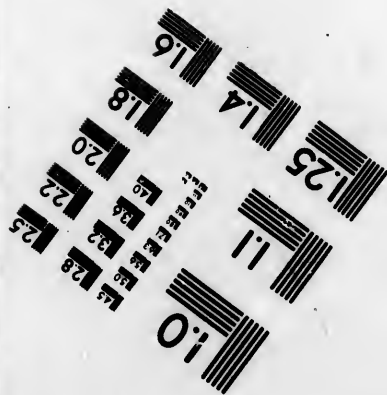
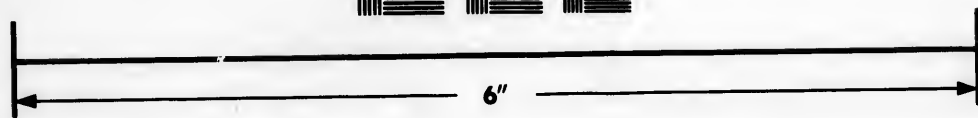
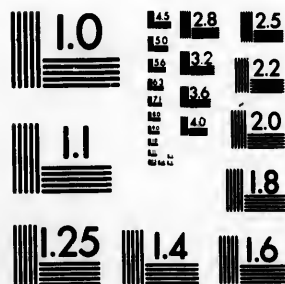


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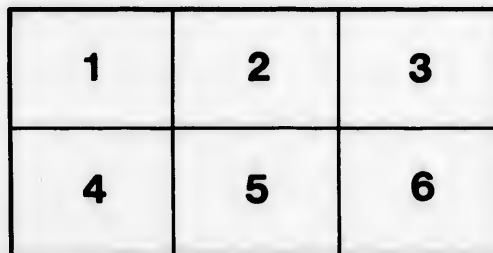
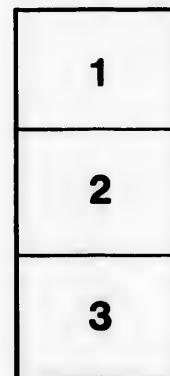
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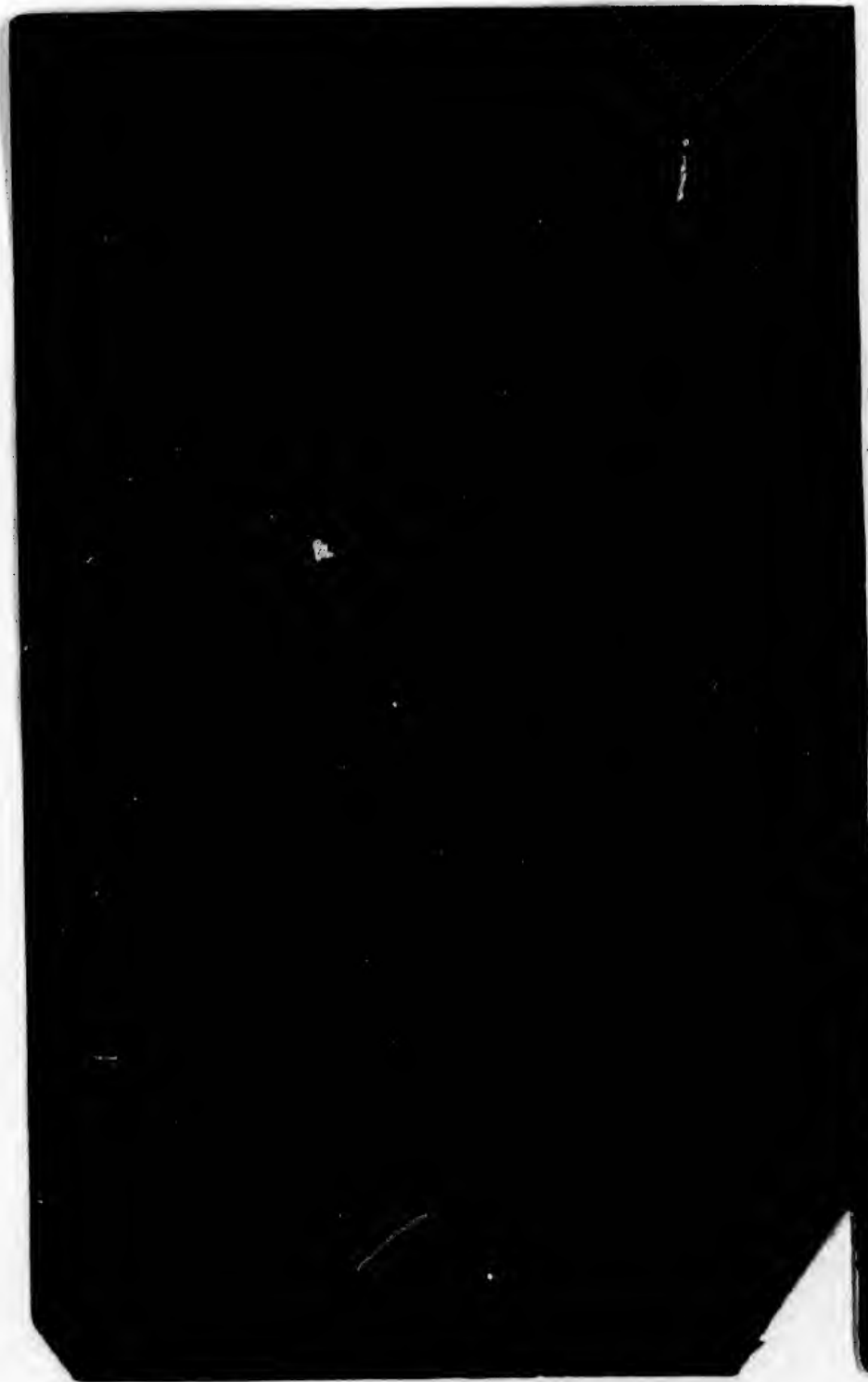
**ANNUAL ADDRESS**

