THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

VOLUME XLVII JANUARY • 1953 NUMBER 1

CONTENTS

THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, Inc.
880 FIFTH AVENUE • • • NEW YORK 21, N. Y.
Single Copy, $1.50 Published Quarterly

THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, INC.

OFFICERS

GEORGE H. HYSLOP, M.D. ..... *President*
PROF. GARDNER MURPHY ..... *First Vice-President*
MRS. LAWRENCE JACOB ..... *Second Vice-President*
MR. EDWARD LATHAM ..... *Treasurer*
MRS. EDWARD W. ALLISON ..... *Secretary and Assistant Treasurer*

BOARD OF TRUSTEES

Mrs. Edward W. Allison	(Jan. 1955)	Miss Margaret Naumburg	(Jan. 1955)
Prof. C. J. Ducasse	(Jan. 1954)	Mr. Cyril J. Redmond	(Jan. 1955)
George H. Hyslop, M.D.	(Jan. 1953)	Prof. J. B. Rhine	(Jan. 1954)
Mrs. Lawrence Jacob	(Jan. 1953)	William O. Stevens, Ph.D.	
Mr. Gerald L. Kaufman	(Jan. 1954)		(Jan. 1955)
Edward J. Kempf, M.D.	(Jan. 1954)	Montague Ullman, M.D.	(Jan. 1953)
Mr. Edward Latham	(Jan. 1954)	Mrs. John J. Whitehead	(Jan. 1953)
Prof. Gardner Murphy	(Jan. 1953)	J. L. Woodruff, Ph.D.	(Jan. 1955)

CHAIRMEN OF COMMITTEES

Research, Prof. Gardner Murphy
Publications, Mrs. E. W. Allison
Finance, Mr. Edward Latham
Library, Miss Margaret Naumburg
Membership, Mr. William Oliver Stevens

Research Associate, Laura Abbott Dale
Executive Secretary, Mrs. Mitchell Kennerley

PURPOSE AND SCOPE OF THE SOCIETY

1. The investigation of claims of telepathy, clairvoyance, veridical hallucinations and dreams, psychometry, precognition, dowsing, and other forms of supernormal cognition; of claims of supernormal physical phenomena, such as raps, telekinesis, materialization, levitation, fire-immunity, poltergeists; the study of automatic writing, trance speech, hypnotism, alterations of personality, and other subconscious processes: in short, all types of the phenomena called psychic, mediumistic, supernormal, parapsychological and metapsychic, together with the bordering subjects.

2. The collection, classification, study and publication of reports dealing with the above phenomena. Readers are asked to report incidents and cases. Names must be given, but on request will be treated as confidential.

3. The maintenance of a library on psychical research and related subjects. Contributions of books and periodical files will be welcomed.

4. Cooperating in the above tasks with qualified individuals and groups who will report their work to the Society.

MEMBERSHIP IN THE SOCIETY

Members, who receive the Proceedings and the Journal, pay an annual fee of $10. (One may become a Life Member or endow a Memorial Membership on payment of $200.) *Fellows*, who receive all publications of the Society and are afforded special library privileges pay an annual fee of $25. (Life Fellowship, $500.) *Patrons and Founders*: For those who wish to make a still larger contribution to the Society's work, these classes are open at $1000 and $5000, respectively.

It is to be remembered that membership in a scientific society means more than merely a subscription to its publications. The work must be carried on largely through the income from membership fees. Therefore members, old and new, are urged to make their membership class as high as they feel they can. *If a comparatively small proportion of the present members went one class higher, the money available for research would be more than doubled.*

THE JOURNAL of the American Society for Psychical Research is published quarterly by the American Society for Psychical Research, Inc., 880 Fifth Avenue, New York 21, N. Y. "Entered as second-class matter July 15, 1941, at the post office at New York, N. Y., under the Act of March 3, 1879."

THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

Responsibility for the contents of any article appearing in the JOURNAL rests entirely with the contributor and not with the A.S.P.R.

VOLUME XLVII JANUARY - 1953 Number 1

CONTENTS

Notice of Annual Meeting of the Voting Members of the American Society for Psychical Research, Inc.

The Annual Meeting of the Voting Members of the American Society for Psychical Research, Inc., will be held at the office of the Society, 880 Fifth Avenue, Suite 1A, Borough of Manhattan, City of New York, on Tuesday, January 27, 1953, at 4:00 o'clock in the afternoon, for the election of five Trustees and for the transaction of such other business as may properly come before the meeting.

Lydia W. Allison, *Secretary*

Voting Members of the Society

California: Professor B. A. G. Fuller; *Canada*: Mrs. Peggy Jacobsen; *Colorado*: Dr. Jule Eisenbud; *Connecticut*: Mr. Edward Latham; *Delaware*: Mr. Herbert L. Cobin; *Illinois*: Mrs. Emmons Blaine, Mrs. Richard L. Kennedy, Jr.; *Kansas*: Professor Gardner Murphy; *Massachusetts*: Mr. H. Addington Bruce, Mrs. David H. Hale, Miss Constance. Worcester; *Michigan*: Mr. Edmond P. Gibson; *New Jersey*: Miss Hettie Rhoda Meade, Miss Gertrude Ogden Tubby; *New York City*: Mrs. E. W. Allison, Mrs. Valentine Bennett, Dr.

Jan Ehrenwald, Mr. Samuel Fischer, Dr. William A. Gardner, Mr. Arthur Goadby, Mrs. Lea Hudson, Dr. George H. Hyslop, Mrs. Lawrence Jacob, Dr. Waldemar Kaempffert, Mr. Gerald L. Kaufman, Dr. Robert W. Laidlaw, Dr. Russell G. MacRobert, Mrs. E. de P. Matthews, Miss Margaret Naumburg, Mr. Cyril J. Redmond, Miss M. Catherine Rittler, Dr. Adelaide Ross Smith, Mr. William O. Stevens, Dr. Montague Ullman, Mr. C. Y. Wang, Mrs. Henry W. Warner, Mrs. John Jay Whitehead, Dr. Edwin G. Zabriskie; *New York State*: Miss Lillian McNab Burton, Mr. Edward N. Ganser, Miss Winifred Hyslop, Dr. Edward J. Kempf, Mr. Alan F. MacRobert, Dr. J. L. Woodruff; *North Carolina*: Dr. J. B. Rhine; *Rhode Island*: Professor C. J. Ducasse; *South Carolina*: Mrs. E. D. Wenberg.

Lectures

Mrs. Eileen J. Garrett, Director of the new Parapsychology Foundation, addressed the members of the Society at the Willkie Memorial Building on Wednesday evening, November 5, 1952. Her lecture was devoted to a résumé of her mediumship in England and in America and to an account of her recent experimental work, a report of which will be published by the foundation.

Forthcoming Lectures

Thursday Evening, January 22, 1953, at 8:15.

The National Republican Club for Women, 3 West 51st Street.

Professor Gardner Murphy on "The Importance of Spontaneous Cases."

Monday Evening, February 16, 1953, at 8:15.

Willkie Memorial Building, 20 West 40th Street.

Rev. Alson J. Smith on "Psychical Research and Religion."

Monday Evening, March 16, 1953, at 8:15.

Willkie Memorial Building, 20 West 40th Street.

Mr. Edward Latham on "Experiences in Extrasensory Perception."

Wednesday Evening, April 8, 1953, at 8:15.

The National Republican Club for Women, 3 West 51st Street.

Professor C. J. Ducasse on "Some Questions Concerning Psychical Phenomena."

The Psychic Fifth Dimension

HORNELL HART

A. The Need for a New Conceptual Framework

Dr. J. R. Smythies, in the *Journal* of the Society for Psychical Research (London) for September-October, 1951, suggested that "the fundamental assumptions, on which natural science is based, should be . . . revised." The aim of his paper was "to suggest a series of alternative assumptions" which, he said, "account satisfactorily for the facts of parapsychology."[1] His basic contention was that both normal consciousness and parapsychological phenomena might be explored more adequately in terms of seven-dimensional space, in which four dimensions were those of physical space-time, while three additional dimensions of space were provided for the psychical realm, the time dimension being shared in common by the two systems.

The need for a revision of fundamental assumptions has been recognized by various leaders of thought in psychical science. J. B. Rhine asserted recently:

> ". . . parapsychology has gone wrong in the past mainly in stating its problems in terms of untested assumptions that were part of the current thought of the period. . . . a more effective order of investigation would have inquired first into the assumptions, rather than take them for granted. . . . The speculative associations and cultural trappings that have been carried along with our branch of inquiry all too long are being cast off. . . . the inquirer of the future will henceforth steer clear of entangling theologies and speculative hypotheses. . . ."[2]

Similarly, R. H. Thouless said recently: "The obstacle to new theoretical insights in the past has been rigidity in holding to old conceptions."[3] Again, he said: "One of the most obvious needs of parapsychology is the formulation of hypothetical systems which will lead to expectations that can be tested by experiment."[4] H. H. Price writes: "A comprehensive conceptual framework into which all the different sorts of psi-phenomena can be fitted . . . is something which is very greatly needed."[5]

---

[1] J. R. Smythies, "The Extension of Mind: A New Theoretical Basis for Psi Phenomena," *Journal* S.P.R., Vol. XXXVI, 1951-1952, pp. 447-502.

[2] J. B. Rhine, "Telepathy and Human Personality," *Tenth Myers Memorial Lecture*, S.P.R., 1950 and *Journal of Parapsychology*, Vol. 15, 1951, pp. 30-31.

[3] R. H. Thouless, "Thought Transference and Related Phenomena," *Journal of Parapsychology*, Vol. 16, 1952, p. 38.

[4] R. H. Thouless, "Comments on Dr. Smythies' Paper," *Journal* S.P.R., Vol. XXXVI, 1952, p. 542.

[5] H. H. Price, letter to Hornell Hart, May 7, 1952.

The conceptual framework offered by Dr. Smythies' article seems to the present writer to be unsatisfactory. But, taken with the discussion which appeared in the next issue,[6] it did stimulate, in this writer's mind, the formulation of a substitute theory, based on five dimensions instead of seven. Copies of a preliminary draft of that theory were sent out to some outstanding leaders of thought in this field, with a view to seeking to discover what are the major areas of agreement, and what are the most vital issues, in relation to the formulation of a comprehensive conceptual framework such as is admittedly needed in psychical research. Very valuable replies were received from Professor C. J. Ducasse, F. L. Kunz, Professor Laurence J. Lafleur, Professor Gardner Murphy, Charles E. Ozanne, Mrs. Dorothy H. Pope, Dr. J. G. Pratt, Professor H. H. Price, Dr. J. B. Rhine, Dr. J. R. Smythies, G. N. M. Tyrrell, and others. Their suggestions have been incorporated in two ways. First, the five-dimensional theory has been extensively revised in the light of their criticisms. Second, a series of outstanding issues brought out in their correspondence has been summarized in a supplementary article.

B. Deriving the Fifth Dimension by Induction[7]

The conceptual framework proposed in the present article is based on the proposition that both parapsychological phenomena and normal consciousness might be analyzed more adequately, simply, logically, and successfully by merely adding a single fifth dimension to our ordinary four of space-time. The logic of adding the fifth dimension may be developed as follows.

The Successive Relations of the First Three Dimensions: Suppose that I hold up my two index fingers about a foot apart. Between the tips of my fingers is a one-dimensional object—a straight line. You cannot see this object because it has no breadth or thickness—only length. Within that straight line, we know that an infinite number of mathematical points could be located without touching each other. Each of these points would be a zero-dimensional object.

Now suppose I hold up my two hands about a foot apart. Between my hands is a two-dimensional object—a mathematical plane. You cannot see it because it has no thickness, but only length and breadth. We know that within this two-dimensional object an infinite number of straight lines could be located parallel to each other—that is, without ever intersecting one another.

