence not under our conscious control can reveal itself by some physical or sensory manifestation.

It is just because these manifestations appear to be so novel and detached from ourselves that they are apt to be so misleading to some and so mischievous to others. Interpreted on the one hand as the play of a wonderful occult force, science has refused to have anything to do with phenomena which seem to obey no physical laws, but are capricious and self-determined. Interpreted on the other, truly enough, as the exhibition of a free and intelligent agent, some infernal or discarnate spirit has been fixed upon as the cause, and a fictitious authority is often given to their indications.

Whether these intelligent automatic movements and hallucinations exhibit information outside the memory, either active or latent, of the individual who uses the autoscope;

or a knowledge beyond that which may have been unconsciously derived from the known environment, animate and inanimate,—is a problem which can only be solved so as to gain general acceptance by long and patient inquiry. Of this the investigations already published in the *Proceedings* of the Society for Psychical Research are an earnest. To the scope and work of that Society we must now turn.

CHAPTER III

THE SOCIETY FOR PSYCHICAL RESEARCH— HUMAN PERSONALITY

THERE can be little doubt that the widespread and intelligent interest which in recent years has been taken in psychical research is due to the work of the Society founded for its investigation and to the scholarly presentation of that work in the two volumes on *Human Personality* which we owe to the brilliant genius and indefatigable labour of the late Frederic W. H. Myers. It is, moreover, a noteworthy fact that the essential portion, the first four lengthy chapters, of Mr. Myers' *magnum opus* is now included in the examination for the Fellowship in Mental and Moral Philosophy in Trinity College, Dublin, the highest prize in that famous University.

The whirligig of time has indeed brought its revenges more quickly than usual, when we find that a subject which was scorned and ridiculed by the learned world, when the Society for Psychical Research was founded in 1882, has now become an integral part of advanced psychological study in at least one great University.

The success which the Society has achieved

is in no small measure due to the wise counsel and constant supervision of the late Professor H. Sidgwick. It was singularly fortunate that from the outset and for several succeeding years, one so learned, cautious and critical as Professor Sidgwick was President of the Society; a position also held by Mrs. Sidgwick, who has given, and, as Hon. Secretary in recent years, continues to give, the benefit of her wide knowledge and unremitting care to all the details of its work. To these names must be added those of the late Edmund Gurney and Frederic Myers—for many years Hon. Secretaries of the Society — whose indefatigable labours and brilliant genius were devoted to laying the foundations of the Society, upon which the latter, ere his sudden death, had begun to build, and we may fain hope is still aiding to build, an enduring edifice.

Those of us who took part in the foundation of the Society were convinced that amidst much illusion and deception there exists an important body of facts, hitherto unrecognized by science, which, if incontestably established, would be of supreme importance and interest. By applying scientific methods to their investigation these obscure phenomena are being gradually rescued from the disorderly mystery of ignorance: but this is a work not of one, but of many generations. For this reason, it was necessary to form a society, the aim of which should be to bring to bear on these obscure questions the same spirit of exact and unimpassioned inquiry which has

enabled science to solve so many problems once no less obscure nor less hotly debated.

The aversion which so many scientific men have felt for psychical research arises, perhaps, from a disregard of the essential difference between physical and psychical science. The only gateways of knowledge according to the former are the familiar organs of sense, whereas the latter indicates that these gateways can be occasionally transcended. The main object of physical science is to measure and forecast, and from its phenomena life and free-will must be eliminated. Psychical phenomena can neither be measured nor forecast, as in their case the influence of life and volition can neither be eliminated nor foreseen.

In fact, the study of human personality and the extent of human faculty form the main objects of psychical research. Its investigations have already thrown much light on these profound problems. Our Ego is not the simple thing "admitting of no degrees" and manifest only in our normal consciousness, which the older psychologists taught. On the contrary, the results of psychical research have led many to accept the view, so ably advocated by Mr. Myers, that the conscious self, with which we are familiar in our waking life, is but a portion of a "more comprehensive consciousness, a profounder faculty, which for the most part remains potential, so far as regards the life on earth," but which may be liberated in full activity by the change we call death.

Others, like Mr. Gerald Balfour, in his Presidential Address to the S.P.R., suggest a more complex view of human personality. To the solution of this profound problem we are still groping our way, and for the present all theories must be regarded as merely provisional. As a convenient working hypothesis I have adopted Mr. Myers' view, but the reader will please understand that, even in the absence of qualifying words, this view is adopted provisionally and not dogmatically. All, however, will admit the existence of a subconscious life in addition to the primary consciousness with which we are familiar.

Just as experimental physics has shown that each sunbeam embraces a potent invisible radiation, as well as the visible radiation we perceive, so experimental psychology affords evidence that each human personality embraces a potent hidden faculty or self, as well as the familiar conscious self. Mr. Myers, using the psychological conception of a threshold, or *limen*, has termed the former *the subliminal self*. This expresses all the mental activities, thoughts, feelings, etc., which lie beneath the threshold of consciousness. This threshold must be regarded not so much as the entrance to a chamber but rather as the normal margin of the sea in the boundless ocean of life. Above this margin or ocean level rise the separate islands of conscious life, but these visible portions rest on an invisible and larger submerged part. Again, far beneath the ocean surface all the separate islands unite in the

vast submerged ocean bed. In like manner, human personality rears its separate peaks in our waking conscious life, but its foundations rest on the hidden subliminal life, and submerged deeper still lies the Universal ocean bed, uniting all life with the Fount of life. Sleep and waking are the tides of life, which periodically cover and expose the island peaks of consciousness. Death may be regarded as a subsidence of the island below the ocean level; the withdrawal of human life, from our present superficial view, which sees but a fragment of the whole sum of human personality.

Now the subliminal self not only contains the record of unheeded past impressions, a latent memory, but also has activities and faculties far transcending the range of our conscious self. In this it resembles the invisible radiation of the sun, which is the main source of all physical and vital energy in this world. Evidence of these higher subliminal faculties is not wanting; we see them sometimes emerging in hypnotic trance, in works of genius and inspiration and in the arithmetical and musical performances of infant prodigies.

As an illustration of subliminal activity, the following case shows the almost incredible swiftness and ease with which "calculating boys" can work out long arithmetical problems in their head, in far less time than expert adults require, even using pencil and paper. Mr. E. Blyth of Edinburgh (*Proc. S.P.R.*, vol. viii., p. 352) relates this incident of his brother Benjamin:—

"When almost six years of age, Ben was walking with his father before breakfast, when he said—'Papa, at what hour was I born?' He was told 4 a.m., and he then asked, 'What o'clock is it at present?' He was told 7.50 a.m. The child walked on a few hundred yards, then turned to his father and stated the number of seconds he had lived. My father noted down the figures, made the calculation when he got home, and told Ben he was 172,800 seconds wrong, to which he got a ready reply: 'Oh, papa, you have left out two days for the leap years—1820 and 1824,' which was the case. This latter fact of the extra day in leap year is not known to many children of six, and if any one will try to teach an ordinary child of those years the multiplication table up to 12 × 12 he will be better able to realize how extraordinary was this calculation for such an infant."

In fact, this arithmetical power was not the result of the child's education but rather an innate faculty, or, as Mr. Myers expresses it, a "subliminal uprush." In such cases, the possessor of the gift cannot explain how he attained it, and usually it disappears after childhood. Thus Professor Safford, when a child of ten, could correctly work in his head in one minute a multiplication sum whose answer consisted of thirty-six figures, but lost this faculty as he grew up, though in adult life he needed it most.

The conception of a subliminal self originated with one of the most eminent

scientific men of the last generation, Sir John Herschel, who tells us he was led to believe, from a curious experience of his own, that "there was evidence of a thought, an intelligence, working within our own organization, distinct from that of our own [conscious] personality." Certainly the everyday processes of the development, nutrition and repair of our body and brain, which go on automatically and unconsciously within us, are far beyond the powers of our conscious personality. All life shares with us this miraculous automatism: no chemist, with all his appliances, can turn bread-stuff into brain-stuff, or hay into milk.

It must be borne in mind that the term *subliminal*, as used by Mr. Myers, and now generally adopted, has a very wide scope. It includes well recognized vital and mental phenomena such as:—(1) Those sense impressions which were either unheeded, or too weak to arouse conscious perception of them when they occurred, but which float into consciousness during stillness, sleep or hypnotic trance, when the stronger sense impressions are removed. In like manner, the faint light of the stars emerges, with the fading of the stronger light of day. (2) The living but unconscious power that controls the physiological and recuperative processes of our own body and which are profoundly affected by "suggestion." (3) The higher mental faculties which emerge in genius, infant prodigies, hypnotic trance, etc. (4) The disintegration

of personality which is seen in dual consciousness, secondary and even multiplex-selves displacing the normal self. All these lie within the scope of orthodox psychology. The term subliminal is also used to denote (5) those submerged and higher faculties of percipience, such as "seeing without eyes," which are alleged to exist in some persons, and also (6) those phenomena which claim an origin *outside* the mind of the percipient; which origin may be sought (*a*) in the minds of other living men, as in telepathy, or (*b*) in—as some believe—disembodied minds, discarnate intelligences, whether human or otherwise. These latter phenomena (*b*), if established, I should prefer to call *supraliminal*, "above the threshold"—but this term Mr. Myers has restricted to, and it is now used to denote, all that relates to our ordinary waking consciousness; this might have been perhaps more appropriately called *cisliminal*—"within the threshold" of consciousness.