OF THE

**President of the American Society  
for Psychical Research.**

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**JANUARY 12, 1886.**



## ADDRESS OF THE PRESIDENT.

It might naturally be expected that in addressing you on the present occasion your president should enter into an account of work done and results gained. There are, however, difficulties in the way of doing this in a satisfactory way. It has been my misfortune to reside so far from the seat of the society, that I have not been able to take that active part in your work which would have been appropriate to my office. Moreover, so far as I have followed this work, it would seem that up to the present time it consists more in preliminary efforts, and preparations for further research, than in finished experiments leading to establish conclusions. Under such circumstances, the question in what direction our efforts should tend is a most important one; and I shall, therefore, ask your permission to enter into a discussion of the general aspect and relations of the subject.

Looking at the situation from the most general point of view, the first question to present itself would be: Why are we here? what is our field of work? We might reply in a way equally general, that we are investigating those obscure mental phenomena which do not seem to accord with the laws of mental action as ordinarily apprehended through the experience of the race. We are more particularly concerned with a large class of sporadic, but well-known phenomena, which seem to indicate that the mind may possess certain susceptibilities outside the limits which experience teaches us is commonly imposed upon its powers.

We are perfectly familiar with a certain system of inter-action between mind and matter. Every instance of voluntary motion, and every instance of a mental effect produced by an external cause, is a case of such inter-action. Taking any one mind, we may consider it either as an agent producing effects external to itself by the action of the will, or as an object acted upon by external causes. Now, a very wide induction from general experience shows us that this inter-action is, in our ordinary experience, subject to the following restrictions:—

Firstly, no individual mind can be acted upon except through



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the medium of a material organism with which it is associated. The external cause, whatever it may be, must act on the organization itself in order that the mind may either be excited to consciousness, or affected in any other way. Moreover, the action of such external causes is a physical process, subject to purely physical laws.

Secondly, the mind cannot act upon any thing external to itself, except through the agency of its material organism; and, this organism being set in action, the effect is subject to purely physical laws.

Both of these laws are strikingly illustrated in our everyday experience. For example, if a living organism is left unsupported, it will fall exactly like dead matter, in spite of any thing the mind can do to stop it. When supported, it presses upon the support with a force equal to the weight of the matter composing it; and no effort of the will can increase or diminish this pressure. Two persons in each other's neighborhood cannot be conscious of each other's existence except through the physical medium of light, sound, or material motion, produced by one and acting upon the organism of the other. By no act of the will can we produce motion or any other change in an external object unless we set in operation a sufficient physical force through the medium of our organism. These, I say, are hypothetical laws, and may be regarded as conclusions from general experience. They are, however, like all other general laws, in seeming disaccord with occasional phenomena. It is these sporadic phenomena with which we are mainly concerned, and which we desire to subject to some form of law. If mind is not subject to the restrictions which have been just defined, we have a mental *actio in distans* which is variously known as "thought-transference," "telepathy," and "mind-reading." Granting this apparent *actio in distans*, we may either suppose it real, or attribute it to some unrecognized physical agency. This question will, however, arise at a later period in our researches. The main question with which we are now concerned is, Can one mind influence another in any other way than through the action of known physical causes acting between and through their respective organisms? If this question is answered in the affirmative, then a great dis-

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covery is made, opening up a new field, not only of research, but of philosophical speculation and of practical application. If answered in the negative, our work is not done, because we then have to explain the sporadic phenomena which seem to indicate thought-transference.

Let us begin by looking at the question from its two sides, beginning with the affirmative one. If we consider the current of our mental processes while sitting listlessly at our desks, we may find our minds to wander in a half-unconscious way from one subject to another. Vague emotions of various kinds may arise without our being able to assign any reason for them. We may feel elated without being conscious of any agreeable event to cause elation, and depressed without having heard any evil tidings. The visual image of absent friends, or the thought of an exciting scene which has been before us, may arise unbidden. Memories follow each other without any apparent logical order. Ideas come and go as if of their own accord.

That these mental impressions are all results of sufficient causes, is a conclusion so instinctive that we can feel no doubt of its truth, and therefore shall take it for granted. The first question which arises is whether the causes are all contained, consciously or unconsciously, within the organism; or whether they may operate and produce their effect through it from outside, without the mediation of the organism. Considering the subject apart from our general experience of the world, there does not seem to be any reason, *a priori*, why we should admit one of these hypotheses rather than the other. The belief that the impressions of distant friends or relatives are in some way reproduced in our minds, is one generally entertained in infancy. Neither to the infant nor to the adult mind need the question, how can such impressions be conveyed from mind to mind, cause any more difficulty than the question how a body millions of miles away can exert force upon a ball in my hand. If we know by experience that the force is exerted, that must satisfy us. The discovery of the medium, if any, by which the effect is produced, is a different and independent problem.

The mental operations alluded to may be rationally attributed, not only to the action of distant minds known to us, but

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to that of minds otherwise totally unknown. It is not uncommon among some classes to attribute those varying mental states which they cannot otherwise account for to the action of intelligences in another and invisible sphere. From a scientific point of view, the whole question is an open one, except so far as it may have been settled by observation and experiment.