Now take a solid object like a wooden cube. You can see the cube

[6] H. H. Price et al., "The Extension of Mind: Comments on Dr. J. R. Smythies' Paper," *Journal* S.P.R., Vol. XXXVI, 1951-1952, pp. 537-570.

[7] This section has been rewritten in the light of suggestions received from Mrs. Dorothy Pope, Dr. J. B. Rhine, and others.

and touch it, because it has three dimensions of length, breadth and thickness, and because it also has a solid, opaque content. We know that within this cube it would be possible to locate an infinite number of mathematical planes parallel to each other, without their ever intersecting one another.

If the straight line is extended infinitely in both directions, it becomes not merely a one-dimensional object but a one-dimensional continuum.

Similarly, if we extend the mathematical plane infinitely in its four directions it becomes a two-dimensional continuum, and if we extend the three-dimensional space of the block of wood infinitely in each direction, that becomes a three-dimensional continuum. We can generalize the steps taken above by saying that into either a one-, a two-, or a three-dimensional continuum, an infinite number of continua of the next lower dimension can be fitted parallel to each other—without intersecting.

Is Time a Fourth Dimension? Common sense tells us that when the three dimensions of length, breadth and thickness have been set up at right angles to each other, the possibilities have been exhausted. It would seem, at first sight, that no fourth dimension could be set up at right angles to all the three dimensions of space. That appears to be the position at which Dr. J. B. Rhine takes his stand. He says:

> "I have never felt right about using dimensions in the figurative way that it seems to me the word is used once it is taken out of the realm of spatial experience. I may, of course, be missing something—even a great deal. . . ."[8]

That time cannot logically be considered to be one of four equivalent dimensions is argued persuasively by Professor Laurence Lafleur.[9]

To test the question of whether a literal fourth dimension is needed, suppose we examine an ordinary time chart—for example, a graph showing the height of the tide at a given point in latitude and longitude at a succession of hours and minutes. The two dimensions on the chart are at right angles to each other. The shape of the curve on the chart is highly significant. It is capable of mathematical exploration and (by the aid of astronomy) of prediction.

Four-dimensional space-time is perhaps the most widely used and fundamental extension of our former three-dimensional conception of reality. The essentially spatial character of this concept can be illustrated by supposing that a girl, dressed in white, is dancing in front of a black screen, and that moving pictures are taken of her dance.

---

[8] J. B. Rhine, letter to Hornell Hart, April 22, 1952, commenting on a preliminary draft of this article.

[9] Laurence J. Lafleur, "Time as a Fourth Dimension," *Journal of Philosophy*, Vol. XXXVII, 1940, pp. 169-178.

After the film has been developed and printed, the figure of the girl is cut out from each frame, and these cut-outs are cemented, back to front, in chronological order. The result is a physical object, representing the girl's four-dimensional dance in the three dimensions of height, breadth and time, but excluding the third dimension of depth. Any moving-picture film is actually, of course, a representation of a four-dimensional, space-time object. With the aid of stereoscopic methods, awareness of the fourth spatial dimension can be made more vivid.

Each successive frame of the moving picture of the dancer may be regarded as a different slice of space-time. Each one of these pictured slices represents a three-dimensional object. The three dimensions of space for any one of these objects might be extended infinitely in every direction. The pictures might be taken every millionth of a second, and (if enough film were provided) the series might go on and on without any assignable limit. Therefore, it is correct to say that an infinite number of three-dimensional continua might be fitted into four-dimensional space-time without intersecting each other. But this is a further example of what we have already noted about fitting an infinite number of continua into the continuum of the next higher number of dimensions. We now have four steps, in each of which it appears that an infinite number of n-dimensional continua can be fitted into an $(n + 1)$-dimensional continuum without intersecting.

The Fifth Dimension: But can an infinite number of four dimensional continua actually be fitted into a five-dimensional continuum? Let us see:

Let us imagine a barrack dormitory, in which a large number of soldiers are sleeping. One soldier is dreaming that he is engaged in an air battle; another is dreaming that he is crossing the ocean; another that he is talking to a girl dancer at the Moulin Rouge; another that he is climbing a mountain; another that he is harvesting wheat in a vast field; another that he is robbing a bank—and so on indefinitely. Each such dream is a four-dimensional object,[10] having three dimensions of space and one of time. In the dream of the air battle, for example, the dreamer seems to see his companion planes on his right and left, with an enemy plane swooping down from "one o'clock" (i.e., from above, at a point a little to the right of center). He sees his comrade on the left go down in flames. A moment later (in his dream) he shoots down an enemy plane, but then finds that his own left hand is shot off. Similarly, in each of the other dreams, the four dimensions familiar in ordinary sensorimotor experiences

[10] The word "object" as used in this article includes very complex structures. For example, the entire earthly life of a given person is regarded as a single four-dimensional object; so is the entire solar system.

appear with equal vividness—and in some dreams with greater vividness—as in waking life.

Every unshared and non-veridical dream might (theoretically) be extended infinitely in each of its four dimensions without interfering with any of the others. Therefore, each such dream can be regarded as part of a four-dimensional continuum parallel with each of the others, and the number of such non-intersecting dreams might theoretically be increased beyond any assignable limit.

To generalize the series of which the above illustrations are the beginning, let us define an $(n + 1)$-dimensional continuum as one into which an infinite number of n-dimensional continua can be fitted parallel to each other—i.e., without intersecting each other. If this generalized definition be accepted, the possible existence of an infinite number of four-dimensional, non-intersecting dreams would constitute (by definition) a five-dimensional continuum. Let us call the fifth dimension of this continuum the "psychic dimension."

Types of Four-Dimensional Space-Time Structures: What other kinds of four-dimensional structures besides dreams belong in the five-dimensional continuum? A little analysis of one's own experience will show that five types of space-time structures occur:

1. The ordinary "outer world" is perceived from moment to moment in our sensory experience and in our motor operations. This continually shifting sensorimotor world carries behind it the memory of immediately preceding sensorimotor experiences and projects into the immediate future the anticipated and planned structures of the experiences into which we are moving.

2. Remembered space-time experiences, not directly connected with the current sensorimotor world, form a second type.

3. Specific plans and anticipations, not directly connected with the current sensorimotor world, form a third type.

(Theoretically, all structures of types 1, 2 and 3 can be consolidated into one four-dimensional object, the outer world of common sense, which I take to be essentially identical with Dr. Smythies' "perceptual world.")

4. Fictional and fantastic imagined space-time experiences are a fourth type.

5. Dreams form the fifth type, in which may be included hallucinations.

On the basis of the above analysis it can be seen that in the five-dimensional psychic continuum there is room for all dreams, all memories, all imaginative fictions, all visualized plans, all heavens, hells and purgatories, the astral world of the Theosophists, and the "branching time-lines" of the science-fictioneers.

The existence of the five-dimensional, psychic continuum, which seems to be demonstrated by the above reasoning, offers a major challenge to research. On the basis of present knowledge, what verifiable facts and principles can be established about this psychic continuum? What further experimentation and other data-collecting are called for by such facts and principles, if and when they are established?

C. Psychic Intersections

Thus far we have been concerned with dimensional objects and continua which are parallel — that is, which do not intersect. But the intersections of four-dimensional objects within the five-dimensional continuum provide at least a beginning basis for understanding psychic phenomena.

To make clear the meaning of an intersection between two four-dimensional structures, let the reader think of his own life, up to the present time, as such a structure. Then let him think of the life of his marriage partner, or of his closest friend, as another four-dimensional structure. For such persons, the structures of their two lives intersect whenever the two persons are in contact — whenever either of them enters into the area of the other's life.

Such intersections provide much of the basis for personal narratives. In strictly historical biographies, the four-dimensional structures of individual lives intersect within the four-dimensional continuum of ordinary space-time. So also in strictly fictional narratives, the author creates an imaginary four-dimensional drama within which the lives of the characters intersect. The life of a heroine in a drama is a four-dimensional structure, and so is that of a hero. When those lives intersect in certain ways, drama develops.

But in historical fiction, four dimensions are not enough: the fifth dimension is required. When a "real" historical character becomes the center of a novel or of a fictional drama, intersections are explored between the four-dimensional structure of the hero's "real" life and the "imaginary" four-dimensional structures of the other characters.

Shared Dreams are Merging Intersections: When a shared dream occurs, the two four-dimensional dream experiences are no longer parallel (as in the barrack dormitory referred to above); they intersect. For example:

> 1. In Elmira, N. Y., on the night of January 26, 1892, between two and three o'clock, Dr. Adele Gleason dreamed that she stood in a lonesome place in dark woods, that great fear came over her, that the presence of her friend, J. R. Joslyn, came to

> her and shook a tree by her, and its leaves began to turn to flame. On the same night, at the same hour, Joslyn dreamed in another house in Elmira that he found Dr. Gleason in a lonely wood after dark, apparently paralyzed with fear, that he went to her side and shook a bush, when the falling leaves turned to flame. Both dreamers submitted written accounts within a month of the occurrence. The accounts agree that when Dr. Gleason and Mr. Joslyn met, four days after the dream, she mentioned having had a strange dream, but that he at once stopped her, and related his own dream first, without suggestion from her. Dr. Hodgson made written inquiries and found that Dr. Gleason had recorded the occurrence of the dream in her notebook the morning after it occurred, and before she saw Joslyn.[11]

The above dream was shared by two people, and may be regarded as a simple merging-intersection between two four-dimensional structures. The term *merging-intersection* is used in this theory, instead of the simple geometrical term *intersection,* because of a difficulty pointed out by Professor Laurence J. Lafleur. He calls attention to the fact that when two planes intersect within a given three-dimensional continuum, their intersection is a one-dimensional line. When two lines intersect in a two-dimensional plane, their intersection is a zero-dimensional point. On the basis of the geometrical principle illustrated by these two examples, it would be expected that an intersection between two four-dimensional dreams within a five-dimensional continuum would be a three-dimensional object. But a shared dream has four dimensions, not three.

The solution of this difficulty seems fairly simple. All shared dreams involve the meeting of two or more personalities at the intersection of their respective four-dimensional dream structures. Granted that that intersection, occurring within the five-dimensional continuum, would be theoretically an instantaneous, three-dimensional structure, it is evident that the recognition of the other person, and of the interests which the two shared, would tend to bring about a merging of the two dream structures into one, jointly experienced, four-dimensional dream. In waking life, the "present moment" is, theoretically, an instantaneous slice of the three-dimensional "material" world. Actually, it is now generally recognized that any moment of consciousness has duration. The phrase "specious present" has been used in this connection. Similarly, the intersection between two dreams would be — not the timeless flash called for by pure geometry, but a shared experience, in which one or both of the two dreamers would turn sufficiently from his previous train of dream-experience to merge his dream with that of the reciprocal dreamer. Quite probably a vast

[11] *Journal* S.P.R., Vol. VII, 1895-1896, pp. 104-106; also *Proc.* S.P.R., Vol. XXXIII, 1923, pp. 417-419.

number of momentary three-dimensional psychic intersections occur without being remembered. But such intersections, by reason of emotional and intellectual linkages, would be quite likely to develop into merging intersections. With rare exceptions, only those which developed into the merging type would be memorable.