Here and there we find certain individuals, through whom the subliminal self, as regards (5) and (6), manifests itself more freely than through others; these have been termed "mediums," a word, it is true, that suggests Browning's Sludge. But, just as scientific investigation has shown that mesmerists and dowsers are not all charlatans, so it has shown that even paid mediums are not always rogues, though the term "psychic" or "automatist" would certainly be preferable. The scepticism which ridicules the necessity of a

"medium" is forgetful of the fact that all physical phenomena which cannot be directly perceived by our senses, require the intervention of a physical medium to make them perceptible.

Thus the invisible radiation of the sun can only be investigated through some medium such as a photographic plate, or a delicate thermoscope, both of which render those invisible rays perceptible to our vision. In like manner the subliminal self, as mentioned in the preceding chapter, requires some agency, mechanical or sensory—some autoscope—to render its operation sensible. There is therefore nothing incomprehensible or unscientific in the necessity for an automatist or medium in those phenomena which transcend our conscious apprehension.

This extension of human faculty, revealing, as it does, more profoundly the mysterious depths of our being, enables us to explain many phenomena that have been attributed to discarnate human beings. Does it explain all the phenomena included in the domain of psychical research? I venture to think it does not, but at present we have to grope our way and clear the ground for the future explorer of these unknown regions.

Here let us pause in order to note that among the many eminent men who have given their adhesion to the Society for Psychical Research, we find a former Prime Minister, the Right Hon. A. J. Balfour, was President of the Psychical Research Society in 1893, and a

Vice-President from the outset, while another Prime Minister, Mr. Gladstone, was a member of the Society and deeply interested in its work. Nor have the foremost representatives of British, Continental and American Science held aloof. That eminent *savant*, Sir W. Crookes, O.M., now Foreign Secretary of the Royal Society of London, has been President of the S.P.R.—as we shall call it for brevity—and the President of the Royal Society itself is, as was his predecessor, a member of the S.P.R., together with such illustrious scientific men as Dr. A. R. Wallace, O.M., Sir J. J. Thomson, Lord Rayleigh, O.M., Sir O. Lodge, and many others. We may name among other distinguished Continental adherents of the S.P.R. its former President, Professor C. Richet, the distinguished physiologist; Mme. Curie, the discoverer of radium; Professors Bergson, Bernheim, Janet, Ribot and the late Professor Hertz; and in America the late Professor W. James, also a former President of the S.P.R., with Professors E. Pickering and Bowditch. Among great names in English literature and art, who were honorary members of the Society, are to be found Lord Tennyson, Mr. Ruskin and Mr. G. F. Watts. The numerical growth and active work of the S.P.R. is no less remarkable; it now numbers upwards of 1,200 members and associates, and has had at various times considerable sums placed at its disposal, towards an endowment for research work.

Certainly the first decade of the twentieth

century will form a memorable epoch in the history of Psychical Research, were it for no other reason than that it has seen the removal of the most eminent investigators of psychical phenomena. Edmund Gurney had gone before, and now Henry Sidgwick, Frederic Myers, Richard Hodgson, William James, and Frank Podmore—though his outlook was narrower—have successively passed away, leaving empty places that can scarcely be filled and impoverishing us by the withdrawal of so much wisdom, knowledge and zeal, though happily bequeathing to us their fruit in accomplished work of the utmost value.

But it is not by losses only, or even we may trust chiefly, that these years will be commemorated. They have marked a period of exceptionally rapid progress along the lines laid down for the study of the various subjects comprehended under the term of Psychical Research; more especially in one of its main problems. Evidence bearing on the question of the existence of unseen intelligences, apparently in some cases directing the hand in automatic writing, has accumulated with unusual abundance; its increase in quantity being, moreover, accompanied by an improvement in quality, which is a very notable feature. Now, as on any hypothesis of survival, such a result is just what we might expect to follow the passing into another life of persons deeply interested as well as widely experienced in the difficult problems that

confront us, the fact that the result *has* followed seems in some degree to strengthen the hypothesis of their continued activity and co-operation.

The consideration of this evidence must be postponed to the sequel; the extent of human faculty, seen in other phenomena of psychical research, must first engage our attention; to this we must now turn.

CHAPTER IV

THE "WILLING GAME" AND SO-CALLED THOUGHT-READING

SOME years ago a parlour pastime called the "Willing Game" was a favourite amusement and gave rise to much public discussion. Certain persons were very expert at what appeared to be "thought-reading," a few became professional performers. The public were greatly mystified, some considering it a trick, others that the remarkable success attained in private circles proved that trickery was out of the question, and afforded evidence of genuine "thought-transference." But the usual method of playing the game showed that a simpler explanation could be given. The blindfolded performer, whom we may call the *percipient*, had to do something that had been concealed from him, such as to find a hidden object, pick out a certain person, or write a figure on a blackboard, etc. Some one of the company who knew the secret, and whom we will call the *agent*, laid his hands lightly on the shoulders or forehead of the percipient, sometimes he grasped the hand of the latter and placed it on his forehead, and then thought intently of the thing to be done,

but made no conscious effort of guidance. If the percipient were a good subject, and allowed his mind to remain passive, he rarely failed to accomplish what was desired; nor could he give the least explanation of how he did it. Both agent and percipient were equally astonished, and it is no wonder that those who took part in the performance at home were convinced that some kind of mental wireless telegraphy occurred, independently of the senses.

Here, for example, are some experiments made when I was staying with my friend, the late Mr. Lawson Tait, the famous surgeon, in the Easter of 1877 : The subject, a medical man, having left the room and placed himself beyond eye and ear shot, we agreed that on his return he should move the fire-screen and double it back. Recalling the subject, my host, the surgeon, put his hands round the subject's waist and silently willed what should be done. After a few moments of indecision he did exactly what was mentally wished. Among other experiments we desired the subject should turn off the gas tap of one out of several gas brackets. This was accurately done, no word being spoken, only the subject was lightly grasped as before. Here it is difficult to understand how the "muscular sense" would lead to the raising of the hands and correct performance of the wish. Information can, however, be conveyed through involuntary gestures or glances from those who know what has to be done, if the subject is not

blindfolded, and blindfolding is often ineffective, because carelessly done.

Thirty years ago, two professional "thought-readers," a Mr. Bishop and a Mr. Cumberland, gained a wide celebrity through their performances in public and before famous personages. A small committee of eminent men, among whom were Mr. (afterwards Sir Francis) Galton, Mr. G. J. Romanes and others, made some careful tests of Mr. Bishop's powers. A report of this committee written by Mr. Romanes was published in the scientific journal *Nature* for June 23, 1881. The following extract from that report is of interest. The experiments took place in a large drawing-room, in the house of Professor Croom Robertson.

"First, Mr. Bishop was taken out of the room by me (G. J. Romanes) to the hall down-stairs, where I blindfolded him with a handkerchief; and, in order to do so securely, I thrust pieces of cotton-wool beneath the handkerchief below the eyes. In all the subsequent experiments Mr. Bishop was blindfolded, and in the same manner. While I was doing this, Mr. Alfred Sidgwick was hiding a small object beneath one of the several rugs in the drawing-room; it having been previously arranged that he was to choose any object he liked for this purpose, and to conceal it in any part of the drawing-room which his fancy might select. When he had done this the drawing-room door was opened and the word 'Ready' called. I then led Mr. Bishop up-stairs, and

handed him over to Mr. Sidgwick, who at that moment was standing in the middle line between the two drawing-rooms, with his back to the rug in question, and at a distance from it of about fifteen feet. Mr. Bishop then took the left hand of Mr. Sidgwick, placed it on his (Mr. Bishop's) forehead, and requested him to think continuously of the place where the object was concealed. After standing motionless for about ten seconds Mr. Bishop suddenly faced round, walked briskly with Mr. Sidgwick in a direct line to the rug, raised it, and picked up the object. In doing all this there was not the slightest hesitation, so that to all appearance it seemed as if Mr. Bishop knew as well as Mr. Sidgwick the precise spot where the object was lying." Neither did it make any difference whether the article was placed at a high or a low elevation.

Mr. Romanes then describes experiments in which Mr. Bishop was successful in locating any small spot thought of on the body of any member of the committee, or on any table or chair, etc. In conclusion, it is stated, that as in all these trials Mr. Bishop was effectually blindfolded and had no means of direct information, " his success was unquestionably very striking."

Nevertheless, that success Mr. Romanes suggests was due to : " Mr. Bishop interpreting, whether consciously or unconsciously, the indications involuntarily and unwittingly supplied to him by the muscles of his subjects." Failure results when the subject [*i.e.* the agent]

"is blindfolded and loses his bearings, or when the connection between Mr. Bishop and the subject is not of a rigid nature."

The committee then tested Mr. Bishop to ascertain if he had an exceptional degree of tactile sensibility, or power of distinguishing between small variations of resistance and pressure. But the result showed this was not the case, he had in fact rather less tactile sensibility than some members of the committee; his success was not therefore due to this cause, but ascribed "to his having paid greater attention to the subject"—whatever that may mean. Nor is the successful performer, whoever he may be, always *conscious* of being guided by any muscular sense. In fact, Dr. W. B. Carpenter (the physiologist) in the following number of *Nature* relates how he himself was equally successful in discovering a particular card that had been chosen, yet though he watched carefully for any material guidance, he could not tell how he was led to make the right selection.