The opinion that a mind can act where the organism is not is one which we know to have been held in one form or another by men in all ages. In it originates the belief in the possession of miraculous powers by gifted beings. Indeed, were we asked what is the distinguishing mark of the conception of a miracle, as it exists in the mind of a believer, we might reply by saying that it is the belief that certain gifted persons possess the power of producing effects through the immediate agency of their minds, without bringing into action any sufficient physical cause. Although the belief in the possibility of such a power is stronger and more general among the lower races, we cannot say that men of any race or degree of intelligence are wholly free from it. From his own observations the writer believes that one-third of the intelligent people of his acquaintance in England and America are more or less under its influence. The fact that the majority of the soundest thinkers not only do not accept the opinion, but look upon it with a greater or less degree of contempt, as an evidence of mental weakness, exerts a repressive effect upon its free expression, and thus diminishes its apparent prevalence.

The speaker distinctly remembers the development of his own ideas on the subject in childhood. Remarks dropped in the conversation of others, coupled with a deep feeling of the wide range of possibilities involved in the universe so newly opened to his mind, led him to grasp with some eagerness at the idea that impressions might be conveyed from one sympathetic mind to another at great distances. But continued observation never showed the slightest connection between his own mental states and those of his friends or relatives. One attempt to put the supposed law to a practical use is still distinctly remembered. He set out for a schoolhouse where his father (the teacher) usually remained a short time after school to read. He was extremely desirous of reaching his father be-

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fore the latter should leave, and therefore exerted himself to the utmost to concentrate his desires on the father in such manner as to induce him to remain. Arrived at the schoolhouse, he found him still there, but just about to leave. The boy inquired diligently of the father whether he had felt any unusual disposition to remain. The reply was, that he had remained only to finish what he had just been reading, and that he had felt no impression whatever tending to make him stay. The natural conclusion was adverse to what is now called telepathy, and it may be supposed that the majority of thinking men reach the same conclusion in much the same way.

When we look carefully into the subject, we find that the general course of experience tends in this direction. The fact that many drugs stimulate in the highest degree the mental processes which I have sought to describe, gives color to the view that their origin is not without the organism. In our common life-experience we find that one mind acts on another only through the medium of physical causes emanating from one organism and reaching the other. It is quite true that the connecting link may be so delicate as almost to evade recognition. Shades of feeling in one mind are made known to another by changes in the countenance so slight and delicate as to entirely evade description. But the medium of communication is always present in the light, which, reflected from one face, paints its image on the retina of the eye. This is shown very conclusively by the fact, that, if the room is darkened, the one will cease to be conscious of the feelings of the other. We also find that it is not at all necessary to the conveyance of intelligence by such connecting physical causes that the person receiving the intelligence, or otherwise acted upon, should be conscious of it. He may have no more conception of the mode of action than the opium-eater has of the causes of his visions.

If thought-transference really exists, it has hitherto failed in the case where its agency has been most urgently required by society. A man on trial for murder knows well whether he has or has not done the deed; and his mind is agitated by impressions, which, could they be conveyed to those who surround him, would settle the question of his guilt or innocence. Yet no case has yet arisen where judge or jury have been con-

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scious of any mental effect caused by the transfer of impressions from the mind of the prisoner which could help them to decide this question. In great cities we are surrounded by many thousands of our fellow-men in every stage of mental excitement. Yet, if we close our eyes and ears, we are wholly unconscious of any impression which we can trace to emanations proceeding from their minds.

But a conclusion thus reached is not necessarily beyond further investigation. We must admit, that, until the formation of our parent society in England, no one ever undertook exhaustive experiments to determine whether there is or is not any such action. If the action in question is weak, obscure, or rare, it might well elude the rough tests which have hitherto been applied. The undoubted fact that the belief is generally found in very bad company, though suspicious, is not conclusive. The phenomena of hypnotism afford an excellent illustration of an analagous case. It must be admitted that these phenomena have always been found in very bad company. From this fact alone they scarcely received any attention from investigators for nearly a century; and many rejected them as spurious, or as the result of collusion between the operator and his subject. But, when once taken up in a scientific spirit, a new condition of the nervous system was discovered, the results of which upon our knowledge we cannot yet foresee.

We must not overlook another side of the case. The theories which the performers presented to the public, and by which they professed to explain the phenomena, were as false and as spurious as any one had ever supposed them. There was only a residuum of truth at the bottom of a great mass of fraudulent pretension. Yet that residuum was well worth collecting.

The conclusion which an unbiassed mind should take of the subject, in advance of any investigation or evidence, seems to be this: Leaving out all theories founded on any supposed relation of the mind to the nervous system, there can be no sound reason for denying the possibility of mental action at a distance. At the same time, the probabilities of the case are against it. As it is always best to bet against any individual horse winning a race, or any single number occurring at a turn of the roulette table, so it is sound to consider the probabilities

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of the case to be against any scientific theory of the class referred to. In other words, the burden of proof is on the side of the affirmative.

On this side we have a mass of evidence so great that we cannot deal with it in detail, unless our task is facilitated by reference to those logical principles which should direct our thoughts. In order to avoid employing these principles in too abstract a form, I shall borrow them directly from our common-sense methods of drawing conclusions in every-day life. It is, however, necessary to lay bare the frame-work which underlies these methods, and in doing this I must ask your close attention for a few moments.

Every explanation of natural phenomena, when complete, involves two elements,—a general law and a particular fact. The former may, and nearly always is, taken for granted as too well known to need statement. And, in fact, the ordinary mind, how much soever influenced by it, seldom comprehends it with entire clearness. Yet it must exist in the intellect, consciously or unconsciously.