A Three-Party Psychic Intersection: Among the cases known to the present writer, the best example of a merging-intersection between more than two dreams at the same time is the following, related in a letter dated May 3, 1869, by Henry Armitt Brown, who subsequently became a brilliant lawyer:

> 2. "In the fall of 1865 . . . while I was studying law in the city of New York, I retired to my room about midnight of a cold and blustering evening. I remember distinctly hearing the clock strike twelve as . . . drowsiness crept upon me and I slept. I had hardly lost consciousness when I seemed to hear loud and confused noises and felt a choking sensation at my throat, as if it were grasped by a strong hand. I awoke (as it seemed) and found myself lying on my back on the cobble-stones of a narrow street, writhing in the grip of a low-browed thick-set man with unkempt hair and grizzled beard, who with one hand at my throat and holding my wrists with the other threw his weight upon me and held me down. . . . Over and over we rolled upon the stones. . . . Presently I saw him reach forth his hand and grasp a bright hatchet. . . . I made one more tremendous fight for life, for a second I held my enemy powerless and saw with such a thrill of delight as I cannot forget the horror-stricken faces of friends within a rod of us rushing to my rescue. As the foremost of them sprang upon the back of my antagonist he wrenched his wrist away from me. I saw the hatchet flash above my head and felt instantly a dull blow on the forehead. I fell back on the ground, a numbness spread from my head over my body, a warm liquid flowed down upon my face and into my mouth, and I remember the taste was of blood. . . .
>
> "Then I thought I was suspended in the air a few feet above my body, I could see myself as if in a glass, lying on the back, the hatchet sticking in the head. . . . I heard the weeping of friends, at first loud, then growing fainter . . . with a start, I awoke . . . my watch told me I had not been more than half an hour asleep.
>
> "Early the next morning I joined an intimate friend with whom I spent much of my time . . . suddenly he interrupted me with the remark that he had dreamed strangely of me the night before. . . . 'I fell asleep,' he said, 'about twelve and immediately dreamed that I was passing through a narrow street when I heard noises and cries of murder. Hurrying in the direction of the noise, I saw you lying on your back, fighting a rough laboring man, who held you down. I rushed forward, but as I reached you he struck

you on the head with a hatchet and killed you instantly. Many of our friends were there and we cried bitterly. . . .'

" 'What sort of a man was he?' I asked. 'A thick-set man, in a flannel shirt and rough trowsers; his hair was uncombed and his beard was grizzly and of a few days' growth.'

"Within a week I was in Burlington, New Jersey. I called at a friend's house. 'My husband,' said his wife to me, 'had such a horrid dream about you the other night. He dreamed that a man killed you in a street fight. He ran to help you, but before he reached the spot your enemy had killed you with a great club.'

" 'Oh, no,' cried the husband across the room, 'he killed you with a hatchet.'. . .

"P.S. I may add that these friends of mine were personally unknown to each other. The first one in New York dreamed that he was the foremost who reached the scene, the other that he was one of the number who followed: both of which points coincided exactly with my own dream."[12]

If the three dreams took place substantially as reported above, we have here an account of a triple merging-intersection within the five-dimensional psychic world. The two friends had the same kinds of reasons for believing that Brown's real focus of consciousness was present within the personality of which they dreamed as they had for thinking that it was present in the physical body with which they conversed in waking life.

The Frequency of Shared Dreams: The two cases cited above are taken from a fairly extensive literature of this type. A collection of such cases, published in 1933, summarized 15 reciprocal dreams.[13] At that time the author estimated conservatively that there was about one chance in 840,000 that these cases were all false.

The fact that 15 cases of shared dreams were assembled in that study certainly suggests that such dreams *do* occur. Indeed, since (a) telepathy is now a fairly widely accepted phenomenon, and (b) since practically everyone admits that dreams occur, and (c) since a combination of dreams and telepathy would produce shared dreams, the phenomenon might seem to be an established fact. But if such dreams are real, they provide a hypothetical basis for a comprehensive exploration of psychic reality. Why, then, has there been no systematic series of experiments to determine how frequently shared dreams do occur? Any really serious and systematic research on the problem of survival would need to explore the question of shared dreams rigorously and with some thoroughness. This would (of course) require

[12] Walter Franklin Prince, *Noted Witnesses for Psychic Occurrences*, B.S.P.R., Boston, 1928, pp. 61-63.

[13] Hornell Hart and Ella B. Hart, "Visions and Apparitions Collectively and Reciprocally Perceived," *Proc.* S.P.R., Vol. XLI, 1932-1933, pp. 234-243.

the development of valid statistical methods for determining what degrees of likeness between the dreams of two or more people could reasonably be accepted as not due merely to chance. Such methods have already been outlined, and seem promising.

Apparitions Involve Merging Intersections: A few pages back in this article, five types of four-dimensional space-time structures were listed. The different types of psychic merging-intersections may be related to that list of types of structures. In ordinary historical narratives, the biographies of the characters intersect within the past areas of the outer world which common sense regards as stretching back from our current sensorimotor experience. In ordinary fiction, the intersections are between the imaginary biographies of the characters; all such intersections take place within an imaginary four-dimensional world. In historical fiction the intersections begin to involve two types of four-dimensional structures — namely, the real biographies of the historical characters and the fictional biographies of the other characters.

Conscious Apparitions of Living Persons: Apparitions of the living may be regarded as another variety of two-type intersection. In such experiences, a four-dimensional dream or other imagined experience intersects with the ordinary, outer-world experience of those who perceive the apparition. For example:

> 3. In 1854, the Rev. P. H. Newnham, then a student at Oxford, had a vivid dream that he was stopping in the home of his fiancée's family. As he started for bed, in his dream, he perceived his fiancée near the top of the staircase. He rushed after her, overtook her on the top step, and passed his arms around her waist, under her arms, from behind. On this he woke, and a clock in the house struck ten almost immediately afterwards. He wrote a detailed account of this the next morning to his fiancée. Crossing his letter came one from the lady, telling that about ten o'clock on the night when the dream occurred, on reaching the landing of the stairs, on her way to bed, she heard his footsteps on the stairs and felt him put his arms around her waist.[14]

In the above case, a representation of her fiancé's personality was perceived audibly and tactually by the future Mrs. Newnham. That this personality representation was actually the vehicle of Mr. Newnham's essential spirit is indicated by the fact that he, at the same hour of the same night, dreamed of observing and operating from within that same dream self. The experience was promptly attested in writing by both participants. This case is one of twelve "Apparitions

[14] Edmund Gurney, F. W. H. Myers, and Frank Podmore, *Phantasms of the Living*, Trübner and Co., London, 1886, Vol. I, pp. 225-226.

Corresponding with Dreams or Hallucinations in the Appearers," cited in the study referred to earlier.[15] In some of these other cases also, the apparitional person was dreaming of being in the presence of the person who perceived the apparition; in others he was attempting to project his apparition; in others he was experiencing an "astral projection"; in others he was merely thinking about the person by whom he was seen or the place in which he was seen. But in each such case, the personality embodiment acted as a vehicle to a greater or less extent for the essential spirit of the person represented, and the embodiment was perceived as if it were part of the sensorimotor surroundings of the percipient.

Collectively Perceived Apparitions of the Dead: The above merging-intersection between a man's dream and a woman's waking world involved only two people, both of whom were still physically alive. The following case involves what appears to be a series of merging intersections between the waking experiences of nine different people and an apparition of a deceased member of the family:

> 4. In June 1931, a chimney-sweep named Samuel Bull died of cancer in Ramsbury, Wilts., England, leaving an aged invalid wife and a grandson, James Bull, twenty-one years of age, living in the cottage where he died. In August 1931, a married daughter, Mrs. Edwards, came with her five children and her husband to live with them.
>
> Sometime in or after February 1932, Mrs. Edwards saw the deceased man ascend stairs and pass through a door, which was shut, into the room in which he died, and in which his widow had been lying for some time, but which was then shut up and unused. Almost immediately after Mrs. Edwards saw the apparition, James Bull also saw it.
>
> Later all the members of the family together saw the apparition. Even the smallest girl (aged 5) recognized it as "Grandpa Bull." The appearances continued at frequent intervals from that time until about April 9. Whenever the apparition was seen, all the persons present were able to see it.
>
> The apparition seemed solid, and twice laid his hand on the brow of Mrs. Bull. Once she heard him call her "Jane." On one occasion the figure was visible continuously for a period thought to have been a half-hour. It always appeared to be quite life-like. The features were clearly recognized. Mrs. Edwards spoke of noting the appearance of the hands, with the knuckles seeming to be protruding through the skin. He was dressed as he usually had been in the evenings when he had finished work. A muffler which he was wearing was noted as being different in color from the rest of the clothes.

[15] Hornell Hart and Ella B. Hart, *op. cit.*, p. 228.

The case was originally reported by the local vicar, the Rev. G. H. Hackett. Through him Lord Selborne and Admiral Hyde Parker heard of the case as early as April 3, 1932. Sometime between April 1 and 11 the vicar, at Admiral Parker's request, visited the family and put to Mrs. Edwards a series of questions covering the reported phenomena, which she answered perfectly consistently with earlier statements made by the family. On April 14, Admiral Parker, Mr. Hackett, Lord Balfour and Mr. Piddington called at the cottage and interviewed Mrs. Edwards and Mrs. Bull, who confirmed the information previously supplied. On May 31, 1932, the vicar visited the family and secured the signatures of Mr. and Mrs. Edwards to the statements of facts which he had previously secured from them.[16]

Are Apparitions of the Dead Similar to Apparitions of the Living? The above section gives brief summaries of two cases of apparitions. In an article published in 1933, summaries are given of 59 cases, for which more or less trustworthy evidence of objectivity is available. From that collection were excluded (of course) mere individual hallucinations, such as might be experienced by persons who were delirious or psychotic. The collection includes 34 cases of apparitions perceived by two or more individuals at the same time,[17] and 24 cases of apparitions which corresponded with dreams or with deliberate experimental efforts on the part of the persons whose apparitions were seen. One additional case belongs to both of these two types, making a total of 59 cases. Since apparitions are so fundamentally related to intersections between four-dimensional structures within the five-dimensional psychic continuum, it may be worth while to summarize briefly some of the conclusions reached in the above-mentioned study.

In the 35 cases of collectively perceived apparitions, the accounts show that, typically, each of the two or more percipients saw the same figure, in the same spatial location, wearing the same clothes, with the same facial expression and doing the same things. If the observers were at different locations they saw the figure as it would be seen from such locations — and even saw suitable reflections in a mirror when the figure was suitably located. If these experiences were subjective, they were collectively subjective, and they were consistent in their relations to the material environment. In the 24 cases of apparitions corresponding with dreams or with deliberate projections, the percipient and the person whose apparition was seen both remembered the joint experience (to a greater or less extent), consistently, as two people would who had met in ordinary life.

16 *Journal* S.P.R., Vol. XXVII, 1932, pp. 297-303.

17 G. N. M. Tyrrell said in 1942: "The number of cases [of collective percipience of apparitions] in our collection is certainly not less than 130 . . ." ("Apparitions," *Seventh Myers Memorial Lecture*, S.P.R., 1942, p. 79).

On the basis of the evidence summarized above, it seems safe to conclude (1) that apparitions of persons whose sensorimotor bodies are not present have been perceived in scores of different cases, widely scattered over the earth and at widely separate dates; (2) that these experiences (in at least scores of cases) have been objectively real in the sense of being consistently shared by two or more people; and (3) that these psychic intersections are a fundamental type of phenomenon which must be dealt with in any adequate theory of the nature of existence.

The two cases summarized earlier in this section are of markedly contrasted types. The apparition of Mr. Newnham is an example of a personality-representation which became the vehicle for the focus of consciousness of the person whose apparition was perceived. Fifteen of the cases summarized in the larger collection seem to have involved apparitions which became vehicles through which the essential consciousness of the appearer was observing and operating. The apparition of Samuel Bull, on the other hand, was a personality-representation of an individual whose physical body was dead. In the larger collection of cases, sixteen examples of this sort are given. The likenesses and differences between these two classes of apparitions constitute one of the crucial empirical facts of psychical research. If apparitions of the dead are found to be essentially the same sort of phenomenon as apparitions which constitute vehicles for the consciousness of absent living persons, then the hypothesis of survival of personality beyond bodily death is vastly strengthened. What are the actual facts as to the likenesses and differences between the two groups of apparitions cited above? The comparison may be discussed under six headings:[18]

1. Both the collectively perceived apparitions of the dead and the self-conscious apparitions of the living were recognizably similar to — and in various cases indistinguishable at first sight from — the sensorimotor bodies of the persons represented. This similarity, in both types of apparitions, applied to the face and other features, the stature, and the clothing.