It is certainly a very remarkable thing, as Mr. Romanes points out, that Mr. Bishop and other successful "thought-readers" should unconsciously and almost instantaneously interpret imperceptible muscular movements unconsciously made by the agent. Albeit that the muscular sense *is* concerned in most cases is evident from the following experiments which any one can make, and which, as a matter of fact, I tried many years ago with a clever amateur "thought-reader," then a

young man, now an Irish M.P. and K.C. Put a piece of cotton-wool between the fingers of the agent and the shoulder or head of the percipient, and as a rule no success is obtainable unless the cotton-wool be pressed so hard that the compressed wool conveys the variations of pressure. Ask the quasi thought-reader to name aloud the figure thought of, or the place where the object is hidden, and he cannot do so; in fact, he consciously knows nothing of what he has to do, but is unconsciously guided, probably by slight differences in the contact of the agent's hand. Blindfold the agent and not the percipient, and if the former loses his bearings, as Mr. Romanes says, the experiment fails. Let a slack piece of string connect the agent and percipient and the experiment fails, though it may succeed with a wire connection, as this can transmit variations of tension. The passive percipient is in fact the *autoscope* of the agent.

A word or two must be said in conclusion about the public performance of so-called "thought-readers." The exhibitions given by Bishop and by Cumberland some years ago are, as already explained, interesting displays of unconscious muscular guidance, verging, it may be, occasionally into incipient and genuine thought-transference. Other public exhibitions, like those of the Zancigs, cannot be so explained, as the performers are far apart. Here only two explanations are possible—telepathy or trickery. Now the characteristic of all genuine telepathic

phenomena, as now known, is their elusiveness. Sometimes, why we do not know, great success is attainable in telepathic experiments; at other times, with the same persons, and under, apparently, the same conditions, dismal failure results. Obviously a public performer cannot depend upon so fitful and uncertain a faculty. The audience come to see an exhibition and they must not be disappointed. It is therefore highly improbable that any regular public performance of so-called thought-reading is a genuine exhibition of telepathy. But a cleverly arranged code of signals has not this uncertainty, and when the performer and his subject are proficient in such a code they may bamboozle the most inquisitive among the audience. The code may consist in variations of the question, "Can you see this?" "Now can you see?" "What is this?" etc., or in various slight sounds or movements made by the performer, and so on. One of these public performers, whose subject was a young girl, apparently hypnotized, startled the public some years ago. He gave me a private exhibition, for which I had secured the help of a shorthand writer, who was not seen by the performers. After an interesting display, an examination of the shorthand notes showed the existence of some kind of verbal code though it could not be fully unravelled.

The performance of the Zancigs and of one or two others is far more remarkable and puzzling; whatever method they employ is not generally known. I had the opportunity

of testing the Zancigs at a private performance in Dublin, and they courteously submitted themselves to a committee of S.P.R. members in London, giving an exhibition in rooms selected by the committee. Though I was unable to be present on that occasion, my place was better filled by a member of the Council who is an expert conjurer. The committee arrived at no conclusion, some of the experiments looked like genuine telepathy, and possibly this exists to some extent between the two performers. But the fact that M. Zancig requires to be the transmitting agent, and the almost unfailing success of the trials, differentiates them from the experiments on genuine thought-transference which will be described in the next chapter. Moreover, no scientific results of any value can be expected from those who are engaged in paid public exhibitions. Nevertheless, every one gives so much more credence to what he has seen than to what he has read, that a critical and scientific friend, who had scoffed at the evidence for telepathy laboriously obtained by the S.P.R., informed me some time ago that he had been converted to a belief in its reality. On inquiring how this came about, he told me he had witnessed and tested a public performance of thought-reading, which turned out to be much inferior to that given by the Zancigs!

CHAPTER V

THOUGHT-TRANSFERENCE IN THE NORMAL STATE OF THE PERCIPIENT

THOSE who have made numerous experiments with good subjects in the so-called "willing game" have, as already stated, found it extremely difficult to account for some of the successful results by the hypothesis of involuntary muscular guidance—an hypothesis often stretched to illegitimate lengths. Thirty years ago, in a communication published in the scientific journal *Nature* for July 7, 1881, I wrote—

"After making the most extravagant allowance for the existence in some persons of a muscular sense of preternatural acuteness, there still remained a large residuum of facts wholly unaccounted for on any received hypothesis. These facts pointed in the direction of the existence either of a hitherto unrecognized sensory organ, or of the direct action of mind on mind without the intervention of any sense impressions. Such startling conclusions could not be accepted without prolonged and severe examination, and it was in the hope of stimulating inquiry, among those who had more leisure and fitness

for the pursuit than myself, that led me to publish a few years ago a brief record of my experiments, which, however, only brought derision and denunciation upon me. As no physiologist came forward to give the subject the wide and patient inquiry it demanded, I went on with the investigation, and for five years have never let an opportunity slip which would add to the information I possessed. A letter addressed to the *Times*, in September 1876, asking for communications from those who had witnessed good illustrations of the 'willing game,' brought me in a flood of replies from all parts of England. Each case that seemed worthy of inquiry was, if possible, visited and investigated by myself during the vacation."

One of these cases which seemed quite inexplicable on any theory of muscle-reading, and which was personally investigated during Easter 1881, was that of the children of the late Rev. A. M. Creery, a respected clergyman in Buxton. This case is historically of importance, for it led to the first clear evidence of thought-transference in the normal state of the percipient. Stringent precautions were taken to avoid any information being conveyed to the subject through the ordinary channels of sense. For example, one of the percipients, Maud, then a child of twelve years old, was taken to an empty adjoining room and both doors closed. I then wrote down some object likely to be in the house, which we (the family together with myself) silently thought of.

No one was allowed to leave their place or to speak a word. The percipient had previously been told to fetch the object as soon as she "guessed" what it was, and then return with it to the drawing-room where we were seated. Quoting again from my communication to *Nature*—

"Having fastened the doors I wrote down the following articles, one by one, with the results stated—*hair-brush*, correctly brought; *wine-glass*, correctly brought; *orange*, correctly brought; *toasting-fork*, wrong on the first attempt, right on the second; *apple*, correctly brought; *knife*, correctly brought; *smoothing-iron*, correctly brought; *tumbler*, correctly brought; *cup*, correctly brought; *saucer*, failure. Then names of towns were fixed on, the name to be called out by the child outside the closed door of the drawing-room, but guessed when fastened into the adjoining room. In this way, Liverpool, Stockport, Lancaster, York, Manchester, Macclesfield were all correctly given; Leicester was said to be Chester; Windsor, Birmingham and Canterbury were failures."

The success obtained in these and other experiments could not be explained by mere lucky guesses nor by any involuntary guidance from those who knew, for there was no contact, and in some trials (as in the foregoing) the percipient was out of sight and hearing. Under such circumstances any secret code of signals between children would have been practically impossible to carry out; moreover, in several

successful experiments no one but myself knew what was to be done.

A new and promising field of scientific inquiry was thus opened up, and it was necessary that other investigators should either verify or disprove the evidence so far obtained on behalf of a faculty hitherto unrecognized by science. But such an investigation lay outside the scope of any existing scientific society; it therefore seemed essential to form a new Society to carry on the inquiry and publish the results obtained. Accordingly, after consultation with Mr. Myers, Mr. Romanes and others, a conference was called by the present writer, at which an account was given of the evidence so far obtained on behalf of thought-transference and other psychical phenomena. This resulted in the foundation of the Society for Psychical Research in January 1882, an investigation of the evidence on behalf of thought-transference being the first work undertaken by the Society. The special committee appointed for this purpose consisted of Mr. F. W. H. Myers, Mr. E. Gurney and the present writer.

A preliminary account of the results obtained at Buxton with the Misses Creery was published as a joint article by Gurney, Myers and myself, in the *Nineteenth Century* for June 1882; this therefore marks a not unimportant date in the history of psychical research; the full details of our research appeared in the first volume of the *Proceedings* of the S.P.R. Precautions were of course

taken to avoid any indication reaching the percipient through the ordinary channels of sense. The exceptional nature of the inquiry made it necessary for the committee to put on one side any argument based on moral character and demeanour, therefore they formed their conclusions only on those experiments where the investigating committee *alone* knew the selected word or thing. This is expressly emphasized and reiterated in their Reports, and yet disregarded by critics. Even as regards the committee the same scrupulous care was taken, sometimes one member and sometimes another being excluded from the trials.

Here, for instance, are some experiments, quoted in the first Report (*Proc. S.P.R.*, vol. i., p. 22), where I was not present, nor did any of the family know the object selected, so that neither I nor they can be accused of being "in the trick." The experiments were recorded by Mr. Myers and copied from the MS. notes which he made at the time, still in my possession :—

"The second series of experiments, which we venture to think are unexceptionable, were made by Mr. Myers and Mr. Gurney, together with two ladies who were entire strangers to the family. None of the family knew what we had selected, the *type* of thing [a card or a number, etc.] only being told to the child chosen to guess. The experimenters took every precaution in order that no indication, however slight, should reach the child. She

was recalled by one of the experimenters and stood near the door with downcast eyes. In this way the following results were obtained. The thing selected is printed in italics, and the only words spoken during the experiment are put in parentheses—

"Experiments made on April 13, 1882—

[Omitting some successful experiments with numbers and names, the following were noted as specially evidential by Gurney and Myers.]

"Cards to be named. [A full pack was used, from which one was drawn at random.]

Two of clubs.—Right first time.
Queen of diamonds.—Right first time.
Four of spades.—Failed.
Four of hearts.—Right first time.
King of hearts.—Right first time.
Two of diamonds.—Right first time.
Ace of hearts.—Right first time.
Nine of spades.—Right first time.
Five of diamonds.—Four of diamonds (No). Four of hearts (No). Five of diamonds (Right).
Two of spades.—Right first time.
Eight of diamonds.—Ace of diamonds said; no second trial given.
Three of hearts.—Right first time.
Five of clubs.—Failed.
Ace of spades.—Failed.