Walking in the fields, I hear a sharp explosion. I explain it by the fact that some one has fired a gun. In doing this, I assume the general law that the firing of a gun causes an explosive sound. To one unacquainted with this general fact, the statement that a gun had been fired would afford no adequate explanation. He would see no connection between the sound he had heard, and my statement that it was caused by firing a gun, until he apprehended the general law.

Sitting at your desk on a sultry afternoon, you find the air gradually growing dark. A flash of light suddenly illuminates the room. The explanation which at once presents itself is that the darkness is caused by a thunder-cloud, and that the flash is the result of an electric discharge in the cloud. Here you have in mind the general laws, that a thunder-cloud cuts off a large part of the solar light, and that an electric discharge produces a brilliant flash. If you never knew that an electric discharge produced a flash, the explanation would fail. But the supposition of the particular fact that a cloud is passing at the moment is equally necessary to the explanation.

I need not stop to point out how the general laws necessary

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to the explanation of natural phenomena are inferred by induction. Every rational mind, in the course of its development, may be said to apprehend, consciously or unconsciously, a continual increasing number of laws of nature. Perhaps the qualification "rational" may not here be required. It may be said that all the higher animals reach a conception of such laws, and that the only difference is that the irrational animals entertain this conception unconsciously, while rational minds entertain it consciously, and can separate it from that of the special facts in which it is exhibited.

The main fact which I wish to illustrate by this digression is that every mind, in the course of its development, is modifying or adding to its conceptions of the laws of nature. The higher order of minds continually group the laws apprehended by minds of a lower order, under some more general laws; and it is in this grouping that scientific progress consists. We may say that all the laws apprehended by the common man are grouped by the scientific theorizer under more general laws. In the common mind, there are a great number of laws of nature determining the occurrence of physical pain or pleasure, heat, cold, blows, contact with acids, disease, injuries. In the cultivated mind, this complex system of laws assumes the form of a few more general and simple laws. But how far soever the work of generalizing laws may be carried, they can never be applied to the explanation of phenomena without evoking some special fact, or system of facts, to which they apply.

It follows, that, when a phenomenon is presented to us which we find it difficult or impossible to explain, we must conclude, either that we have some new law of nature to apprehend, or that some particular facts which we do not see are present to modify the action of known laws. Whether our difficulties arise from ignorance of the law or of the fact, is a question which in some cases involves great difficulty, while in others the mind settles it without question. The untutored man, who for the first time sees iron in a state of fusion, learns correctly the (to him) new general law that iron is melted by heat. But he may infer a new law when he really has to deal only with a known law, acting through facts which are concealed from him.

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A juggler holds in front of him a dish of water filled with jelly-fish. An assistant having thrown a large handkerchief over the dish, the juggler rolls the handkerchief in a lump; and vessel, water, and fish have all disappeared. A looker-on might see in this the evidence of some new law of nature, in virtue of which a mass of matter could become invisible; but the better informed spectator knows that something has been done under the handkerchief which he did not see, and that no new law of nature comes into play. He might find it impossible to explain, even to his own satisfaction, how the disappearance has come about: but this ignorance does not in any way diminish his confidence that the phenomenon can be fully explained by the presence of some particular circumstances of which he is ignorant.

I hope that the main principle which I wish to enforce will now be clearly apprehended. When a set of phenomena presents themselves to us, apparently defying explanation, we may conclude either that some law of nature of which we have before remained ignorant has come into play, or that the result is due to known laws acting under particular circumstances of which we are ignorant. The whole question of the reality of psychic force is of this kind. We have seen thought transferred from mind to mind. The evidence of the transfer in some cases is beyond doubt. The question is, Did it take place through some physical connection between two organisms which eludes our scrutiny, but which, had we seen it, we should have recognized as involving no new principle, or did some new law of nature come into play? Is there any criterion by which we can decide between these two hypotheses? The history of scientific investigation shows that there is. But, before pointing it out, let us glance at the subject from a slightly different standpoint.

Phenomena which we are unable to explain at the moment are of almost daily occurrence. Every sound which we hear, and of which we cannot state the origin, belongs to this class. The course of our thoughts, and the internal physical pains so familiar to humanity, frequently belong to the same class. Indeed, the number of particular facts which we do not know is so very great, that our natural impulse is always to attribute



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any inexplicable phenomenon, not to some new law, but to some unknown combination of circumstances. In many cases we call phenomena thus arising *spurious*, not because they are unreal, but because we may suspect that circumstances which give rise to them have been intentionally produced to deceive us. The word would, however, bear a connotation which we should avoid applying to the present case without explanation.

One very natural way of investigating the question whether inexplicable phenomena belong to the class just mentioned is that followed by our parent society. It consists in carefully investigating all the attendant circumstances with a view of finding whether they afford a sufficient explanation of the phenomenon under known laws. If investigation shows the presence of conditions under which the phenomenon could be produced by such laws of nature, it is then assumed that no new law comes into play; but if the most searching investigation fails to discover any such conditions, then it is to be concluded that a new law of nature is established, with a greater or less degree of probability.

Although this method is in perfect accord with our ordinary modes of investigating phenomena involving no new law, yet I must, with all due respect to those who have applied it, express my dissent from its validity as a method of discovering such laws. In fact, it is not in accordance with our every-day habit of inference to infer a new law by this method. I think the following illustration will make this habit clear.