2. The apparitions of the living persons were perceived at a distance from the living sensorimotor bodies of the persons whom they represented. The apparitions of the dead were also at a distance from the bodies of the persons represented — and in that group of cases, of course, the physical bodies were no longer alive.

3. The self-conscious apparitions of the living were perceived by sight in almost all cases, but were also experienced by touch and by sound in some instances. Apparitions of the dead also were visually

[18] Hornell Hart and Ella B. Hart, *op. cit.*, pp. 247-249.

perceived in almost all cases, but also are reported to have spoken to the percipients and to have touched them in some cases.

4. Both the conscious apparitions of living persons and the apparitions of persons known to be dead were seen in the great majority of the cases by persons with whom they had close emotional ties. Wives, husbands, fiancés, close friends and relatives made up most of the list of apparitions in both types of cases.

5. Both the conscious apparitions of the living and the apparitions of the dead, in various cases, have appeared at a time of crisis in the life of the person toward whom the apparition appeared to be directed. In both groups of apparitions, cases are found in which the apparition seemed to be purposefully concerned to be of help in that crisis.

6. Both the conscious apparitions of the living and the collectively perceived apparitions of persons known to be dead made apparently intelligent and purposeful adjustments to physical objects and to people. Smiling and nodding at the percipients, touching them, conversing with them, bending over a sick child with a look of intense love, entering through a door, walking across a floor, walking up or down stairs, looking at a portrait, and sitting on a chair or a bed, are examples of such adjustments.

7. Both types of apparitions also, at times, appeared to transcend the ordinary limitations of the sensorimotor world. They at times passed through locked doors or through other material objects. They sometimes floated in the air without physical support. Such departures from the usual modes of sensorimotor behavior, however (if one may judge tentatively from the small samples available) were much more frequent among the apparitions of the dead. Such apparitions sometimes took shape or faded out gradually, were transparent, and were sometimes self-luminous. Self-conscious apparitions of the living, in the cases cited here, did none of these latter things.

Aside, then, from these tendencies to be luminous and transparent, the 15 apparitions which served as vehicles for the observing and operating consciousness of living persons were markedly similar to the 16 collectively observed apparitions of the dead. Merging intersections between the dreaming consciousness of a living person and the waking consciousness of another living person evidently involve apparitions. But if amazingly similar apparitions are experienced (as in the above cases) when the physical body of the person represented is dead, what then is intersecting with the waking experience of the living percipient? Could it be the surviving consciousness of the appearer?

D. How are the Five Dimensions Related to the "Material World"?

A crucial element in the theory proposed by Dr. Smythies is his distinguishing between "physical" and "psychical" space-time continua. The present writer believes that that type of analysis complicates the problem needlessly, without providing a basis for effective psychical research. We need not concern ourselves with anything "out there" which "causes" the observations which we experience as part of the configuration which we call a "material object." Dualism, of the sort on which Dr. Smythies' theory is based, can be obviated by an approach which starts with the stream of conscious experience, and subdivides it by means of a clear-cut experiment.

This experiment consists in approximating as closely as feasible to the following operations: going into an absolutely light-proof, sound-proof room which is noiselessly and draftlessly air-conditioned, sitting down in a perfectly comfortable chaise-longue, switching off the lights, relaxing completely, but with alert consciousness, and ceasing to pay any attention to breathing, heart-beat and other physiological processes. Under those conditions, certain aspects of one's consciousness disappear for the time being. We may call these "the sensorimotor world." All other parts of one's experience may be called "the inner world."[19]

The sensorimotor world may at first appear to be identical with the material space-time world of common sense. But when we examine our experience-configurations more carefully we find that this is not true. For one thing, the sensorimotor world, which is shut out by going into the dark, quiet, comfortable room, is a matter of the continuous present. The past is contacted only through memory and through the interpretation of records; memory and interpretation belong to the inner world. Time, therefore, is an inner-world phenomenon, which we project into the sensorimotor world by interpretation.

The kinds of experience which belong in the inner world include the following: (1) All dreams belong there, since one could dream under the conditions of the dark, quiet, comfortable room. (2) Also to the inner world belong concrete memories of past sensorimotor experiences and of dreams. (3) Concretely visualized plans and anticipations of the future also belong to the inner world. But in addition to these three types of specific imagery, two more kinds of inner-world experience must be recognized. (4) Generalizations expressed

[19] Professor Ducasse properly criticizes the above over-simplified statement of the experiment. In a forthcoming article a more adequate discussion will be offered which (it is believed) meets Professor Ducasse's objections.

in words, diagrams or other types of symbols belong here. (5) Beyond these we must recognize the existence of wordless and imageless thought, which we may call "intuition." Types (4) and (5) go beyond our five-dimensional continuum, and may provide the basis for the sixth and perhaps subsequent dimensions.

In the light of the above analysis, how can we think of "material objects" without the dualistic assumption of the existence of unknowable "things out there"? The answer consists in being concerned only with the configuration of experience. Any material object may be defined operationally as consisting in that configuration of observations and operations, actual, remembered and potential, which are correlated with the name or with the other key observation or operation by which it is identified. The "actual" operations and observations of a given "material object" belong to the sensorimotor world; the remembered and potential ones belong to the inner world.[20]

In What Sense Do We Share a Common Sensorimotor World? Under the five-dimensional system proposed above, what would one mean by saying that "we share a common physical world"? The physical bodies of one's human associates are material objects, as defined above. These bodies appear to be very similar to one's own body. They act in ways analogous to the ways in which oneself acts. In one's own body, the "I" observes and operates upon its sensorimotor world from a focus located in space and time. These other living human bodies act as if they provided foci from which other consciousnesses like one's own observe and operate upon this same sensorimotor world. One finds that one can cooperate with these others in the present, that one can recall common memories of past sensorimotor experiences, and that one can plan future cooperation with them by means of verbal symbols, which they usually interpret in ways coordinate with one's own interpretations. One has no absolute and final proof of the independent existence of these other consciousnesses, but the hypothesis that they exist proves exceedingly useful, and is confirmed by so many detailed observations and operations that sane persons practically universally appear to adopt it.

But what about the "material world" of the physicists? The present approach assumes that associated human beings share the same contemporary sensorimotor world — defining "sharing" in terms of coordinated and correlated operations and reported observations. It also assumes that competent human beings can verify and coordinate each other's remembered and potential experiences correlated with those specific sensorimotor experiences. The physical sciences consist merely in systematic explorations of the remembered, actual and potential

[20] Cf. Whately Carington, *Thought Transference*, Creative Age Press, New York, 1946, pp. 141-144.

operations and observations which are correlated with given types of experience-patterns. They provide descriptive and predictive formulas for more effective dealings with our shared sensorimotor world, and with its associated memories and potentialities. The "material world" is merely a complex hypothesis which is used by the public in a commonsense form, and by physical scientists in a rigorous form, to summarize our experience of "material objects" as defined above.

Five-Dimensional Space Contains an Unlimited Number of Four-Dimensional Systems: The implications of five-dimensional space can easily be misunderstood. Commenting on a preliminary draft of this article, Dr. J. R. Smythies wrote:

> "Your two space systems comprise on the one hand psychical space which you fill with dreams, memories, etc., and physical space which you equate with the space filled by the perceived body and the visual field (your sensorimotor world)."[21]

But this is a misinterpretation. The five-dimensional theory regards the sensorimotor world as simply the present-time slice of a very special case among the unlimited number of four-dimensional systems contained within the psychic continuum. Every work of fiction creates a different four-dimensional system — parallel in many ways to our historical space-time world, but having its own imaginary dimensions of time and space. In Galsworthy's *Forsyte Saga*, a series of successive novels were fitted into one such fictional four-dimensional system.

Similarly, a shared dream (to the extent that it was actually shared) would constitute a four-dimensional structure which might conceivably be extended into a four-dimensional continuum. If surviving personalities found themselves in an "astral world" that too would constitute a four-dimensional continuum.

Every Four-Dimensional System Has its Own Time-Scale: Another failure of the original draft of this article to make clear the full implications of the five-dimensional theory is indicated by the following comment by Professor H. H. Price:

> "I think we can all agree that the dream-images of your soldiers in the dormitory are in different spaces and that all of these spaces are different from the physical space in which the dormitory (and their bodies) are located. . . . On the other hand I suppose we *can* say that your dream-events and mine and everyone else's all have existence in one single time, which is also the time of the physical world."[22]

On the other hand, Dr. J. G. Pratt raised an opposite difficulty:

---

[21] J. R. Smythies, letter to Hornell Hart, May 20, 1952.

[22] H. H. Price, letter to Hornell Hart, May 7, 1952.

> "If we induce a dream in hypnotism, we can measure its duration; but do we take the time to be equal to the period during which the person dreams, or to the apparent time covered by the dreamed action?"[23]

The answer to both Dr. Price and Dr. Pratt is that every four-dimensional continuum has its *own* time-scale, which comes into equivalence with the time of any other four-dimensional continuum only when it intersects such another continuum. To illustrate, let us suppose that a fiction writer starts with a scene in which a man is proposing marriage to a girl. From this common space-time scene, the writer might develop an unlimited number of different possible plots. In one of the plots the girl accepts the man, they marry, have children and become a typical middle-class family. In the second plot the girl rejects the man, they separate, each of them finds another life partner, and they set up two separate families. In a third plot, the girl rejects the man with contemptuous ridicule, he loses his temper, murders her and commits suicide. Such a group of plots would illustrate what the science fictioneers call "branching time lines." Each of these plots could be handled in relation to its own independent time-scale (or scales), though all of the plots would have started from the same four-dimensional intersection, namely, the proposal scene.

Science-fiction plots illustrate still further the multiplicity of time-scales within the five-dimensional continuum. In one such story, a girl rejected the man who sought to marry her, whereupon he joined a group of scientists who were perfecting a space ship. This ship had developed a type of super-drive which approached the speed of light, and he took a journey in the ship, returning when the girl was an old woman, whereas he was still a young man, because of the alteration of the time dimension by the excessive speed. In another science-fiction story, the hero was placed in suspended animation, and awoke tens of thousands of years later. In another, a crew which started out toward a distant star, using an early model of space ship, found, on arrival, that a much faster ship had been invented after they left, and that other crews had arrived decades ahead of them. In other plots, some supposed means of speeding up the hero's time perception is found, so that the people in ordinary time appear to slow down so much as to become practically motionless, while the hero moves so fast (relative to ordinary people) that he becomes quite invisible. In one plot, the hero learned to reverse ordinary time, so that he could observe other people going backwards to any given point, and could thus control events to suit himself. This, of course, is merely a variation of the time-machine theme, which has had scores of different

[23] J. G. Pratt, memo to Hornell Hart, May 28, 1952.

treatments in science fiction. Comparative analysis of these science-fiction plots suggests the proposition that, in each such case, not one time dimension but two or more are involved. The story idea hinges, in each case, upon the difference between the time experience of the hero and of other characters in the story. Each character has his own unique time-line, on which his successive experiences are strung like beads. His personal identity is inseparably connected with his unique time-line, and with his acceptance of each experience on it as his own.

To summarize very briefly: every four-dimensional system has its own independent time. For the sensorimotor world, this is sidereal time. In a dream, time may be radically different. In the life beyond death, as reported in various purported communications, it is also different. But when two or more four-dimensional systems intersect fully, their time-dimensions and the time-lines of the participating personalities must coordinate with one another throughout that intersection.

E. Psychic Experience Versus the Rules of the Material World

Why Psychic Experience Transcends Time and Space: Under the theory presented in the present article, dreams, memories and fictional scenes all constitute four-dimensional structures existing in the psychic fifth dimension. This theory would explain quite simply why telepathy, clairvoyance and precognition so often operate independently of the limitations of space and time. To make this clear, let us set up an imaginary experiment (which the reader can easily carry out if he cares to do so).