"Special precautions were taken to avoid errors of experiment . . . and the results show

that, in the case of cards, out of *fourteen* successive trials *nine* were guessed rightly the first time, and only three trials can be said to have been complete failures. On none of these occasions was it even remotely possible for the child to obtain by any ordinary means a knowledge of the card selected. Our own facial expression was the only index open to her; and even if we had not purposely looked as neutral as possible, it is difficult to imagine how we could have unconsciously carried, say, the two of diamonds written on our foreheads."

There remains only the hypothesis of a lucky series of guesses. But the probability of this can be estimated, and that is the main reason why cards or some definite series of numbers were selected. In the case of playing cards, the odds against guessing any particular card rightly were of course 51 to 1; but when, as in this case, five cards in succession are named rightly on the first response, the odds against this happening by pure chance are considerably over a million to one. These, and many other experiments made later on, were submitted to one of the highest authorities on the Calculus of Probabilities, Professor Edgeworth. Only those experiments were selected in which knowledge of the object thought of was confined exclusively to the investigating committee. Altogether under these conditions there were some 450 trials with cards and numbers: of these 260 trials were made with playing cards, the first response giving on an average one quite

right in nine times, instead of one in fifty-two, as would result from pure guesswork. Similar results were obtained with numbers of two figures. Mr. Edgeworth, as the result of his calculations, stated that chance coincidence is certainly ruled out, and "the recorded observations must have resulted either from collusion on the part of those concerned or from thought-transference."

It is necessary to examine this alternative of collusion a little more closely, as doubt has been thrown on this wonderful series of experiments because signalling was discovered between the children some time afterwards, when they had practically lost their psychic gift. But however clever a signaller may be, his ingenuity only comes into play when he knows what to signal. In the experiments just referred to the committee alone knew, and therefore if collusion occurred, one or other of the committee must have been participators. Now the credit of any one witness is not likely to suffice for the demand here made upon it, but every additional witness who, as De Morgan said, "has a fair stock of credit to draw upon," is an important gain. Hence, to the great advantage of this investigation, Professor and Mrs. Henry Sidgwick early in the inquiry went to Buxton and made a series of experiments, in some of which I took part, with the result that they were convinced a *prima facie* case existed on behalf of the genuineness of the phenomena; and later on, more conclusive experiments with

other subjects, converted them to a belief in thought-transference.

To the witnesses already named may also be added, at this early period, the late Professor Balfour Stewart, F.R.S., who kindly acceded to my request to make independent trials with the same percipients. Professor (now Sir Alfred) Hopkinson, Vice-Chancellor of the University of Manchester, accompanied Professor B. Stewart, and though their tests were fewer and less stringent, they corroborated the conclusions of the committee. Furthermore, in 1882 some of the children came over to my house at Kingstown and also went to Mr. Myers' house in Cambridge, and at both places numerous successful experiments were made under the strictest conditions. Take, for instance, the experiments at Cambridge in August 1882 (see *Proc. S.P.R.*, vol. i.), where the percipient, Miss M. Creery, was placed "outside a closed and locked door, a yard or two from it, in charge of one of the committee, who observed her attentively." Within the room one of the committee silently drew a card from a pack and held it in view of the sitters: in this way out of ten trials two cards were named rightly on the first answer, besides several close approximations. On another day Mrs. Myers and I alone knew the card selected, and out of eight trials, three were guessed rightly—one, it is true, on a second attempt. A comparative experiment was also made by allowing two of the sisters of the percipient to know

the card chosen, and the same degree of success was obtained. The original note-books of these long and wearisome experiments, only a portion of which were published, are still in my possession, and conclusively establish the fact that collusion except on the part of one or other of the committee was entirely out of the question.

But freshness of interest on the part of the percipient appears essential to success; we all noted that the best results were obtained on those days when there was no weariness or anxiety for success. At the close of the third Report, the committee state that the power of the percipients gradually diminished during the months over which the experiments extended, so that at the end they failed under the easiest and most lax conditions, where at the beginning they succeeded under the most stringent tests. This gradual decline of power, they remark, "resembled the disappearance of a transitory pathological condition, being the very opposite of what might be expected from a growing proficiency in code communication." It is therefore less surprising to find that when the Misses Creery, anxious to appear successful, were tested again some time later at Cambridge, it was discovered that they were using a code of signals. Here one of the sisters was allowed to know the thing selected, and she tried to help her sister to "guess" it by this improper means.

Whether this had occurred in the earlier

trials or not, it obviously discredits all experiments where such a thing is at all possible. Hence the necessity, emphasized in the preceding pages, of confining our attention in all cases to, and drawing our conclusions from, those trials where the investigators themselves could alone be charged with the possibility of collusion.

Professor Sidgwick, in a Presidential address to the S.P.R., before these later trials (*Proc.*, vol. ii., p. 154), has given the best answer to those who would reject the evidence afforded by the early experiments. He remarks—

"None of our critics appear to me to appreciate the kind and degree of evidence that we have already obtained. They often imply that the experiments on thought-transference are such as could be performed by 'cheating mediums or mesmerists,' by the simple means of a code of signals, which the investigating committee cannot find out; quite ignoring such cases as that given in *Proc. S.P.R.*, Part I., where the cards guessed by one of the Miss Creerys were unknown to any one but the four strangers who went to witness the experiments; and where, therefore, as I have before said, the investigators must either have been idiots, or one or other of them in the trick. Similar remarks may be made about the experiments reported in the last *Proceedings*, where four or five different persons must either have been guilty of unveracity or collusion, or of most abnormal

stupidity if the phenomena were not genuine."

It is right to say that, although I differed from them, Professor Sidgwick, together with Mr. Myers and Mr. Gurney, subsequently decided against further publishing any of these experiments. They no doubt considered that at such an elementary stage of the investigation, with as yet so small a quantity of evidence to lay before so many hostile critics, it was absolutely necessary to shun even the appearance of the slightest contact with detected fraud. Under the changed conditions of the present day, however, there is no longer any reason for setting aside the, as I believe, unimpeachable experiments in the earlier series.

In fact, numerous investigators, both at home and abroad, have since obtained additional and irrefragable evidence on behalf of thought-transference. The first of these contributions was made in 1883 in a paper read before the Literary and Philosophical Society of Liverpool—the authors being Mr. Malcolm Guthrie and Mr. Birchall, the Hon. Secretary of that Society. A fuller report of these and subsequent experiments by the same investigators was contributed to the *Proceedings* of the S.P.R., 1883–85. The subjects, or percipients, in these experiments were two young ladies, well known to Mr. Guthrie, and every care was taken to prevent any information being conveyed through the organs of sense. Mr. Gurney and Mr. Myers

and myself were present at some of the trials, which were specially interesting as showing that the mental transfer of tastes and pains took place in the normal as well as in the hypnotic state. Thus a collection was made of some twenty strongly tasting substances; these were put into small bottles or parcels and kept out of sight of the subject; every care was taken to prevent any odour of the substance reaching the percipient, moreover no strongly odorous substance was used in these trials. The percipient being seated with her back to the agent and blindfolded, the taster, usually outside the room, then silently took a small quantity of one of the substances, put it in his mouth, and returning placed his hand on the shoulder of the percipient, who called out what she apparently tasted; no one else was allowed to speak. Thus the agent having tasted vinegar, the percipient said she felt "a sharp and nasty taste." The agent then tasted mustard, and the percipient at once said, "I now taste mustard." But this seemed to spoil the next couple of trials, as the percipient said, "I still feel the hot taste of mustard." Another evening, Worcester sauce, bitter aloes, alum, nutmeg, cloves and cayenne pepper were correctly named by the percipient. There were, it is true, several failures, but the successes were quite beyond pure guesswork, though more complete protection (which was made subsequently) against the possibility of the percipient obtaining indications through the

sense of smell would have been desirable; nevertheless alum, bitter aloes and an acid lozenge, all correctly named, give off no sensible odour.

This possible objection of odour does not apply to the transference of pains. Here Dr. Herdman, F.R.S., the distinguished Professor of Natural History in the University of Liverpool, was present with other investigators, and corroborated the results obtained in his presence. The percipient, Miss Ralph, one of the two ladies referred to, was seated as before, blindfolded with her back to the investigators, who all agreed noiselessly to inflict upon themselves some similar trivial pain. There was no contact with the percipient. In all twenty trials were made; in ten of these the percipient localized the pain with great precision; in six the localization was nearly exact, and in four nothing was felt or the localization was wrong. These experiments show that in certain subjects in a passive waking state, a "community of sensation" occurs between the agent and percipient, such as was long before observed when the subject was in the mesmeric trance.

We are also indebted to Mr. Guthrie for a lengthy and carefully conducted series of experiments on the mental transference of colours, rough diagrams of pictures and imaginary scenes. Sir Oliver Lodge, F.R.S., was present at many of these trials. The drawing or object to be thought of was placed out of sight of the percipient, whose eyes were

also bandaged. It would take too long to give even a summary of these experiments; one or two may be quoted which were made in Dr. Herdman's rooms—

Object: a pair of scissors partly open, points downwards. Percipient says, "It is a pair of scissors standing up, a little open." Object: A key. Percipient: "It's bright, it looks like a key." Told to draw it, the percipient drew it inverted. Object: Outline drawing of a little flag. Percipient: "It's a little flag." Told to draw it, she drew it as it was, upright, but laterally inverted. The frequent lateral inversion of objects by other percipients I have also noticed. A different drawing was next made, but put aside and purposely the drawing of the flag again put up. Percipient: "I still see that flag." Object: An oval locket hung up. Percipient: "I see something gold, something hanging, like a gold locket." Asked what shape, "It's oval."

An interesting experiment was made with success to try the effect of two agents looking at different objects and to note if the percipient saw the *combined* result. This experiment, made by Sir O. Lodge, was described by him in a letter to *Nature* of June 12, 1884. This simultaneous effect of two minds on one percipient is significant, as it affords a proof of the joint agency, occasionally found to occur in connection with spontaneous cases of telepathy that will be considered later.