Let us have presented to us fifty phenomena, all belonging, so far as we can see at the first glance, to one class, and all apparently inexplicable without assuming some new law. We proceed, however, to investigate, with a view of determining whether they are not the product of circumstances not evident at the moment. Suppose, to fix the ideas, that the separate phenomena are fifty in number: it matters not whether fifty repetitions of the same thing, or fifty separate occurrences of the same general character, all differing in their details. What connects them together is some element of similarity. They may be produced by one person, or they may show certain likenesses in virtue of which they supposed them explainable by some one new law.

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We now proceed to investigate. A very little examination shows that twenty of them are the product of known causes which we did not at first see. More careful examination, extended through several hours or days, explains twenty more in the same way; leaving only ten from which to infer a new law. Bringing in new means of investigation, and devoting increased industry to the work, we succeed in explaining five more, one by one; leaving yet five which defy our powers. Are we to conclude that these five do not belong to the same class as the others, that there cannot possibly be any circumstances unknown to us which have produced them, and that some new law of nature is therefore established? I think not. I think the man of well-balanced mind in such a case always reasons thus: As first presented to me, these phenomena were all of the same general character. All seemed to point to the existence of a new law of nature. All had the character of individuals claiming that they were not the product of known causes. But, as I went through the investigation, I find that ninety per cent of them had deceived me in various ways by being the product of known causes, concealed from my sight. As some of these hidden causes require little investigation for their discovery, others yet more; and as my powers of investigation are limited, and I can never be sure that no unknown causes are present, — I therefore conclude that the remaining ten per cent are the product of circumstances which have only the common property of eluding my present powers of investigation.

This is, in fact, the method of reasoning which we always adopt in every-day life. We adopt it because we know that circumstances are constantly present, the discovery of which eludes all our powers. No one claims the ability to explain every thing he sees and hears in one day. He knows that unknown causes are continually present, and is satisfied to relegate inexplicable phenomena to their action. Hence, the method of investigation in question can only show satisfactorily our inability to discover the true cause, and can never justify us in concluding that a new law of nature comes into play.

The true method of investigation is exemplified by the whole history of physical science. The general laws of nature are permanent: the special circumstances under which they act are

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continually varying. We see a law only in a sequence of phenomena permanent in its character. This system is also in perfect accord with our common-sense method of drawing conclusions. When the same phenomenon occurs under the same conditions time after time, we infer a law of nature. When we cannot trace its repetition to any common set of conditions, we conclude that it is due to varying circumstances, perhaps unknown to us.

It is a characteristic of all scientific progress, that, when we ascertain any new law connecting phenomena, we are able to produce them with continually increasing facility. Take the case of electricity, for example. Before regular experiments were made, electrical phenomena were so little known that they might have been deemed entirely spurious. The early experimenters met great difficulty in reproducing them at pleasure. Sometimes they appeared, and sometimes they did not. Sometimes electricity was conducted from one body to another, and sometimes it was not. But, as investigation went on, there was a regular progress, step by step, until a stage was reached at which all the phenomena could be produced at pleasure, and fully explained by known laws and attendant circumstances.

How does psychic research stand this test? I think we must all admit, that, up to the present time, it does not stand it at all. The unwelcome fact seems to be that we have absolutely no general knowledge that we did not have ten years ago. We have seen that there is sometimes an apparent transfer of thought, and that impressions are apparently produced from time to time by unknown causes. We knew this as well before we began our investigation as we do now. If any new law of nature is involved, what is its character? Let us grant that thought is sometimes transferred. What question will then arise? I reply, that the first question to be considered is under what circumstances and conditions, and by what agencies, is it transferred? That these circumstances, conditions, or agencies are exceptional, is perfectly obvious. Were they universal and general, our minds would be affected by those of the thousands who surround us. We know that they are not so affected. The whole question, is, therefore, under what conditions are mental impressions of any kind communicated from mind to mind

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without the intervention of known physical causes? I have carefully studied the proceedings of our parent society, as well as articles in magazines describing cases of supposed thought-transference, without being able to find any answer whatever to this question.

Let us now look more closely into the history of the investigation. As our own work is in some sort a continuance of that of the English society, we may begin by recalling certain extremely interesting experiments of the former, which, if properly followed up, might be expected to lead to a definite conclusion.

In the latter part of the year 1882, some members of the society learned through Mr. Douglas Blackburn, an associate, that a mesmerist of Brighton, named Smith, had the power of describing impressions existing in Mr. Blackburn's mind. After some tests of this power, it was found that Mr. Smith could copy a drawing of which it was supposed he had no knowledge, except as it existed in Mr. Blackburn's memory. In copying the drawings, the "percipient," Mr. Smith, sat at a table, blindfolded, while behind him sat the "agent," Mr. Blackburn, thinking intently on the form of the drawing as he had just seen it. Very soon Mr. Smith began to make a copy of the drawing so like the original that no doubt could exist of a relation between the two. This copying of drawings was practised in December, 1882, in Brighton, and again for three or four days during the following month in London.

It was afterwards found that two young ladies in a large drapery establishment in Liverpool possessed a similar power; and reports on them were made to the society by their employer, Mr. Malcolm Guthrie, J.P., and by Professor Lodge. In some respects these trials are more complete than those made with Mr. Smith, since a number of persons seem to have acted successfully as agents. Out of a total of one hundred and fifty drawings, only sixteen are given; so that the data for deducing any law bearing upon the subject are entirely wanting.

These copies of drawings have a great advantage over verbal descriptions, in that the record can be made the subject of future study. It was found that the three or four persons able to copy invisible drawings were also able, as we may well sup-

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pose, to describe invisible objects. It is difficult to see how one could draw an object unless he had some conception of it in his mind, and with this conception he should be able to describe it.