Suppose that one goes into a dark, quiet and secluded place, sits in a comfortable chair, closes one's eyes, and calls up in imagination a dwelling in which he has recently spent a considerable period of time, or of which he has vivid and protracted memories. Suppose that one goes back to the earliest memories which he has of this dwelling, then recalls as clearly as possible a series of events which occurred there, imagining himself as moving through those scenes once more. Suppose that he then brings back to mind the latest contact which he has had with that home. Suppose finally that he imagines vividly a future party which he plans to hold in that house, or some alterations which he proposes to have made in it.

During this period of recollection the experimenter has called up a four-dimensional structure, extended in space and in remembered and projected time. Within that structure the experimenter's focus

of consciousness has moved about. But the experimenter has also been maintaining his own unique time-line. He can say to himself: "It was five minutes ago that I was imagining myself as entering the door of my home on that day when I first began to live there. It was a moment later that I recalled an event which originally occurred three years after I first moved into that house. . . . Just a little later in my experiment I was imagining a scene from the future of that same house."

Qualitative Differences Among the Dimensions: The above experiment brings out certain objective facts about the nature of experience in the psychic fifth dimension. We must distinguish clearly between the series of geometrical dimensions as an abstract set of logical tools, on the one hand, and on the other, the concrete realities of experience to which we attempt to fit these dimensions. In mathematics, dimensions X, Y, Z and W are interchangeable. But in practical life, we note vitally important qualitative differences between "vertical," "east-and-west," "north-and-south," and "past-to-future."

First, it must be noted that the three spatial dimensions are not ordinarily measured (in geography) on the rectangular rectilinear axes of solid geometry. Vertical locations are measured on converging lines, all of which (theoretically) pass through the center of the earth. Horizontal locations are measured along curved lines, on the surface of a somewhat flattened sphere. The vertical dimension has the qualitative peculiarity of being associated with gravitation. Travel east or west keeps one at a constant distance from the equator (with consequent climatic implications) whereas travel north or south involves moving toward or away from tropical or arctic regions.

Time has various fundamental differences from the spatial dimensions.[24] Outstandingly, in time (considered as a dimension of our solar system) we can move only forward, and that at an inexorably fixed speed (barring such extremely exceptional processes as travel approaching the speed of light.)

The above qualitative peculiarities of each of the first four dimensions should prepare us to expect special qualitative characteristics in the fifth dimension. In the psychic dimension, whether one examines the ordering of objects and events in dreams, in memory, or in constructive imagination, it is evident that one's focus of consciousness is able to jump about, at will or on impulse, in psychic space and time. In purposeful recollection, or in memory, one shifts deliberately and quite often instantly from point to point in psychic space-time. In

---

[24] Laurence J. Lafleur, *op. cit.*, pp. 169-178; also letter to Hornell Hart, July 10, 1952.

random daydreams and ordinary night dreams such shifts also occur.[25] Thus, in the psychic dimension, experience is ordered, not by physical distance, nor by sidereal time, but by what is sometimes called "the association of ideas,"[26] or "emotional, ideational and habitual linkage." Likenesses and differences, logical relationships, past loves, fears, hates, anguish and joy, shared experiences, reciprocal needs — such are the psychic gravitational attractions and the psychic bridges which unite the objects and experiences of different four-dimensional structures within the five-dimensional psychic continuum.

A few pages back, it was observed that fiction and drama involve intersections between the four-dimensional lives of the characters. But note that such intersections subordinate the rules of material space-time to the rules of the psychic dimension. The dramatist leaps around from place to place and from one time-crisis to another in constructing his drama.

The Material World as a Special Case: In the preceding section it is suggested that apparitions are a type of phenomena which involve intersections between "physical" and "mental" four-dimensional structures. If such intersections do occur, it seems natural to regard "physical" space-time as a special type of four-dimensional structure within the psychic five-dimensional continuum. This special case of four-dimensional structure, which we call the physical universe, has certain peculiarities. Communication there takes place by means of the senses. One cannot move from one point to another, in space or in time, without traversing a continuous series of intermediate points. But mental four-dimensional structures are of a different character. Communication in and between such structures is by means of telepathy. An intersection between two mental four-dimensional structures would appear to involve a high degree of telepathic rapport, while an intersection between a mental and a physical four-dimensional structure (as in the veridical experiences of astrally projected consciousness) involves clairvoyance.

Mind Often Dominates over Matter in the Psychic Dimension: The above section offers a theoretical explanation of the transcendence

[25] Dorothy H. Pope, Managing Editor of the *Journal of Parapsychology*, points out that, even in the psychic continuum, one's freedom to move about in time and space has limits. Once one has made a jump (by ESP or by imagination, or in a dream) one tends to follow sequences of time and space which are similar to those of the sensorimotor world. She writes: "I've heard of apparitions who disregarded matter by walking through walls, but I don't believe I ever heard of one which disregarded time. You don't see an apparition shoot itself before it picks up the gun."

[26] The "psychic-fifth-dimension theory" appears to be directly in harmony with Whately Carington's "association theory of telepathy," as developed in his *Thought Transference* (pp. 98-161). The relations between the two theories will be explored in a subsequent article "Can the Five-Dimension Theory be Useful in Psychical Research?"

of space and time by telepathy and clairvoyance. But how about psychokinesis?

The present writer has frequently questioned groups of people about their dreams of flying. Theoretically, one might be expected to dream of flying in an airplane or a dirigible. More rarely, one might be expected to dream of flying with feathered wings, as angels are supposed to fly, or as mythological personages are related to have flown with magic bird costumes. But aviation dreams are rare (except by people whose daily lives involve frequent flying) — and angel-winged dream flights are almost non-existent, among persons to whom these inquiries have been addressed. About one-third to two-thirds, of the typical group, report having had flying dreams, but the plurality of such flights have been dreamed to have been achieved by mere will-power — aided, perhaps, by some paddling motions of the feet or hands.[27]

In one such dream, recorded by the present writer, I found myself pursued by some enemy. In my need to escape, I realized that I could pass through a solid stone wall if I merely determined strongly enough to do so. And I did escape by that method, in the dream.

Quite in line with such dreams and imaginations are certain characteristics which have been repeatedly reported in connection with apparitions, both of the dead and of the living. Apparitions typically do adjust themselves to their physical surroundings. They may enter through a door, sit in a chair, look at a picture or at a person — even touch a person's arm or face with their hands. But apparitions also frequently transcend their material surroundings. They pass through doors which are closed and locked. They rise into the air. They dissolve into nothing when one seeks to embrace them.

Levitation of living persons is one of the persistently reported types of psychic phenomena. The occurrence of "apports," the passage of matter through matter, and the materialization of spirit forms have also been reported repeatedly. Without passing judgment as to the authenticity of such phenomena, it is worth pointing out that they might be expected to occur occasionally if the physical world is merely

---

[27] Prof. H. H. Price, in a letter to Hornell Hart, dated May 7, 1952, commented as follows on the above paragraph: "May I just add that my own experiences of dreams of flying (which I used to have fairly often at one time) entirely support what you say? Although I have flown quite a lot in real life, both as pilot and as passenger, and have almost a passion for aviation in all its forms, I have never found myself flying with wings in my flying dreams. It has usually been much like swimming—only that one was swimming in air instead of water—and sometimes it has just consisted in making oneself rise over a wall or the like in a standing position by sheer effort of will. The experience has always given me intense pleasure, and a certain pride, as of one who is learning to accomplish a rather difficult feat. But I don't think I have ever managed to 'fly' more than twenty yards or so."

a special case of four-dimensional structure in the five-dimensional psychic continuum.

The psychokinetic influencing of the fall of dice and other objects is, however, a well-authenticated type of psychic phenomenon. Cases of the psychic healing of structural lesions in human and animal bodies have also been reported in apparently authentic cases. Such occurrences are also in line with the fact that mind does often control "matter" in the *mental* structures of the psychic continuum. In the sensorimotor world also, the fact that a soldier's body can be put into action by so mental a process as the giving of an order by an officer — and, indeed, the fact that one can raise one's own arm by determining mentally to do so, are utterly mysterious on the basis of materialistic theories, whereas they become quite matter-of-course when one recognizes the sensorimotor world as merely a special case of four-dimensional structure within the five-dimensional psychic continuum.

Escape into the Fifth Dimension: A further development of the significance of the five-dimensional theory, as explaining some types of psychic phenomena, may be found along the following lines. Let us suppose (as has frequently been done) that a Mr. Square and a Mr. Triangle both live in a two-dimensional "Flat World" (with time as a third dimension). Neither Mr. Triangle nor Mr. Square is aware of any other dimensions except length, breadth and time. Let us suppose that Mr. Square imprisons Mr. Triangle in a circular prison. As long as the operations are confined to the three-dimensional flat world, and as long as the circle remains closed, it is impossible for Mr. Triangle to escape. But along comes a four-dimensional person who recognizes this three-dimensional Flat World as simply one of an infinite number of such worlds which might be fitted into his four-dimensional continuum. This person might take Mr. Triangle out of his circular prison without breaking the wall, leaving Mr. Square confronted with a miracle.

Similarly if we regarded our four-dimensional world as simply one of an infinite number of such structures which might be contained in the five-dimensional psychic world, we could well imagine that an entity who had free range of the psychic continuum might take out a prisoner from a completely closed and locked dungeon. This line of explanation would account for apports, for the sudden appearance and disappearance of apparitions, and for various other psychic phenomena. Argument along similar lines might possibly explain such conceivable phenomena as instant passage to some remote point (the "space-warp" of the science-fictioneers), the passage of matter through matter, the tying of a knot in a continuous rope without freeing the ends, and the like. The present theory would hold, however that the

fundamental explanation for the occurrence of psychic phenomena lies rather along the line of recognizing that the basic characteristics of the psychic continuum are different from those which obtain in the "material world." The use of an extra dimension may provide a *modus operandi* in some cases, but the basic fact is that, in the psychic continuum, the focus of consciousness normally transcends space, time and matter.

Conclusion: Materialistic prejudice attempts to impose the assumption that the laws of motion, of perception and of matter in the physical space-time world must be universal in their scope. But in the light of the five-dimensional theory, such assumptions appear to be narrowly parochial. Psychic phenomena might naturally be expected to conform rather to the basic nature of the psychic fifth dimension.

F. The "Five-Dimensional" Psychic Hypothesis: A Summary

On the basis of the foregoing discussion, the following propositions are submitted as providing a rational foundation on which to base psychical research with some reasonable hope of obtaining verifiable conclusions about survival of personality beyond bodily death, and about the fundamental nature of our own existence.

1. The most inescapable fact about existence is that something thinks "I" and that this "I" observes and operates from a focus of consciousness which finds its locus along a unique time line, occupying such foci in a succession of four-dimensional space-time structures.

2. The most persistent and consistent of these four-dimensional space-time structures is the one whose present moment the "I" experiences continuously (during ordinary waking consciousness) as the sensorimotor world. In this structure, (a) one can normally traverse time only from past to future; (b) one can normally get from one point to another only by traversing a continuous series of intermediate points; and (c) one can normally move matter outside one's own body only by activating a continuous chain of material movements from one's body to the object which is to be moved, or by altering a force-field which includes the object.

3. During dreams, memory, imagination and hallucination, one's focus of consciousness may observe and operate within an unlimited number of different space-time structures which exist within the psychic five-dimensional continuum. Within these structures (a) one can move back as well as forward in time; (b) one can move instantly from point to point in space and time, without traversing a continuous series of intermediate points; and (c) one can develop the capacity

to move and to shape matter (including one's own body) by direct action of one's will.

4. Four-dimensional structures intersect and merge by telepathy in shared dreams. Apparitions of the living involve merging intersections of four-dimensional dreamed or imagined structures with the sensorimotor world.