The transference of colours and scenes was also more or less successful, and these all

point to a visual impression made on the percipient. More striking were the reproduction of rough drawings, obtained by Mr. Guthrie, Mr. Gurney and other experimenters; these cannot be reproduced here, and our readers are referred to the *Proceedings* of the S.P.R., vols. ii. and iii., or to Mr. Myers' *Human Personality*, vol. i., where illustrations of the original drawing and its reproduction by the percipient are given side by side. To avoid the possibility of muscular guidance, no contact can ever be allowed between the agent and percipient in such experiments. The drawings were made for the most part in another room, and consisted of any simple random figure that occurred to the investigator, such, for example, as a tuning-fork, a scroll, dumb-bells, the outline of a head, a horse, a fish, etc. The percipient was blindfolded, the drawing placed on a wooden stand between the agent and percipient and in silence gazed at by the former. When the percipient received an impression, which usually occurred after half-a-minute to two or three minutes, she was allowed to remove the bandage and draw what she had mentally perceived. Her position rendered it absolutely impossible for her to obtain a glimpse of the original drawing, and she was kept under the closest observation the whole time and complete silence preserved. Under these stringent conditions many of the reproductions closely resembled the original drawing, and by no possibility could be ascribed to lucky guesses.

Summing up the result of the numerous Liverpool experiments, Mr. Guthrie states that 437 trials were made with objects, colours, drawings, numbers, pains, tastes, etc.; of these 237 were correctly transferred and a few others partly correct. Entire corroboration of these results have been obtained by many other independent and competent observers, both at home and abroad. Hence though not yet officially recognized by science, no doubt of the reality of thought-transference can be left on the mind of any diligent and thoughtful student, however critical he may be. This conviction is greatly strengthened by the additional evidence to be found (1) in experiments during the hypnotic state, to which we must turn in the next chapter, and (2) by the transmission of mental impressions and hallucinations over great distances. It was the recognition of this latter fact that led Mr. Myers to suggest the general term *Telepathy*, "feeling at a distance," to cover, as he remarks, "all cases of the communication of impressions of any kind from one mind to another independently of the recognized channels of sense. Telepathy may thus exist between two men in the same room as truly as between one man in England and another in Australia, or between one still living on earth and another long since deceased."

The tremendous and far-reaching implications involved in the fact of telepathy renders its discovery of the utmost importance to philosophical and religious thought, as well

as to psychology. These implications cannot be discussed here; obviously telepathy renders a purely materialistic philosophy untenable, and furnishes the prospect of a far more perfect interchange of thought than by the clumsy mechanism of speech. It affords a rational basis for prayer and inspiration, and gives us a distant glimpse of the possibility of communion without language not only between men of various races and tongues, but between every sentient creature, which if not attainable here may await us all in that future state when we shall "know even as we are known."

CHAPTER VI

THOUGHT-TRANSFERENCE IN THE HYPNOTIC STATE

THE older mesmerists had noticed sixty or seventy years ago that there sometimes occurred a "community of sensation" between the operator and the entranced subject; the latter indicating correctly the taste of various articles such as salt, sugar, cinnamon, etc., which the operator placed in his own mouth, unseen by the percipient. A former distinguished Professor of Physiology, both in King's College and in the Royal College of Surgeons, London, Dr. Mayo, F.R.S., whose enlightened views were far ahead of his scientific friends, writing in 1850, confirms this. He tells us—

"The entranced person, who has no feeling or taste or smell of his own, feels, tastes, and smells everything that is made to tell on the sense of the operator. If mustard or sugar be put in his [the subject's] own mouth he seems not to know they are there; if mustard is placed on the tongue of the operator the entranced person expresses great disgust and tries to spit it out. The same with bodily pain. If you pluck a hair from the operator's

head, the other complains of the pain you have given him."

These results were confirmed by other observers both in England and abroad, but, strangely enough, the significance of these observations was long overlooked. The attention of the pioneers in hypnotic investigation was, in fact, largely confined to the therapeutic and anæsthetic effect of hypnotism, and to combating the prejudices and unscrupulous attacks with which they were assailed in the medical press of that period.

My own attention was directed to the subject by witnessing some hypnotic experiments made by a friend whilst staying at his country house in Westmeath, about the year 1870. Fresh from the Royal Institution in London, conversant with and fully sharing the scepticism of the scientific world of that time, as to the genuineness of these alleged marvels, I was interested but unconvinced by the experiments which I witnessed. It was not until my host allowed me to repeat the experiments and to choose the subjects myself that my scepticism gave way. Selecting two or three of the village children, they were placed in a quiet room, a scrap of paper was put in the palms of their hands, and they were told to gaze at it steadily. One of their number soon passed into a sleep-waking state, and became susceptible to any suggestion, however absurd, which I might make. The others were dismissed, and the sensitive subject put into a deeper sleep by a few passes of my hand

down her face and body. Lifting the eyelid of the subject and touching the eye with my finger, no reflex action, or instinctive contraction, occurred. The eyeball was turned upwards and the subject apparently was in profound slumber. Pricking her hand with a needle, no sign of feeling was evoked. My host had a medical induction coil by which powerful shocks could be administered; the terminals were placed in the hands and on the cheeks of the subject, and the current applied; no notice was taken of shocks that in the normal state it would have been impossible to bear with equanimity. When her name was called loudly by others than myself no reply was given, but when I whispered her name, however faintly, or even inaudibly and outside the room, an instant response was given. Collecting a number of things from the pantry on to a table near me, and standing behind the girl, whose eyes I had securely bandaged, I took up some salt and put it in my mouth; instantly she sputtered and exclaimed, "What for are you putting salt in my mouth?" Then I tried sugar; she said, "That's better"; asked what it was like, she said, "Sweet." Then mustard, pepper, ginger, etc., were tried; each was named, and apparently tasted by the girl when I put them in my own mouth, but when placed in her mouth she seemed to disregard them. Putting my hand over a lighted candle and slightly burning it, the subject, who was still blindfolded and had her back to me, instantly

called out her hand was burnt, and showed evident pain. Nor did it make any difference when I repeated these experiments in an adjoining room, nor when every one was excluded from the room but myself and the subject.

On another occasion, after hypnotizing the girl as before, I took a card at random from a pack in another room, noted what it was, placed it within a book, and giving the closed book to the subject asked her if she could see what was inside. She made no attempt to open the book, but held it to the side of her head and said there was something "with red spots on it." I told her to count the spots, and she said there were "five." The card was, in fact, the five of diamonds. Other cards chosen by me and concealed in a similar way were, for the most part, correctly described, though sometimes she failed, saying the things were dim. One of the most interesting experiments was made when in answer to my request that she would mentally visit London and go to Regent Street, she correctly described the optician's shop of which I was thinking. As a matter of fact, I found, upon subsequent inquiry, that the girl had never gone fifty miles away from her remote Irish village. Nevertheless, not only did she correctly describe the position of this shop, but told me of some large crystals of Iceland spar ("that made things look double") which I knew were in the shop, and that a big clock hung outside over the entrance, as was

the case. It was impossible for the subject to gain any information of these facts through the ordinary channels of sense, as there was no conversation about the matter. My friend, the late Mr. W. E. Wilson, F.R.S., was present when these experiments were made in his father's house, and in answer to my request he subsequently wrote to me confirming them, saying, "We proved beyond all doubt that the subject was able to read the thoughts of the mesmerizer."

The evidence, in fact, appeared so incontestable and of such vast importance if established, that I ventured to bring these and other psychical phenomena that had come under my own observation before the British Association in 1876, with a view to the appointment of experts to investigate and report on the whole subject, but the idea was scorned at the time. The following sentence from that paper of thirty-five years ago may here be quoted—

"In many other ways I convinced myself that the existence of a distinct idea in my own mind gave rise to an image of the idea in the subject's mind; not always a clear image, but one that could not fail to be recognized as a more or less distorted reflection of my own thought. The important point is that every care was taken to prevent any unconscious movement of the lips, or otherwise giving any indication to the subject, although one could hardly reveal the contents of an optician's shop by facial indications" (*Proc. S.P.R.*, vol. i., p. 243).

In these early experiments I noticed that the hypnotized subject responded to thought-transference even when a considerable distance and opaque objects intervened. Later on, in 1882, some careful experiments on this point were made by me in my own house at Kingstown, Co. Dublin. Here the subject was a lad named Fearnley, and the hypnotizer, a complete stranger to him, was a friend, Mr. G. A. Smith. On one of two precisely similar cards I wrote the word "Yes," and on the other "No." Placing the hypnotized subject or percipient so that he could not see the cards I held, a request was made that he would open his hand if the card "Yes" was shown to the agent, Mr. Smith, or not open it if "No" was pointed to. In this way Mr. Smith, who was not in contact with the percipient, silently willed in accordance with the card shown to him. Twenty experiments were made, under the strictest conditions to avoid any possibility of information being gained by the ordinary channels of sense, and only three failures resulted. Then the subject was requested to answer aloud whether he heard me or not. When "Yes" was handed to Mr. Smith he silently willed the subject should hear, when "No" that he should not hear. The object was to reduce the experiment to the simplest form to try the effect of increasing distance. In all except the first few experiments, the cards were shuffled by me with their face downwards, and then the unknown card handed by me to Mr. Smith, who looked

at it and willed accordingly. This precaution was taken to avoid any possible indication being gained by the percipient from the tone in which I asked the question. After I had noted the reply, and not till then, was the card looked at by me. The percipient remained throughout motionless, with eyes closed and apparently asleep in an arm-chair in one corner of my study; it is needless to repeat that even had he been wide awake he had no means whatever of seeing which card was selected by me. Here are the results, with varying distances between the agent, Mr. Smith, and the percipient, Fearnley. It must be borne in mind that not a single word was spoken, nor any sound made by Mr. Smith.