There was also one interesting case of an apparently marvelous power of naming objects thought of by others. The Rev. A. M. Creery discovered that his four little girls, as well as a waiting-maid in his family, possessed this power in a remarkable degree. A child being sent out of the room, an object to be thought of was agreed upon by the company, or a card was drawn from a pack and passed around. On being called back to the room, the child was very soon able to name the card or object. What is yet more wonderful, the power was not confined to merely material objects, but extended to the guessing of numbers and names which could convey no definite idea to a child's mind. Judging from the number of reports made about these children, it would seem that some definite conclusion might have been hoped for.

The question which now arises is, Does all this prove that in this case thought was transferred from one person to another without the intervention of previously recognized agencies? The principles I have already enunciated will lead us to answer this question in the negative. All investigation of this kind should assume in advance that the phenomena which we observe are the result of certain causes, or are associated with certain conditions; and that when these causes or conditions are reproduced, the phenomenon will recur. Until these causes or conditions are discovered, nothing can be inferred.

What science concerns itself with is not the mere recurrence of the phenomena, but the nature of the relation between the cause and the effect. Such isolated facts as that some particular man in the fifteenth century got well of a disease after a priest had laid hands upon him, or that a little girl at a certain time guessed a card she did not see, are in themselves of no scientific interest or importance, however well they may be fitted to excite our curiosity. What we want to discover is the invariable relation by which every sick man of a definable class, upon whom the right kind of a priest lays his hands, shall be cured; and to discover all the conditions under which a little girl can name a card. Until these conditions can be discovered,

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we have no right to attribute the result to one cause rather than to another. It is true that we have not the right to demand that every little girl shall be able to name the earl under the given conditions. There may be only one girl out of a thousand, or only one out of a million, who possesses the required power, just as there is only one man out of a thousand who can integrate a differential equation. At the same time, the cases must be numerous enough to make them a subject of some kind of investigation, and to deduce from them a statement of some kind of general law. The rarer they are, the greater the attention that should be devoted to them when found.

Again, in the case of the drawings, as well as in the other cases, the same question arises. We have given, an "agent" A, and a "percipient" P. It is found that an impression of some sort is conveyed from A to P. What we want to know is, how it is conveyed. When we can answer this question, we shall be able to say whether a new theory of mind is to be established. To find how it is conveyed, the very first step is to determine by experiment the laws of conveyance; that is, the conditions necessary and sufficient to the transmission. The first questions which would arise might be the following:—

Whether the power on the part of A diminishes with the distance from P; and, if so, according to what apparent law?

Whether at any given distance the relative position of the two parties affects the result?

Whether the intervention of a material obstacle, such as a door, interferes with the transmission of the impression?

Whether the presence of light or darkness affects the result?

Whether sight on the part of either A or P is necessary?

Whether the result is any more successful when the object or idea selected originates with the agent than with some other person?

Whether the presence of any particular person is necessary?

After these questions are all answered, other details without number would arise. But these would come first.

It does not appear, that, up to the present time, either the parent society or our own has been able to decide any of these questions. When the experiments were begun, it was indeed

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sought to determine whether contact between Mr. Blackburn and Mr. Smith was necessary. This question was decided in the negative. In another case, where the trials were made with Messrs. Blackburn and Smith, the observers, after making eleven numbered experiments, placed the two men in separate rooms. It was then found that the communication failed. But there was no inquiry why it failed, and no statement whether the door was open or shut, or whether the parties were farther apart than they were when the experiment succeeded.

Whatever view we may take of this matter, it seems to me, that, in the absence of any consideration or decision upon the various questions which I have raised respecting the conditions of thought-transference, we are not entitled to conclude that any causes come into play in the matter except unknown conditions. This view is strengthened by another consideration to which I shall call your attention. I have already alluded to the general fact in the history of scientific investigation, that, when sequences of phenomena which are rare in themselves become a subject of inquiry, their reproduction and observation become easier and easier. Two centuries ago the phenomena of electricity produced by artificial excitation were extremely rare and had little variety. But, as science advanced, new methods of producing electrical effects were discovered, and the conditions of the production of electricity became easier and easier to fulfil. Now no one has any doubt or difficulty about the method of producing electrical phenomena at pleasure. Why this should be so is obvious. The more we study a phenomenon which is the product of a law of nature acting under certain conditions, the more likely we are to discover such conditions. The more we find out about them, the easier it will be to produce them, or to determine the law of their recurrence. Easier investigation is therefore the almost necessary result of scientific progress.

On the other hand, if the phenomenon becomes more rare as we proceed, we reach the conclusion that it is not associated with any given conditions by a law of nature, but is only the result of accidental or unknown circumstances unassociated with any new law. I may, perhaps, borrow an astronomical

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illustration of this principle. We know that astronomical records contain many observations of dark bodies passing over the disk of the sun. It has frequently been supposed that these phenomena were due to the transits of unknown inter-Mercurial planets. But, when we look into the history of the subject, we find that such observations are nearly always made by comparatively inexperienced observers, with imperfect instruments; and that as instruments are improved, and observers acquire practice, they gradually disappear. These facts alone have sufficed to render astronomers sceptical as to their reality. The fact that the observations cannot be reconciled with each other in such a way as to show that they belong to the same body is generally considered to afford nearly conclusive proof of their spurious character. In fact, we may regard this character as now fully established.