5. That the sensorimotor world is a special case among the unlimited number of space-time structures within the five-dimensional psychic continuum is suggested by the following facts: (a) that apparitions and other types of intersections between the sensorimotor and other space-time structures occur; (b) that psychic transcendence of time occurs in the form of precognition; (c) that psychic transcendence of space occurs in the forms of shared dreams, apparitions, telepathy, and clairvoyance; and that psychic transcendence of matter occurs in the forms of psychokinesis and ectoplasmic materializations.

6. That we share with one another the same sensorimotor world (in the sense that we are able to share experience with each other by coordinating our observations and operations with one another far beyond anything which could be explained by chance or by self-delusion) is an unprovable but extremely well-supported hypothesis.

7. That similar sharing of experience in four-dimensional mental structures continues beyond the death of the sensorimotor body is suggested by the close parallelisms between self-conscious apparitions of the living and apparitions of the dying and the dead.

G. Some Research Priorities which Emerge from this Five-Dimensional Theory[28]

The theory of the five-dimensional psychic continuum provides a method of analyzing and classifying human experience. The known facts — both of "normal" existence and of psychic phenomena — fall naturally into place within the five-dimensional framework. This theory, however, is by no means self-obvious. Preliminary discussion has already brought out a series of alternative theories which have been advanced by other students of psychic phenomena. The pros and cons of these alternatives will be discussed (in comparison with those of the five-dimensional theory) in two subsequent articles.

At the present point, however, it is important to note that the chief

[28] In a letter dated April 28, 1952, Professor Ducasse has criticized an earlier draft of this section as follows: "As regards the research program, its specific proposals seem to me very good, but, so far as I can see, they are not suggested specifically by the five-dimensional theory . . . . An experiment can be properly said to be *based on* a given theory only to the extent that the outcome of the experiment would tend to decide between the given theory and its possible rivals . . . ."

touchstone for testing such theories consists in exploring what implications they have with respect to research. Theories of this sort have two practical bearings on research programs. First, any such theory implies certain priorities in research. It suggests the probable importance of certain kinds of inquiry, and the likelihood of obtaining significant results by collecting certain types of data and performing certain types of experiments. Second, any such theory, when it has been utilized as a basis for research priorities, and has been explored along the lines which it suggests, should lead to the designing of crucial experiments, by means of which the truth or falsity of rival theories may be tested.

The psychic-fifth-dimension theory opens up a whole series of challenging lines of research, in which controlled experiments and statistically tested findings are clearly obtainable — provided that financial resources, competent personnel, and persistent courage can be brought to bear on the presently obvious problems, and on the further hypotheses which will certainly develop if present clues are vigorously pursued.

1. A Fresh Review of Spontaneous Cases: The collection and investigation of spontaneous cases of psychical phenomena have been among the outstanding contributions of the British, the American and other SPR's. The theory presented in the present article emerges out of the analysis of such cases. Sciences, in their early stages, usually progress by fitting theories to collections of spontaneous data, and then seeking new data and fresh methods of analysis in the light of the theories. The present theory points toward the importance of collecting further spontaneous cases, and analyzing them along the following lines:

(a) Shared, or reciprocal, dreams need to be collected — i.e., dreams in which two or more people interact with each other, and which are remembered independently by two or more of the participants, and dreams occurring at approximately the same time, reported independently by two or more dreamers, when the dreams are more similar to each other than can reasonably be explained by chance or by shared waking experiences. Points to be particularly noted about such dreams include the following: (1) the extent and degree of similarity and of differences; (2) the amount and types of communication which occurred in the dream between the reporting dreamers; and (3) possible emotional factors which might have generated the dream.

(b) Clear dreams need to be collected (i.e., dreams in which the dreamer becomes aware of the fact that he is dreaming, but still continues the dream.) Points to be particularly noted about such dreams include the following: (1) frequencies with which such dreams recur to the same individuals; (2) conditions which

appear to be favorable to having such dreams; (3) techniques employed (if any) to induce such dreams; (4) extent to which the dreamer is able to control the content and development of such dreams; (5) types of personalities encountered in such dreams, and any indications which point, or seem to point, toward such personalities being independent consciousnesses or being mere figments of the dreamer's imagination; (6) appearance in such dreams of representations of persons known to be dead; and (7) connection of such dreams with dreams of flying and of falling.

(c) Astral excursions need to be collected (i.e., dreams or waking visions in which the dreamer or seer seems to be visiting places outside the normal sensory range of his physical body). Points to be particularly noted include the extent to which such experiences involve such items as (1) seeing one's own physical body from the outside; (2) perceiving physical objects, but being unable to move them; (3) being able to pass through closed doors or solid walls; (4) being levitated; (5) perceiving other people, who share the power to levitate and to pass through solid objects, and with whom one can communicate; (6) encountering persons known to be dead; (7) being perceived as an apparition or vision by persons seen while on such excursions; (8) acquiring, while on such excursions, information about physical objects, people or events, which one could not have acquired otherwise; (9) observing a "silver cord" connecting one's astral body and one's physical body; and (10) experiencing a sense of falling (with or without a feeling of shock) on returning to one's physical body. In connection with such points, it may be important to ascertain the extent to which the person reporting astral excursions has become familiar with the literature on the subject, or with the reported experiences of others who are familiar with the literature.

(d) Apparitions of the living need to be collected (i.e., waking visions or other sensory or pseudo-sensory perceptions of persons who are alive at the time, but whose physical bodies are not at the sensorimotor locations where they are perceived). Points to be specially noted are: (1) To what extent are such apparitions perceptible to other human beings? To what extent do they seem to be perceptible to dogs, cats, horses or other animals (judging from the behavior of these)? (2) Do such apparitions appear to be normally dressed, and natural in color? (3) To what extent do such apparitions display normal variations in perspective as they move about, or as they are seen by different percipients looking from different angles? (4) In what ways do such apparitions adjust normally to the physical environment (as by entering through open doors, mounting or descending stairways, sitting in chairs, seeming to perceive physical objects, etc.)? (5) In what ways do they transcend ordinary physical behavior (as by

appearing or disappearing suddenly, passing through solid matter, being transparent, etc.)? (6) In what ways do they give evidence of definite purpose? (7) Do they speak or otherwise communicate, and if so, what is the extent of the communication? (8) To what extent do such apparitions involve emotional linkages between the percipient and the appearer? (9) Do such appearances coincide and correspond with dreams or with other conscious experiences of the appearers, in which they seemed to be observing and operating from the positions in which their apparitions were perceived? (10) Is a given apparition of this kind perceived by more than one person at the same time?[29]

(e) Apparitions of the dead need to be collected (i.e., visions, or other sensory or pseudo-sensory perceptions of persons whose physical bodies are known to be dead at the time). Points to be noted include: In what ways are apparitions of the dead similar to, and in what ways different from, the most frequent types of apparitions of the living, with respect to each of the points enumerated above?

2. *Systematic Recording of Dreams by Groups of People.* This line of research would be designed to serve the following purposes:

(a) To determine the actual frequencies of shared dreams between various types of pairs of people. At present our knowledge on this point is extremely meager. Only a very small fraction of dreams are consciously remembered in waking life. The probability of an actual shared dream being publicly reported as such is the probability of that dream being remembered by a given participant, multiplied by the probability of the same dream being remembered by another participant, multiplied by the probability of one of them telling the other about it, multiplied by the probability of such a verbal discussion of the sharedness of the dream being reduced to a published report. Since each of these probabilities is small, the joint probability is exceedingly minute. Hence it seems safe to assume that such dreams are much more frequent than is generally supposed. If dreams are shared fairly often, the discovery of that fact will open up major lines of research into the nature of the psychic dimension.

(b) To determine the frequency of clear dreams, the types of people who experience them, and the conditions under which they tend to occur. A clear dream may be defined as one in which the dreamer is aware that he is dreaming and yet continues to dream. Various questions about clear dreams need to be explored. First, to what extent, and by what techniques, is it possible deliberately to increase the frequency and the duration of such dreams? Second, how fully is it possible for a dreamer to be in possession of his normal waking faculties in such a dream — such

[29] The paragraph on apparitions of the living incorporates several improvements suggested by Professor H. H. Price.

as remembering purposes which were formulated in his waking life, dreaming coherently and consistently, being able to reason clearly and to experiment verifiably, formulating purposes and conclusions in the dream which can be carried back into waking life, and the like? Third, if two people both developed fairly full control of their powers to dream clearly, to what extent could they call up dream images of one another, and to what extent could such reciprocal images (if achieved) be made vehicles for verifiable telepathic communication? Fourth, if clear dreamers should find it possible to achieve shared dreams of one another, to what extent could they call up clear dream images of deceased persons, and to what extent could such dream images become vehicles for communication of valid evidences of survival?

(c) To determine the frequency of precognitive dreams, and more about their character. Precognitive dreams have already been made the subject of a fairly systematic, but inconclusive, inductive study, in which Oxford students participated. Dunne's hypothesis suggests a high degree of frequency for such dreams. If this proves to be true even to a considerably less degree than Dunne anticipated, this fact is likely to call for major and fundamental reconstructions in many of our basic concepts of spiritual reality and of survival. The projected study of dreams should be set up in such a way as to check on the precognitive factor in conjunction with the other basic questions.

(d) To become more familiar with the difficulties involved in trying to remember dreams and to record them accurately and fully.

If the theory of the psychic fifth dimension be accepted, even tentatively, it becomes evident that dreams provide one of the most frequent, most vivid and most spontaneous forms of extrasensory four-dimensional structure. The systematic exploration of dream phenomena, in the light of the five-dimension hypothesis, should throw a good deal of light on possible further lines of research into the psychic continuum.

3. Experimental Induction of Clear and Reciprocal Dreams and of Astral Excursions: The induction of dreams by hypnosis is a well known phenomenon. Experiments should now be tried to determine to what extent *clear* dreams can be produced by hypnosis. Persistent attempts should also be made to develop such dreams through autohypnosis. If and when clear dreams can be obtained fairly dependably, the next step should be to suggest to paired individuals, independently, that they are to dream clear dreams about each other, with more or less detailed suggestions as to surroundings and events to be experienced and topics to be discussed in the dream. An almost unlimited variety of conditions would need to be explored in order to find out what procedures are most likely to produce clear shared dreams.

4. Experimental Encounters with "the Dead" in Dreams: If and when it becomes possible to produce clear shared dreams deliberately, with reasonable frequency, the next stage would be to induce clear dreams of dead persons, using a series of different dreamers, and taking measures to insure absence of sensory communication between them. If and when that type of phenomena can be produced at will, the problem of developing reliable tests of the independent identity of dead persons dreamed about can be tackled.

The above program is, of course, in a quite preliminary stage. It undoubtedly involves great difficulties and quite likely considerable dangers. It is outlined chiefly with a view to indicating possible lines along which the five-dimensional-psychic-continuum theory might reasonably be expected to produce fruitful results in relation to the problem of human personality and its survival of bodily death.

ESP Success and Trial Position[1]

J. G. PRATT

For this study I have taken the ESP data of another experimenter, Dr. S. G. Soal of London University. He sent these records to the Parapsychology Laboratory in the spring of 1951 for the investigation of psychological effects not revealed by the total scores of the tests. Later he himself came as a Fulbright Scholar for a period of joint research upon these records. The findings I wish to present at this time were made before Dr. Soal's visit.

Dr. Soal obtained the data in a series of extremely well controlled ESP tests done during the period, 1945-1950. The subject in these experiments, Mrs. Stewart, attempted to identify animal cards or "targets" under conditions of independent recording, safeguards against sensory cues, careful observation and checking, and other precautions that go beyond the requirements usually met by psychological research. Simply to describe these conditions fully would take all of my time, and I must refer you for the details to reports that have already been published (1, 2).

Here is a record sheet from this series with as much of the data as are essential for understanding the present report (Fig. 1). This sheet provided spaces for recording the results of two columns of 25 trials each.