"At 3 feet apart, twenty-five trials were successively made, and in *every case* the subject responded, or did not respond, in exact accordance with the silent will of Mr. Smith, as directed by the card selected. At 6 feet apart six similar trials were made without a single failure. At 12 feet apart six more trials were made without a single failure. At 17 feet apart six more trials were made without a single failure. In this last case Mr. Smith had to be placed outside the study door, which was then closed with the exception of a narrow chink just wide enough to admit of passing a card in or out, whilst I remained in the study observing the subject.

"A final experiment was made when Mr. Smith was taken across the hall and placed in

the dining-room, at a distance of about 30 feet from the subject, two doors, both quite closed, intervening. Under these conditions three trials were made with success, the 'Yes' response being, however, very faint and hardly audible to me when I returned to the study to ask the usual question after handing the card to the distant operator. At this point, the subject fell into a deep sleep and made no further replies to the questions addressed to him" (*Proc. S.P.R.*, vol. ii., p. 14).

Subsequently other trials were made under different conditions with the percipient in total darkness, with successful results. Altogether about one hundred trials were made, during which there were only four wrong answers and one doubtful one, and for these Mr. Smith blamed himself rather than the percipient. Pure chance would have given about one-half right instead of the ninety-five right actually obtained.

When the subject was awakened he said he had heard the question each time, but when he gave no answer he felt unable to control his muscles so as to frame the word.

In 1883 Mr. Ed. Gurney made a number of excellent experiments on the mental transference of *pains*, between the hypnotizer, Mr. Smith, and the subject, in this case a lad named Wells. I was present at many of these experiments, and can testify that it was quite impossible for the subject to have obtained any information through the ordinary

channels of sense. Wells was blindfolded and Mr. Smith stood behind his chair. Mr. Gurney, or one of us, then silently pricked or pinched Mr. Smith in different parts of his body. The only words spoken were "Do you feel anything?" addressed to Wells. Out of twenty-four experiments made in this way, the exact spot was correctly indicated by the subject twenty times. With another subject also in a light hypnotic trance similar results were obtained, together with the transference of *tastes*. Whenever Mr. Smith was given a substance to put in his mouth, the subject, in nearly all cases, correctly indicated the taste. These and other experiments abundantly confirmed the results already described.

In France Professor Pierre Janet obtained similar results with a hypnotized subject in 1885 and 1886. Professor Janet and Dr. Gibert also made a series of experiments with a sensitive subject at distances varying from a quarter of a mile to a mile. Here the test was the production of hypnotic trance in the subject whenever the distant operator willed it to occur, at some unexpected time. Out of twenty-five trials eighteen were completely successful, and the remainder partially so. It is needless to refer to the numerous other experiments of a similar kind made by able and critical observers abroad.

Perhaps the most carefully conducted and extensive series of experiments upon thought-transference with a subject in the hypnotic state were those made at Brighton in 1889

by Professor and Mrs. Sidgwick. As usual, the most provoking and inexplicable variations of success occurred on different days, when the conditions appeared to be exactly alike; thus on August 16 and 17 the experiments were a brilliant success, whereas on August 19, 20 and 21 they were total failures. These differences could not be accounted for on grounds of health, etc., for sometimes a run of success would begin and then abruptly cease.

The percipient was a clerk, about nineteen years old, designated as P. To avoid any bias in the selection of the numbers to be guessed, the wooden counters of the game of Lotto, which had the numbers from 10 to 90 stamped on them, were put into a bag and one drawn out; as there were thus eighty-one different numbers, mere chance guessing would give only one right in eighty-one trials. After the first few trials, Professor Sidgwick drew the number from the bag, placed it in a little box, and handed it, unseen by the percipient, to Mr. Smith, who kept strict silence; Mrs. Sidgwick recorded the answer in entire ignorance of the number drawn. It made no difference whether the percipient P. was blindfolded or not, as in the hypnotic state, during these experiments, his eyeballs were turned upward, his eyelids closed, and normal vision was impossible; even so, every precaution was taken to prevent any information being derived through the ordinary channels of sense. The percipient speaks of "seeing" the numbers,

but this is purely a mental visualization. Here is a summary of one set of experiments so made, giving the number drawn in ordinary type, the number guessed in italics:—

87, almost immediately P. said *87*; 19, P. *18*; 24, P. I see an *8* and a *4*—*84*; 35, P. a *3* and a *5*—*35*; 28, P. *88*; 20, P. *23* ("not so plain, I saw the 2 best"); 27, P. I see a *7* and I think a *3* in front of it, I can see the 7; 48, P. I see an *8*. Told to look again, P. said he saw a *4*—the 4 to the left, *48*; 20, P. *2* and *0*; 71, P. *71*; 38, P. *3* . . . *38*; 75, P. I see a *7* and a *5*—*75*; 17, P. after seeing a *4*, said, I see a *1* first and *7* second; 52, P. *52*, I saw that at once; 76, P. *76*.

This is a record of a continuous set of experiments; the total number of trials made when the agent and percipient were in the same room was 644, of which 131 were complete successes, both digits being given correctly, and in fourteen trials the digits were given in the reverse order. Pure guesswork would have given about eight right, so that mere chance coincidence cannot account for the success obtained. In a later series of experiments, carried on from 1890 to 1892, by Mrs. Sidgwick and Miss Johnson, the agent and percipient were in different rooms and strict silence was preserved. I was invited to be present at some of these trials, and can therefore say from personal observation that the possibility of any information being gained by the percipient, through unconscious whispering of the number, seemed to me to be quite

excluded, however acute his sense of hearing. The transference of mental pictures, also with more or less success, was subsequently tried under the same conditions, and by the same experimenters with different percipients.

CHAPTER VII

MESMERISM—HYPNOTISM—SUGGESTION

To most people, any acquaintance with mesmerism they possess is confined to those public exhibitions—common enough a generation ago, and usually called by the barbarous word "electro-biology"—where some of the audience are invited to the platform and made to look at a small object placed in their hands, whilst passes are repeatedly made by the operator down the body of the subject. Presently two or three fall into a sleep and readily obey any suggestions, however ridiculous, made by the operator. In this way the subject can be made to believe he is another person, or any bird or animal suggested, often exhibiting a wonderful dramatic power in carrying out the suggestion. Other curious phenomena were occasionally shown by the subject when in a deeper entranced state, such as complete insensibility to pain in any part of or over the whole body, while, on the other hand, he would sometimes exhibit an amazing exaltation of any special sense; feeling or detecting things impossible for him to perceive in his ordinary waking state. On returning to his normal state, to

which he was restored by upward passes and a command from the operator to "wake up," he was utterly oblivious of everything that had occurred during his entranced condition and was incredulous when informed of what he had said or done. To the general public such performances only excited speculation as to their genuineness, and little regard was paid to the far-reaching psychological problems involved. Let us briefly recall the history of the subject.

The remarkable phenomena of mesmerism originated with a Viennese doctor, Friedrich Mesmer, a Swiss, born in 1733. Mesmer claimed to have discovered a new vital fluid or effluence, which could be transmitted from one person to another and which, he asserted, had wonderful curative power. At that time the physical forces of electricity, magnetism, heat, etc., were attributed to various impalpable fluids, and Mesmer believed he had found a new fluid or force associated with life, resembling magnetism: hence he called it "animal magnetism." Whether such an effluence exists or not, it certainly has nothing to do with magnetism as the latter is known to physical science; nevertheless, the misnomer still widely exists.

In 1778 Mesmer came to Paris to demonstrate his new system of therapeutics. The use of drugs and other prevalent medical remedies were abandoned and the patients submitted to a treatment which looked very like quackery. Seated round a mysterious

tub of water, in which were rows of bottles, the patients, rich and poor, were linked together by a rope from the tub, and iron rods proceeding therefrom were brought into contact with the diseased part, whilst Mesmer and his assistants stroked or massaged the patient. Partial darkness and the subdued strains of music added to the mystery. But the results were extraordinary, numerous amazing cures were effected, and Paris rang with the fame of Mesmer. The patients were mostly of high standing and included some physicians of note, one of whom, a "doctor regent," became Mesmer's enthusiastic advocate and helper. In one year it is said that 8,000 persons were so treated, and the record of the cures wrought could neither be explained, nor explained away, by the medical profession. A medical commission was appointed in 1784 to report on the whole subject. This commission, which included some famous members of the Paris Academy of Sciences, was unfavourable to Mesmer and his fluid theory, attributing the cures to imagination. But the commission was much prejudiced against Mesmer, owing to the secrecy and charlatanism with which he had surrounded his system. Mesmer thereupon left Paris, followed by numerous patients, and subsequently died in obscurity in Switzerland.

Among Mesmer's disciples was the Marquis de Puységur, who brought a more critical and scientific spirit to bear upon the subject. Puységur ultimately believed the secret of the

cures—which could not be gainsaid, though they were practically ignored by the medical commission—to be, as he states, in "belief and will" or "the action of thought upon the vital principle of the body." This, in fact, is generally recognized, and lies at the foundation of Faith Cures, Christian Science, and the cures wrought in ancient Greece and Rome by what is now termed Suggestive treatment. Puységur also discovered the state of somnambulism induced in susceptible patients by Mesmer's system. Such patients were thrown into a state of trance wherein another personality with clearer vision and higher faculties appeared to emerge, able to diagnose their own illness, even prescribe for its treatment, and foresee the date of cure. On returning to their normal state, not the slightest memory of what had passed in the trance state remained. Though unquestionable evidence exists of this "lucidity" of the entranced patient, it is impossible to say how far the results were merely due to a heightened but normal sensitiveness, *i. e.* hyperæsthesia, or to so-called clairvoyance, which we shall discuss in another chapter.