Guided by this analogy, let us see what we should expect the history of psychical research to be, were thought-transference real. An investigator would have found one or more persons possessing some power of influencing the minds of others by a direct transfer of ideas. It would probably have been found that some ideas were transferred more readily than others, and that the transfer was better marked under some conditions than under others. The discovery of these ideas and their conditions would in its turn have facilitated the study of the transfer by teaching how to secure it, and thus the body of knowledge would have gone on increasing. This knowledge would have resulted in the discovery of other laws, and in the gradual enlargement of the number of people who possessed the power. Finally the investigators would have been able to say: If you consider this or that form of thought; if you select a certain definable class of people, and proceed in a certain way, — then you will be able, when you please, to observe thought-transference.

Such has not been the history of the case. The most careful collection of facts and observations during three years has failed to show any common feature in the ideas transferred, and has thrown no light on the question of the condition under which the phenomena can occur. The theory cannot be reconciled on any reasonable hypothesis, even that of thought-transference,



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with the absence of such action where we should most expect it.

When we consider the importance of the problems which were presented, we cannot but feel regret that so little public attention was given to the subject. If we accept the conclusion of thought-transference, we have the startling result that there were and probably still are in England a number of people possessed of the power of perceiving or being affected by what is going on in other men's minds. Why did not Parliament grant the necessary funds to enable these people to be collected, supported at the public expense, and experimented upon? "Practice makes perfect," says the proverb; and it might well be hoped that, after a little well-directed practice, these people could perceive the thoughts and memories in the minds of murderers and robbers, and thus do away at one stroke with one of the greatest difficulties in administering justice. Instead of this, the parties and the subject have been lost sight of, so far at least as appears from published records.

To suppose that the society has made no effort to utilize the knowledge acquired during its existence, by discovering other persons possessed of the powers in question, would be too severe a reflection upon its eminent membership for any one to indulge in. In the absence of evidence to the contrary, we are to presume that a very careful search has been kept up. But, if this is so, not only have no new discoveries been made, but the old ones, if we can call the conclusions by that name, have not been confirmed.

I feel it a great misfortune that I have not been able to take an active part in the work of this society, and am not fully acquainted with its latest details. So far, however, as I have learned, we have been less successful than the parent society in finding satisfactory subjects of investigation. We might almost say that careful search has failed to bring us subjects to be experimented upon. An exception to this is found in the case of one of our most eminent members, who has been experimenting upon mesmerized persons. His work having not yet been communicated to the society, I must speak of it with much reserve, and may possibly be out of strict order in alluding to it at all. I cannot, however, refrain from citing one result which he has

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verbally communicated to me. It is well known that mesmerized persons are those supposed to be most susceptible to the reception of agencies exerted by other minds without physical communication. I learn, however, that our fellow-experimenter has not been able to find any cases in which any mental impression could be conveyed to, or any nervous effect produced upon, a mesmerized subject, without a sufficient physical cause being found. Isolate the agent and the subject from each other, and no impression or action whatever can pass from one to the other.

If the investigation of thought-transference is to be still further pursued by us, it may be useful to point out the conditions under which we should expect it to be found. One of these must be found in the case of the man who is surrounded by a crowd watching a pyrotechnic display. Within a few yards of him there are a hundred people who simultaneously receive upon their minds the startling impression of a brilliant rocket. If there is such a thing as telepathy, then, a person standing in the middle of the crowd, with his eyes closed and his ears filled with wax, ought to know just when the rocket appears, by a mental tremor of some kind, not traceable to any physical agency. I suggest this as one very simple experiment on the subject.

Let us take another case. West of the Mississippi River there are probably several hundred thousand persons whose chief amusement is the playing of a game of cards, in which a knowledge of the cards which another person right in front of him is looking at, or even the power to make a probable guess on the subject, would lead rapidly to success and fortune. Yet not a case has ever been known to arise in which a player could get the slightest inkling of what sort of a hand his opponent held by any process of mind-reading. Is it not worth our while to institute an investigation among the players of this game?

The question may arise whether the non-occurrence of the phenomenon under those circumstances where we should most suspect it is not due to the rarity of some special power. This hypothesis is however negatived by the observations of our parent society, already mentioned. We have seen that three or four children and a waiting-maid were found in a single

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family, all of whom could name cards which other persons had simply looked at, and could even guess a number which another person thought of. Now, if the power were really rare, what is the probability that four persons possessing it would be found in a single family? We should have to wander among the infinities to investigate it. Possibly it might be suggested that heredity would result in one possessing the same powers that others did. But heredity could not extend to the waiting-maid of the family, unless we introduce some such new biological hypothesis as the absorption of one person's powers by another. Not only were four or five of the persons found in one family, but in other cases two or more were found at work in the same factory. Now, adopt what theory we may, this curious grouping of persons endowed with the power prevents us from regarding it as sporadic. We must form the hypothesis, that, when one individual possesses it, there is a certain chance of its passing to another individual who chances to be an inmate of the same family. But, if we adopt this hypothesis, how shall we prevent it from spreading through the whole community? In fine, what rational hypothesis can we form to explain every thing? If we grant that thought-transference is a fact, just how are we to limit it? How explain its apparent absence under circumstances where we should most suspect it? What prevents any one person from being influenced by the thoughts and feelings of the whole thousand million of other people who live in the world? In the absence of any answer by the Psychical Society, I shall suggest one: The intensity of the effect diminishes very rapidly with the distance.

If this be the case, it should increase very rapidly as the distance diminishes; and of this no evidence has been found. Nor is the hypothesis of dependence upon distance supported by all the facts. In some of the most striking cases on record, the parties were separated by miles; I am not sure but continents or oceans have occasionally intervened.