Before each session the experimenter prepared the sheets he would need by filling out the two columns of digits 1 to 5 that determined the target order. The experimenter and a sender sat facing each other, separated by a screen. For each set of 50 trials the sender shuffled a set of five animal target cards and arranged them where she alone could see them in five positions numbered 1 to 5. The subject sat out of sight in another room with a blank record sheet for writing her calls. With her was an observer.

When the arrangements were complete, the experimenter held up a card with the first digit on the list so the sender could see it. The sender silently touched the back of the animal card in that position to indicate the target for that trial. The experimenter, who did not know the target, gave a ready signal, and the subject promptly wrote what she thought was the target in the first call space. (For convenience the calls and the target digits are shown in Fig. 1 as if they

[1] This is a research report which was presented on September 5, 1952, at the annual meeting of the American Psychological Association in Washington, D. C. The research was conducted with the support of a grant from the Rockefeller Foundation.

RECORD SHEET

[Simplified for purposes of illustration]

Subject: Mrs. Gloria Stewart Date: Nov. 19, 1945

(Spaces for recording Experimenter, Sender, Observers, Rate of Calling, Special Experimental Conditions, etc.)

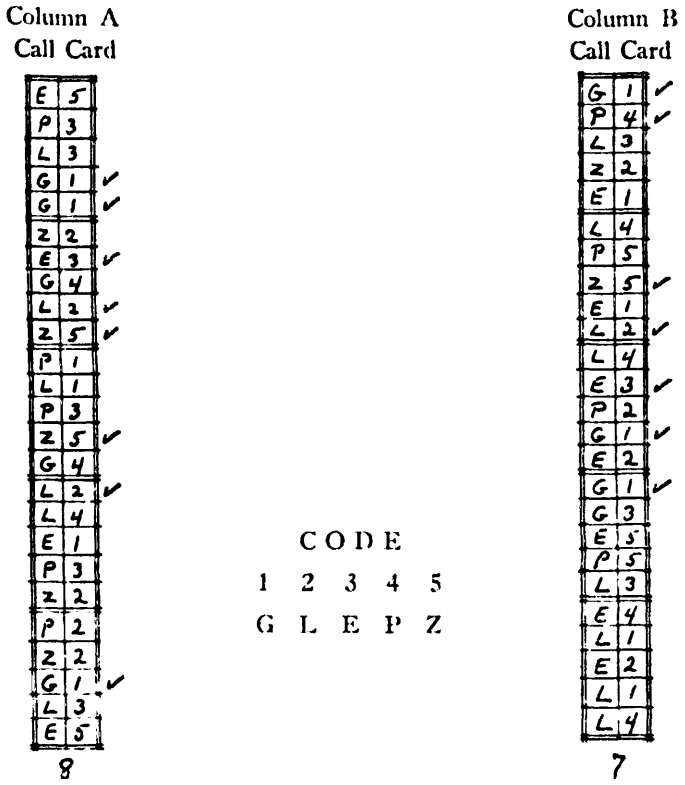

FIG. 1. A simplified record sheet showing the arrangement of the two columns on the page. The subject's calls were recorded originally on a separate page. To check the hits, the target digits must be translated into the animal letters by means of the code.

occurred on the same sheet.) This process was repeated without interruption through the 25 trials of Column A. Then there was a pause of about 10 seconds, and the second half of the page was done in the same way. The 50 trials took about 2 minutes.

The experimenter then came around the screen and copied down the order of the target cards. The results were checked at the end

of the session, which usually consisted of eight such sheets. The subject did not watch the check-up and she rarely saw any of the record sheets other than the ones on which she wrote her calls.

The results were statistically highly significant in terms of the total number of hits. The over-all scoring rate was 25.3%, compared with a mean chance expectation of 20%. There were 37,500 trials with the standard procedure I have described, and these gave 9,483 hits, or 1,983 more than chance expectation. The probability value of this result is approximately 10^{-137}. By contrast, consider the results obtained when we took a control series of scores by cross checking the results on each page: the calls of Column A against the targets of Column B and the calls of B against the targets of A. In this control series, there were only 11 more hits than the expected number, an obviously insignificant result.

But we have found that the total scores by no means reveal all that we are able to learn from the data about the subject's performance. The success rate in several ways was affected to a highly significant degree by trial-to-trial factors in the tests. These special effects have been measured in ways that are statistically independent of the gross scores. They therefore provide additional evidence of psychological effects in the data and at the same time point to facts that may help us to understand the response mechanisms involved. We will consider one of these trial-to-trial effects.

I found that the actual *position* of the trial on the record page had an effect upon whether the subject's call hit or missed the target. This discovery was made first in a preliminary sample of 50 pages of data taken from near the middle of the series. I then took 600 other pages from the series as a test group to see whether the same position effects were present in the data as a whole.

The most significant positional trend in scoring in the preliminary sample was a general decline in success within Column A as shown by a five-point curve for the column, each point representing the average level of scoring for a five-trial segment. The graph shown in Fig. 2 shows the same general decline in hit frequency within the pooled 600 A-columns of the test group.

To make a statistical test of this drop in scoring, each of the 600 columns involved was given two scores: one equal to the number of hits made in the first 10 trials and another for the hits made in the last 10 trials. (The precedent for doing this was set in working with the preliminary group.) The difference between the means of these two groups, of 600 scores each, was evaluated by the use of Student's *t*. The value of *t* was found to be 9.27 (1,198 degrees of freedom), with P being less than 10^{-18}. Thus it is clear that the position effects are statistically significant on the basis of the Column A decline alone.

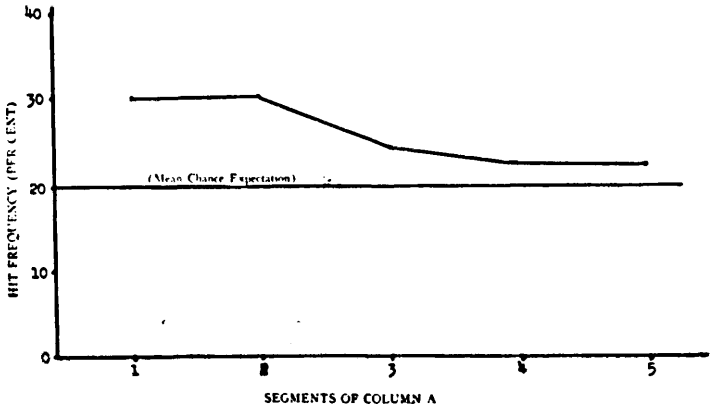

FIG. 2. Decline in ESP score level in Column A based upon the pooled left-hand columns of the 600-page test group.

Another control check, one bearing specifically upon this decline, was obtained by comparing the calls of Column A on one page with the targets of Column A for the next page. The results for 650 columns were within the limits of random fluctuation as regards both the total score and the difference between the first 10 and the last 10 trials.[2]

Anyone who has followed the experimental work in parapsychology knows that declines have been reported repeatedly. In fact, this effect was observed by Richet, Sidgwick, Jephson and Estabrooks before experimental work in this field was started at Duke University in 1930, and it has been a common feature of ESP results obtained during the last two decades. Why do I bother, therefore, to report still another instance of score decline?

I was influenced, I admit, by a recent survey of psychological opinion which leads me to infer that there may be one or two members of the audience who are still unconvinced regarding the evidence for ESP. The decline effect shows that there is something unmistakably *psychological* about these results, a gradient of performance that is similar to those we find in such familiar areas of research as learning of nonsense syllables, studies of recall, and even my old field, the

---

[2] This control study demonstrates that only chance results are obtained when the subject's calls on one record page are checked against the target digits of a later page. These chance results show that the highly significant scores and position effects obtained when the calls are compared with the real targets cannot reasonably be attributed to any kind of statistical artifact arising from the failure of the digit lists to meet all the standards of randomness, as previously reported (2).

behavior of rats in a discrimination situation. Some psychologists have suggested that they cannot accept ESP until they have a logical framework for it. The scoring decline reveals a lawfulness of response in the ESP test situation which is certainly no less consistent than that found in many aspects of behavior with which psychologists have long been concerned. Such findings seem to me to offer a challenge to, if not to place an obligation upon, psychologists to study the evidence of parapsychology — the *better* evidence — rather than to look for weaknesses in series which the investigators themselves have never considered crucial, and certainly not to launch upon critical attacks without bothering to study the literature.

I haven't time to describe the other aspects of position effects in these data, many of them effects peculiar to this one subject. The details have been given in a report that is awaiting publication in the *Journal of Parapsychology.*

Some of you may be wondering why Dr. Soal did not discover these position effects himself. In fact, he did analyze the data for this purpose, but he made the assumption that the pattern of variation in the A and B columns should be the same, and he therefore pooled the records from the two halves of the page. Column B does have significant position effects, but they are opposite to those in Column A to such a degree that the scoring trends were largely obscured when the two parts of the page were combined.

The full report will also present significant variations within the five-trial segments. It was not all downhill for the subject in Column A. An increase in the first five trials was observed in the pilot study, and this tendency was confirmed in the test group ($P = 10^{-6}$). Also, there is a peculiar tendency for the scoring to alternate between a high level and a low one for even and odd trials, respectively, in the second half of the page ($P = 10^{-8}$). (See Column B of Fig. 1.) The study of the factors producing such consistent performance patterns should help us to understand and control the psychological processes involved.

References

1. Soal, S. G., "The Experimental Situation in Psychical Research," *Ninth Myers Memorial Lecture,* S.P.R., 1947.
2. —— and Pratt, J. G., "ESP Performance and Target Sequence," *Journal of Parapsychology,* Vol. 15, 1951, pp. 192-215.

Reviews

CONVERSATION AND COMMUNICATION: A Psychological Inquiry into Language and Human Relations, By Joost A. M. Meerloo. Pp. X + 245. International Universities Press, New York, 1952. $4.00.

SPECIALIZED TECHNIQUES IN PSYCHOTHERAPY. Edited by Gustav Bychowski, M.D. and J. Louise Despert, M.D. Pp. XII + 371. Basic Books, New York, 1952. $5.00.

Dr. J. A. M. Meerloo's book *Conversation and Communication*, and *Specialized Techniques in Psychotherapy*, edited by Drs. G. Bychowski and J. L. Despert, have one thing in common: they include specific references to problems of parapsychology. This certainly marks a new departure in psychiatric literature. Dr. Meerloo approaches his topic from the psychoanalytic point of view. He deals with communication as a means of reaching out to our fellow men, of establishing contact with them through spoken or written words, various expressive acts such as gestures, facial expressions and psychosomatic symptoms. Paramount among the motivations for communication and conversation is the need for companionship, the need to make contact, to inform, to state facts. But the desire to give vent to emotions, to take a position opposite the world, to use language as a means of magic control, of self-assertion and aggression, is equally important. Words can thus be used to induce erotic feelings, as an exhibitionistic ingredient in courtship, as a destructive weapon of propaganda or as camouflage to conceal offensive thoughts and a device to confuse an opponent. They can, eventually, through a slip of the tongue, give away unconscious mental content. But Meerloo emphasizes that there are means of communication between person and person, and, for that matter, between animals of various species, which do not fit in with our familiar three-dimensional system of symbols. This type of communication must be assumed to take place between analyst and patient in later stages of the treatment; between mother and child; between the hypnotist and his subject; and between lovers in certain climactic stages of their relationship. Meerloo holds with Freud that communication of this type is an archaic function and compares the well-known resistance to such uncontrollable heteropsychic influences to our resistance to unconscious mental content in general.

The book, written in a delightful, easy vein, is replete with ingenious psychological observations and is in itself a rare example of an art whose decline the author rightly deplores: the art of conversation.

Yet this only enhances its merits as a valuable contribution to the subject which he sets out to explore.