A later French Medical Commission, appointed in 1826, reported in favour of this clairvoyant faculty and of the remarkable cures effected by mesmerism. This report was, however, suppressed by the medical faculty and issued informally. Meanwhile the subject had been lifted into a different and modern line of thought by the investigations of an

able French physician, Dr. A. Bertrand, who in 1820 published a treatise on artificial somnambulism, in which he sweeps away the idea of animal magnetism and a vital fluid, and attributes the extraordinary mesmeric cures to the influence of *suggestion* on the patient, who, by the treatment, is made preternaturally alive to the faintest suggestion expressed, or even unexpressed, by the operator. Bertrand, however, records that in the trance state the subjects have unquestionably a marked exaltation of their intellectual powers, apparently enabling them to gain a knowledge and prevision of their malady, often a marvelous appreciation of time, and a community of sensation between operator and subject. It is also alleged that a state of clairvoyance, or seeing without eyes, was sometimes exhibited. Moreover, and this had been largely overlooked before, complete anæsthesia, or absence of sensation, was induced in the entranced subject.

These were marvels enough and testified to by weighty authority, albeit they were in general discredited by the medical profession. Up to this time England had held aloof from the subject, regarding it with extreme disfavour. But, in 1838, an eminent London medical man, Dr. Elliotson—then professor at, and senior physician to, University College Hospital—having been convinced by some mesmeric experiments he had witnessed, took up the subject with characteristic energy and enthusiasm. He founded a mesmeric hospital

in London, and also a journal called the *Zoist*, which for thirteen years was the organ of the medical mesmerists—its pages recording not only the extraordinary cures wrought by mesmerism, but also many of the more startling phenomena, such as the community of sensation between the operator and his subject, and the clairvoyance noticed by the early French investigators. In spite of his high standing, Elliotson's advocacy of mesmerism caused him to be ostracized by the medical profession, led to the loss of his practice, and compelled him to resign the high official positions he held. The same fate followed Dr. Esdaile, an able surgeon in India, appointed, by the Governor-General, Presidency Surgeon at Calcutta. In his six years' practice in India, and in the mesmeric hospital he opened in Calcutta, Esdaile performed no less than 261 serious operations on patients when under the mesmeric trance, some 200 tumours were removed, varying from 10 to 103 pounds in weight! Not the slightest pain was felt in any case, and nearly all made a good recovery, the mortality under such operations being reduced from 50 to 8 per cent. The discovery of chloroform was made about this period; the ease of administering and the certainty of the operation of this anæsthetic, compared with the tedious and often uncertain induction of the mesmeric trance, led to its general adoption, though cases undoubtedly arise where it would be far safer to employ the mesmeric trance. The profession, however, would have

nothing to do with mesmerism, and hounded out of its ranks any practitioner, however eminent, who ventured to use what the *Lancet*, in 1848, called " this odious fraud."

Hitherto the mesmerists were possessed by the idea of a peculiar fluid, communicated to the patient by the passes they employed. Dr. Braid, a Manchester physician, in 1843 showed that a patient could be entranced simply by gazing at a bright object. Braid called this process *hypnotism*, from the Greek word for sleep, and this term has now replaced the word mesmerism, which connotes a special theory. As was the case with the older mesmerists, Braid found at first surprising support for the doctrine of phrenology, when his patients were entranced; slight pressure on different parts of the head giving rise to the exhibition of mental characteristics in the subject, corresponding with the location of the so-called organs of language, laughter, etc., with which phrenologists had mapped out the skull ! Though the results, which I myself have repeated, are very curious, the cause is obscure and may arise from telepathy or some unconscious suggestion (as Braid subsequently believed) conveyed to the subject by the operator.

On the Continent, somewhat later, distinguished physiologists, like Professor C. Richet, and physicians of note, such as Dr. Charcot, Liebault, Bernheim and others, took up the investigation, added largely to our knowledge, and founded schools for the

study and practice of hypnotism. At Nancy and elsewhere hypnotic treatment is used in the hospitals, and the value of this remedial agent is now generally recognized. In England, we owe to Dr. Milne Bramwell and Dr. Lloyd Tuckey the publication of standard medical works on hypnotism, or treatment by suggestion. This is not the place to pursue the medical side of the question any further; it will be sufficient to say that the popular aversion to hypnotism as a dangerous process is entirely baseless. Its practice as a remedial agent should, however, be restricted wholly to qualified medical men, just as is the use of chloroform or other powerful narcotics.

Moreover, the incontestable cures effected by hypnotism, often when other means had failed, do not always require the subject to be entranced; monotonous and repeated suggestion can produce the effect even when the patient remains fully conscious.

In fact, an American practitioner (*Proc. S.P.R.*, vol. xii.) treats his patients by silent suggestion, and has published a record of remarkable cures effected in this way, which closely resembles the Christian Science "treatment at a distance," by their healers.

History is full of the miracles of healing wrought by suggestion. Greatrakes in the seventeenth century, Gasner in the eighteenth, Prince Hohenlohe, and other notable faith-healers, in the nineteenth, all accomplished wonderful cures without medical skill. To

say they were due to "suggestion" is merely to conceal our ignorance of the processes involved. Suggestion no more explains the results than the crack of the starting pistol explains a race. Both are simply signals for a new departure. The suggestion given by the operator liberates the subconscious, recuperative, and formative forces within the organism of the patient. Success consists in overcoming the difficulty of setting these forces at work, and often the most effective way is, as it were, by a flank movement, an indirect suggestion, and not a direct assault. That there *is* a hidden self below the threshold of consciousness, the subliminal self, has, we think, been abundantly proved: medical and psychological research in the future will doubtless throw more light on this strange and silent partner of our life.

Some of the most remarkable cures effected by hypnotic treatment have been in the region of habits and morals. The drunkard has been made sober, the idle industrious, and insidious drug habits overcome. In the dissolution of self-respect, peculiar to the victims of such habits, there seems to be, as Mr. Myers remarks, "nothing on which sage or evangelist can lay hold. Yet we have seen hypnotic suggestion effect the magical change and restore the degraded outcast to a safe and honourable position among his fellow men."

The investigation of hypnotism from the point of view of psychical research was begun

by Mr. Gurney soon after the foundation of the S.P.R., and his brilliant work in this direction is of enduring value. Gurney distinguished three stages in hypnosis—first, the *alert* stage, when the subject will, when requested, open his eyes, answer questions but cannot originate remarks, is generally sensitive to pain and will respond to any suggestion, even when he is half conscious he is making a fool of himself; next, the *deep* stage, into which he will pass with eyeballs rolled upwards, insensitive to pain, but mentally active; this stage quickly lapses into a profound sleep and irresponsiveness.

One of the most curious phenomena—the *appreciation of time* by the hypnotized subject—was tested by Gurney, and also by myself, nearly thirty years ago. A subject was hypnotized and told to wake up in a certain number of minutes and then write his name. There was no timepiece in the room and the subject had no watch. At the precise minute he woke and mechanically wrote his name, wholly ignorant why he did so, nothing being remembered of the command when the subject was awake. Again and again we tried, with periods of longer duration, such as thirty-two, fifty-five, and ninety-six minutes; there was not the least mistake and no means of his gaining any knowledge of the time by ordinary perception. Dr. Milne Bramwell has, in recent years, carried this experiment much further. It is simply necessary to give the command when the patient is in the

trance, tell him to write his name, or do any simple thing, at a given time, and then wake him up. When questioned he knows nothing of what he has been ordered to do, but nevertheless fulfils it exactly at the required time. Thus Dr. Bramwell told a female patient when entranced to make a cross on a piece of paper at the end of 7,200 minutes, and mark down the time she then thought it was without looking at the timepiece. The time fell due when the patient was teaching a Sunday-school class. She suddenly felt an impulse to make a cross and mark the time. It was only on looking round at a clock behind her that she found the time was right; the number of minutes had also been estimated with perfect correctness. Another time she was told, when entranced, to make a cross in 10,070 minutes. This suggestion fell due when she was subsequently hypnotized by Dr. Bramwell and had no means of seeing the time. Nevertheless, exactly at the assigned moment she made a cross and wrote down the correct time. Out of fifty-five similar experiments, forty-five were perfectly successful and only two not fulfilled. Dr. Mitchell, a Fellow of the Royal Society of Medicine, and a member of the Council of the S.P.R., has since corroborated these results by a large number of well-conducted experiments which were uniformly successful, though the time interval was sometimes over 200,000 minutes, and sometimes given in many thousand seconds.

How are these results to be explained?

There is no question of fraud, continental observers having obtained the same remarkable results under test conditions. If hypnotized before the command is fulfilled, the subject will remember the order given and tell the precise number of days, hours and minutes required to fulfil it. Thus, during hypnosis, being told to make a cross in 4,580 minutes and asked how long this was, a subject replied immediately, three days four hours and twenty minutes, which is correct, but could not say how she made the calculation; the order was accurately fulfilled at the stated time. The whole process goes on through the operation of a subconscious intelligence. Possibly the stated time is reckoned, and the time as it passes is noted, unconsciously. On the other hand, the time of fulfilment sometimes falls due when the patient is asleep, nevertheless, she awakes at the correct moment and carries out the command. In the few experiments I made long ago, the hypnotized subject, when entranced, told me he watched the time by a large clock he saw. There was no clock in the room, nor any clock visible from the window; on asking which clock, he said that on the tower of the Houses of Parliament—about a quarter of a mile away and impossible to see from the rooms we were in. This suggests that some clairvoyant faculty is unconsciously exercised by the subject, and this may possibly be the case. Mr Myers quotes a case where a person, in his ordinary waking state, occasionally had a similar vision

of an invisible clock face and saw the exact time thereon.