It appears, therefore, that not only has no theory of thought-transference been constructed, but it does not seem possible even to imagine any one simple theory, or set of general laws, which will explain all the phenomena. I beg leave to say once more, that what we want is a statement of general laws, like

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those which we find in books on mechanics, electricity, magnetism, or physiology, setting forth the conditions under which thought-transference can be brought about. That no such work has appeared, or been attempted, can, it seems to me, be accounted for only by the fact just brought out, that no one set of principles can be formulated that will cover all the supposed facts.

When, some two years ago, the early experiments of the English psychical society were made known, it seemed to me that a strong case was made out for a new law of nature governing the transmission of thought, or some form of mental influence from person to person. The state of the case I suppose to be that a number of members found themselves permanently able to copy drawings without other guidance than the thoughts of other members not in physical contact with them. Under the influence of this possibility, I encouraged the formation of our own society, and accepted membership in it.

Being thus interested in the work, my first act was very naturally to enter upon a more critical and careful study of the work of the parent society. I soon noticed that in its essential features it differed remarkably from what I had supposed. It lost the character of generality which I had attributed to it. As the result of the circumstances which I have already considered, I may say that the work of the society seems to me to have almost entirely removed any ground which might have existed for believing thought-transference to be a reality. I have seen nothing in our own work to change that conclusion. Every wide consideration which occurs to me leads in the same direction. We are not dealing primarily with a question of quantity and degree, but with one of yes or no. Considered in advance of experience, it may be an open question whether thought in its very nature is or is not transferrable. Whether we regard thought as simply the working of our own organism, or regard our minds as inhabiting our nervous systems, it may be true in either case that our minds are absolutely incapable of exerting an *actio in distans*. Now, if this be true as an essential quality of mind, then the very expression "thought-transference" involves an impossibility. But granting that it is true, and that thought may be transferred, then reflect upon the number of

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people who surround us, and the infinity of the conditions under which thought might be transferred. How is it that with such ample opportunities of experiment extending through centuries, and such industry as has been devoted to the subject here and in England through the last two years, no living person knows any more about the conditions of transference to-day than men did a thousand years ago?

The question suggests itself whether the search for the phenomena under present circumstances is not much that of looking for a kind of gold which shall differ in density from ordinary gold, or for a substance of unheard-of specific gravity. We may advertise for specimens of such things, and execute many weighings, with a view of testing claimants to our attention. Yet I am persuaded that, should we undertake this, the unanimous views of chemists would be that we were wasting our labor. The negative evidence that no gold has been found differing much in specific gravity from that which we carry in our pockets is conclusive against its existence.

Whether we should take the same view of thought-transference is a question on which I refrain from expressing a decided opinion, for the reason that no such opinion is necessary. Even if there is no real thought-transference, we have cases of apparent thought-transference to investigate and explain, which may lead us to the discovery of new laws of mental action.

An illustration of the line of research here indicated may not be out of place. The largest collection of facts made by our parent society comprises occurrences of the following general character. A person, generally one not subject to hallucinations, suddenly receives an impression the cause of which he cannot define. Commonly it is the visual image of some absent friend or relative in a state of suffering, or the voice of a speaker calling aloud, or the impression a pain not associated with any physical cause. After a few hours, days, or weeks, news is received from the friend that something had happened to him at the very moment the impression had been received, bearing too close relation to the impression for a mere accidental coincidence. Very often the case is one of the death of the friend. Sometimes he cried aloud in pain, and used the very words which the other heard.

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Such is the order of events as commonly described; but, if described as they actually come to knowledge, they would appear in a different form. The experience of the observer would be: I heard that my friend was dead, or that he had met with an accident and cried aloud. After inquiring when the death or accident occurred, I remembered that about that time I heard this very exclamation, or saw his image before my eyes.

Now, we have two theories on which this may be explained. It may be that there was a real transfer from the friend to the percipient; or the whole recollection may have been the work of the percipient's mind at the time, — a mere illusion of the memory. My own experience leads me to believe that these illusions are more common and more difficult to distinguish from the reality than generally supposed. I have no reason to consider myself in any unusual degree the victim of illusions; yet I frequently find vague impressions in my mind the reality of which I am unable either to deny or affirm. They may have been dreams, and they may have been occurrences. I frequently have a dream which I forget all about until a day or two afterwards, when perhaps some impression produced in the dream is brought to mind. Having totally forgotten that I had any dream at all, I am often at a loss to say whether the impression is that of something which I really saw, or something which I dreamed of. I do not remember ever to have had an hallucination in my waking hours, but dream hallucinations I find not at all uncommon. It may not be out of place if I relate one, which, after the lapse of more than a year, I am still unable to classify with certainty as a reality or illusion.

I dined with friends at a hotel, later and more generously than was my custom, and retired without the post-prandial airing necessary in my case to sound sleep. The window of my room in the hotel was directly above the kitchen, and I was much disturbed by noise coming from that quarter. Some time in the night, I cannot tell when, I heard, or thought I heard, a window opened above my room, and the voice of a guest calling in a loud voice to the servants below, "If you don't stop that racket, I will get up and leave the hotel." The whole impression was so vivid that I have ever since been in doubt

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whether it was a dream or a reality, with perhaps slight probabilities in favor of its being a dream.

I believe that our dream life and our imaginative powers are more potent factors in the production of supposed extraordinary phenomena than is commonly supposed. Whatever may be the fate of the theory of thought-transference, the phenomena of hypnotisms, as well as of dreams, illusions, and faults of memory, are all before us. They form a field of which the cultivation has only commenced, and which ought to prove attractive to all. I even venture to say, that, if thought-transference is real, we shall establish its reality more speedily by leaving it out of consideration, and collecting facts for study, than by directing our attention especially to it.

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