Some people have the faculty of awaking exactly at the definite time they have agreed upon overnight; here the time-sense, when not due to a habit, must be a subconscious estimate of the efflux of time.

The singular exaltation of the intellectual powers in particular directions is characteristic of many subjects when hypnotized. Thus a rather dull lad, during hypnosis, was asked, in my presence, how many times the letter c occurred on a page of print suddenly placed before him, and answered correctly after a shorter interval than one could count the number of times that that letter occurred in a couple of lines. Other experiments were long sums in arithmetic, correctly and swiftly done, during hypnosis, which the subject had failed to do in a longer time in the normal state. Again (and these were all private experiments, no question of trickery coming in), another subject was asked by me to add up a long row of figures I had jotted down at random and, *at the same time*, to count aloud the odd numbers up to 100. Both acts were correctly, quickly, and simultaneously performed; many other similar experiments were made, illustrating the wonderful exaltation and even dual activity of the mind in the hypnotized subject. These experiments remind us of the case of the calculating boys, to which reference has been made in a previous chapter.

Another remarkable feature in the hypnotic trance is that hallucinations can be provoked either during the trance, or subsequently to it, by a command from the operator. Thus an entranced subject, on being told he would see his friend B—— at a certain time after he woke up, when the time came actually believed he had met and clearly seen the person named, and related the fact to others, though fully aware B—— was at that time in America or elsewhere. These "post-hypnotic" hallucinations are of great theoretical interest in psychical research, as showing that lifelike phantasms can be created by pure suggestion.

CHAPTER VIII

EXPERIMENTAL AND SPONTANEOUS TELEPATHY OVER LONG DISTANCES

THE next question that presents itself is, *how far* can telepathic impressions be conveyed? We have already referred to numerous successful trials in the hypnotic state when considerable distances separated the operator and the subject. In the waking state, experiments have been quoted showing that success has attended trials when the agent and percipient have been separated by closed doors and were some yards apart.

A few successful experiments were made in 1892 between two ladies, Miss Despard and Miss Campbell, when the distance was much greater. The trials were made not only a mile or two apart in London, but also when the former was at Surbiton and the latter in London: the experiments were published by the S.P.R., but must be omitted here from want of space. The Rev. A. Glardon in Switzerland also made similar experiments between himself in the Canton Vaud and a friend in Florence. These are described in vol. i. of *Human Personality*, with illustrations of some of the diagrams thus mentally transferred, many of

the correspondences being singularly good. But the most systematic and carefully conducted series of experiments, when the agent and percipient are widely separated, have been made by my friends, Miss H. Ramsden and Miss C. Miles. Full details of these experiments were published in the *Journal* and in the *Proceedings* of the S.P.R. for 1906, 1907 and 1908. Miss Miles consulted me about the best method of conducting the experiments when they began, and both she and Miss Ramsden have been scrupulously careful throughout in following out the suggestions made. Both ladies are members or associates of the S.P.R., and are energetic and excellent investigators. The following is from the introduction to the first of their joint papers—

"Miss Ramsden, having met with a certain amount of success in experiments in thought-transference with two other friends of hers, asked Miss Miles to try a systematic series with her. It was then arranged that Miss Miles, living at Egerton Gardens, London, S.W., should play the part of 'agent,' while Miss Ramsden, at her home, Bulstrode, Gerard's Cross, Buckinghamshire (about twenty miles from London), acted as 'percipient,' the times of the experiments being fixed by pre-arrangement.

"Miss Miles, at the time of each experiment, noted in a book kept for the purpose the idea or image which she wished to convey, while Miss Ramsden wrote down each day

the impressions that had come into her mind, and sent the record to Miss Miles before knowing what she (Miss M.) had attempted on her side. Miss Miles then pasted this record into her book opposite her own notes, and in some cases added a further note explanatory of her circumstances at the time, to which it will be seen that Miss Ramsden's impressions often corresponded. Whenever it was possible, Miss Miles obtained confirmatory evidence from other persons as to the circumstances that had not been noted at the time, and the corroboration of these persons was written in her book and is published."

Having examined the documents, I can vouch for the conclusive evidence they afford of the frequent and often surprising transmission of telepathic impressions across the wide distances that separated the agent and percipient. The best results appeared to be obtained when there was *no special effort* made by the transmitter—confirming our previous inference, that it is the subconscious, the subliminal activities, and not the conscious intelligence, which is operative in these and other supernormal psychical phenomena. In fact, Miss Miles writes that she found it was much easier to impress an idea without specially concentrating her mind on it at a fixed time.

Here, for example, is a singularly successful experiment of this kind. Miss Miles was attending a meeting of the S.P.R. on the afternoon of October 27, 1905, and noticed

the curious pair of spectacles worn by a gentleman near her. This, she thought, would be a good subject for her experiment with Miss Ramsden, and so, on returning home, she wrote down the word, but did not attempt to visualize it: "*October* 27. *Spectacles.*—*C. M.*" Miss Ramsden, in Buckinghamshire, that evening wrote: "*October* 27. 7 *p.m. Spectacles.* This was the only idea that came to me, after waiting a long time.—H. R." It is difficult to imagine this to have been a lucky guess, for Miss Miles does not wear spectacles. If telepathy be denied, the objector can only explain the results by collusion.

Here is another experiment. Miss Miles noted in her book as the idea she wished to transmit: "*November* 2. *Hands.*—*C. M.*" Miss Ramsden, twenty miles away at her own home, wrote: "*November* 2. 7 *p.m. I began to visualize a little black hand, well formed.*" (Some other impressions were also noted, but Miss Ramsden adds), "*the hand was the most vivid.*" Miss Miles is an artist and was drawing in charcoal that afternoon the hands of a portrait; Lady Guendolen Ramsden was staying with her at the time and confirms this as follows: "Miss Miles was drawing the hands of the model in the afternoon.—Guendolen Ramsden." Two other witnesses also confirm this statement.

Many other experiments were more or less successful, others, however, were failures; and a series tried early in 1906, when Miss Ramsden

was in Norway and Miss Miles in London, were almost all failures. But here there were disturbing circumstances, which might possibly have accounted for the disappointing results.

Another series of experiments was tried later the same year. Throughout this second series, which lasted for about a month, from October 19 to November 14, 1906, inclusive, Miss Miles was again agent and Miss Ramsden percipient. Miss Miles was staying first near Bristol and afterwards near Malmesbury, Wiltshire. Miss Ramsden was living all the time near Kingussie, Inverness-shire, a distance of about four hundred miles, as the crow flies, from Bristol.

The general plan of action was that Miss Ramsden should keep her mind free from distraction about 7 p.m. each day the experiment was tried and think of Miss Miles, then write down on a postcard any impression that she received, and post the card to Miss Miles the next morning. Miss Miles, on her side, noted briefly on a postcard the principal impressions made on her during the day and posted it to Miss Ramsden. In this series copies of many of the postcards were also posted simultaneously to me. The postcards were afterwards pasted together in a book with notes, the postmarks showing the date of posting. It should be added that, beyond knowing that her friend was staying at a country house near Bristol, Miss Ramsden was quite ignorant of Miss Miles' doings and

surroundings, never having been in that part of England. The results are thus summed up by the S.P.R. research officer—

"Out of a total of fifteen days' experiments, the idea that Miss Miles was attempting to convey, as recorded on her postcards, appeared on six occasions in a complete or partial form among Miss Ramsden's impressions on the same date. But it also happened that almost every day some of Miss Ramsden's impressions represented pretty closely something that Miss Miles had been seeing or talking about on the same day. In other words, while the agent only succeeded occasionally in transferring the ideas deliberately chosen by her for the purpose, the percipient seemed often to have some sort of supernormal knowledge of her friend's surroundings, irrespective of what that friend had specially wished her to see. . . .

"It has to be considered how many of the successes might be mere guesses, whose correctness was due to chance and not to telepathy. After studying all the records, however, it appears to us that while some of the coincidences of thought between the two experimenters are probably accidental, the total amount of correspondence is more than can be thus accounted for and points distinctly to the action of telepathy between them."

This is the opinion of a skilled and severe critic, and it is fully borne out by a careful perusal of the published records. The reader should note that all the experiments were given in full, not a favourable selection, and

that Miss Miles' record was always made *before* she heard what Miss Ramsden's impressions were. When one thinks of the thousands of things that might be selected for the purpose of the experiment, the fact of *any* agreement between the two records is suggestive, but when we find frequent remarkable agreements, the only inference is that one mind must in some way have communicated its impression to the other, four hundred miles away.

Further, and occasionally, very striking evidence of long-distance telepathy is given in a series of experiments between the same two ladies during the summer of 1907. Miss Miles was then on a sketching tour with Lady Ramsden in the Ardennes, and Miss Ramsden was staying at her father's country house in the Highlands of Scotland.

On returning to England Miss Miles went to Newbury in Berkshire for some painting lessons, and stayed in lodgings, her landlady having a delicate little girl in whom Miss Miles was much interested. Unaware of the existence of this child, Miss Ramsden writes from the Highlands on a postcard to Miss Miles—

"October 31, 1907. I think you wish me to see a little girl with brown hair down her back, tied with a ribbon in the usual way. She is sitting at a table with her back turned and seems busy . . . cutting out scraps with a pair of scissors. She has on a white pinafore, and I should guess her age to be between eight and twelve.—H. R."