Specialized Techniques in Psychotherapy is a symposium. It comprises such diverse contributions as articles on hypnoanalysis, on the treatment of schizophrenic children, on psychotherapy with the crippled and disabled, on the psychoanalytic management of marital problems, group therapy and the Rorschach test. Of special interest is Dr. J. Eisenbud's chapter: "The Use of the Telepathy Hypothesis in Psychotherapy." In a brief historical introduction he seeks to put psi events in the proper perspective. They have to be regarded as manifestations of behavior that subserve the same adaptational laws as all behavior and must no longer be considered as "disembodied and almost depersonalized outside happenings . . ." (p. 44).

Following in the footsteps of Freud and Stekel, and using familiar methods of psychoanalytic interpretation, Eisenbud illustrates his point by a dream reported to him by a patient. In the light of orthodox dream analysis it was easy to relate its latent content to the dreamer's unresolved psychic conflicts. But Eisenbud shows that such a procedure still leaves a gap in the full dynamic understanding of the dream and its highly involved symbolism. This gap could, however, be readily filled when a specific missing link (which the dreamer could only have perceived in a telepathic way) was incorporated in the context of the dream. In the light of such an interpretation it appeared that the telepathic perception served a specific dynamic purpose: it helped the dreamer to deal, on an unconscious level, as it were, in advance with a problem which was about to break upon her consciousness at the time the dream occurred. Eisenbud illustrates the usefulness of such an approach in several other incidents observed in his analytic practice. In one case the telepathic interpretation helped toward a better dynamic understanding of what otherwise might be attributed to the scientifically meaningless operation of mere chance coincidences. In another case, again, he seeks to establish a telepathic correlation between a dramatic incident in his patient's life and a simultaneous striking change in her neurotic symptomatology. Observations like these tend to justify the introduction of the telepathy hypothesis as a legitimate tool of psychiatric theory and practice and hold the promise of deeper insight into existing clinical problems.

The inclusion of Eisenbud's article in a symposium devoted to current and established techniques of psychotherapy testifies to the vision and pioneering spirit of its editors. If the lack of editorial comment (or of any cross references by other contributors to Eisenbud's thesis) leaves this reviewer with a slight sense of frustration, this certainly is not the fault of either the editors of the symposium or of the authors themselves. It merely reflects an attitude still pre-

vailing in the field of clinical psychiatry at large — notwithstanding the notable exceptions represented by the books reviewed here.

JAN EHRENWALD, M.D.

HISTORY OF AMERICAN PSYCHOLOGY. Illustrated with portraits, drawings and charts. By A. A. Roback. Pp. XIV + 426. Library Publishers, New York, 1952. $6.00.

This valuable book, heralded by its publishers as the first history of American psychology, surveys three centuries of psychology in this country from its beginnings in Colonial times through its many stages of development to the present. Of particular interest to readers of this JOURNAL is the author's recognition that psychical research is not a subject to be lightly dismissed, or ignored altogether, as unfortunately appears still to be the case with many psychologists. This the author makes clear in the following passage:

> "There can hardly be a greater contrast than between physiological psychology and psychical research, yet they are both, more or less peripherally, related to psychology, the one as a basis for it; the other as a higher dimension or level. Whether or not we accept its convictions or its methods, it does not behoove us as scientists to dismiss that type of research with a snort" (p. 389).

In the section on psychical research, Dr. Roback summarizes the little-known investigations in the psychical field of Joseph R. Buchanan, an American physician, who as early as 1842 claimed "to have made the discovery of the peculiar impressibility of the human brain, which enables it to receive cues without the mediation of the senses." While, as the author points out, modern psychologists might not agree with Dr. Buchanan's interpretation of his results, in view of the vastly increased knowledge in the field since his time, it is of interest to note that one series of "interesting and even exciting" experiments was performed with about 80 students and several professors of the Eclectic Medical Institute of Cincinnati, "where it turned out that nearly one-half the students and five of the professors were affected in a definite manner by holding in their hands an envelope containing some drug entirely concealed from view" (p. 390).

Buchanan, Dr. Roback tells us, then experimented with living persons instead of objects and discovered that by placing the hand on any part of the body of a person in a state of even incipient disease, the observer felt a distinct reaction. He called his method "psychometry," and "was prepared to champion the theory that the electrical properties of the brain (a most original thought about a century ago, when we consider the recency of the electro-encephalo-

graphic technique) come in contact with the 'mysterious influences' of the object or writing" (p. 390).

Coming further down the line, Dr. Roback refers to a substantial number of English and American psychical researchers. Among the latter, in the opinion of this writer, some receive considerably less appreciation than they deserve. Surely, the work of James H. Hyslop, founder of this Society, and Walter Franklin Prince, research officer of both the American and Boston societies for psychical research, commands respectful attention. On the other hand, the contributions of William James, and of William McDougall, who presided over this Society in 1921-1923, are favorably compared to the achievements of the "moving spirits" in the S.P.R.

Dr. Roback concludes his short survey of psychical research in America by indicating the attitudes, pro and con, of psychologists who have given their time and energy to its investigation. Gardner Murphy, he says, has, in the matter of telepathy, "steadfastly maintained a sympathetic attitude on the basis of experimental data" and J. B. Rhine, who established the parapsychology laboratory at Duke University, has created so much interest in the reported phenomena as to receive sufficient subsidies for his publications. "In fact, it may be said, that Duke University is the only higher institution of learning which harbors a separate department of this sort."

L. W. A.

Response to Appeal for Dreams

Dr. Jule Eisenbud, of the Executive Committee of the Medical Section of the Society, wishes to express deep thanks to the members of the A.S.P.R. for their splendid cooperation in responding to his recent appeal for samples of dreams. The study for which these samples are to be used has a direct bearing on psychical research, but the results will not be known for some time.

Correspondence

To the Editor of the JOURNAL:

In his recent paper "The Natural, the Mystical, and the Paranormal" (this JOURNAL, October 1952, pp. 125-142), Professor Murphy has offered the thesis that the basic need to establish contact with someone other than ourselves may be a significant determinant in various types of love experiences, mystical experiences and paranormal experiences. He points to a certain kinship between all three types and, after discussing the mystical and the paranormal, suggests that "the experiences to which I have invited your attention are experiences of reaching out to *other* selves; they are experiences like the experiences of love." Throughout the paper the "reaching out" and the need to communicate so characteristic of the love experience is presented as the prototype of the mystical and the paranormal experience. Only toward the close of his paper does Professor Murphy add: "I would not of course venture to say that *every* mystical experience, or that *every* paranormal experience, is determined solely by the need to communicate with others. These experiences may have other dimensions than those described here." As to what these other dimensions might be, however, we are given no hint, almost as if they hardly needed to be taken into account.

One of the dimensions that seems not to have been considered in Professor Murphy's paper is that which we might broadly designate as hate. While it may be true that hate is often enough the result of some interference with, or frustration of, a person's love needs, it is nevertheless also true that hate, once engendered, becomes a powerful motivating force in its own right, and must be included in a truly representative catalogue of those needs which may lead people to establish contact with others. However, this "dimension," which in its modes and manifestations might well merit a description as eloquent as that which Professor Murphy accords certain forms of love, does not always require *communication with* others, unless we are to define this in a much broader sense than we ordinarily do. In the case of hate, contact is sometimes required merely in order to destroy, to hurt, to hinder or to render in some way less threatening.

Offhand it is difficult to see why paranormal functioning should serve only the more socially acceptable of man's needs rather than *all* of his needs. No such distinction seems to establish itself in the case of other human functions, be they sensory, motor, endocrine or whatnot. An arm which can tenderly encircle a waist can also, subserving another need, stab or strangle; the vocal apparatus which sings the most exquisite love poetry may under other conditions mutter maledictions. Most functions are not specific but show marked versa-

tility and adaptability in the expression of various and changing needs. However, those of man's needs which we might subsume under hate —needs frequently as blocked from adequate direct expression as his love needs—seem not to have figured very largely in the investigations and theorizing of parapsychologists. If it be urged, as indeed it is by Professor Murphy, in the spirit of Lotze, that "the objective efforts of science towards ever fuller understanding and inspection of the picture of nature must be rigorously pursued to the uttermost limit, with never an experience held out from the accounting, immune to the searcher's peering eyes," must we not forthrightly and candidly search out those of man's natural experiences which happen to be less agreeable to his picture of himself than those which we are happy to set down to the power of love? Might we not also say here that "just as the world of natural love and communication has nothing to fear by being studied, and just as we believe that the use of critical observation and analysis may bring into a unity that which at first seemed fractionated and irreconcilable," so in the realm of those phenomena that can be related to hate and aggression "rigorous and systematic inquiry" has nothing to fear?

The fact is that neither love nor hate—those two eternally wedded and eternally warring forces in the affairs of mankind—has been subjected to particularly free inquiry, neither free nor rigorous nor systematic. How this happens to be is itself worthy of rigorous investigation, investigation which may conceivably shed some light on mankind's oppressively and obstructively ambivalent attitude toward study of the paranormal. At all events, a considerable part of civilization and its institutions (including certain aspects of science and scientific method) seems to be bound up with a guilty need on man's part to exalt the role of his love impulses in the large scheme of things at the expense of his frequently unrecognized and more often disavowed hate impulses, while numerous conceptual devices have been developed to enable man to dissociate himself from the power and effects of the "bad" in him. What is of particular concern to us here, though, is that in the literature of psychic research and parapsychology there appears to be more than a barely perceptible trend—in books, articles and editorials—to relate paranormal behavior almost exclusively to those impulses and dispositions in man that we hold to be good and laudatory.

That the evidence points this way is exceedingly doubtful. In any case this is not the entire story. True, we do not today see much of the evil eye or hexing, but is it not a hazardous presumption to imagine that what for so long figured in the fantasies and folklore of peoples all over the globe has no counterpart in the lives of the insecure, anxiety-ridden and all too frequently hate-inspired people of today? Perhaps what is needed before we can come up with a more balanced

picture of man's paranormal behavior is a more adequate methodology for the collection of certain types of data and a more tolerant theoretical framework into which to put these data than those currently in use by the majority of investigators in parapsychology. One such method, the psychoanalytic, though far from adequate in many respects, and by itself hardly in the highest tradition of experimental science, nevertheless is beginning to uncover data that do in fact point to the individual's use of paranormal functions for a variety of needs which far transcend his need solely to reach out toward contact with those who might satisfy his love requirements. Needs which might well be classified under hate seem to figure largely in this panel, as well, incidentally, as needs that appear to be largely autistic and have little or nothing to do with anything that might even broadly be defined as effectual contact or communication with others in a genuine interpersonal, social sense.

The foregoing ought by no means to be construed as a wholesale rejection of Professor Murphy's excellently presented thesis. The plea is merely for a wider focus on paranormal behavior than one which results in a picture of things far more one-sided and far more gratifying to man's self-esteem than we get in other areas where psychobiosocial behavior has been studied. (This may conceivably apply as well to the mystical experience, which is not to impugn either the reality or the effects of such experience.) Parapsychology's tendency to neglect the so-called seamy side of man's vital strivings may lead, as I fear it has, to theoretical *cul-de-sacs* which may long impede its efforts to integrate its hard-won data with the data and theories of other scientific disciplines. One such *cul-de-sac*, in my opinion, is current thinking about what is termed precognition. Here the neglect of the fact that man is, among other things, oftentimes a violently hating animal who prefers to invent fantastic subterfuges rather than face up to the destructive aspects of his subtle role in affairs, has more or less blocked us from the serious consideration of hypotheses that might go far toward obviating the necessity for postulates about time that seem somewhat less than comprehensible to many students of the question. But this is a matter that clearly cannot be dealt with in a page or two.

JULE EISENBUD, M.D.

HISTORY OF THE SOCIETY

The First American Society for Psychical Research was formed in 1885, in consequence of a visit by Sir W. F. Barrett to this country, and Prof. Simon Newcomb became its President. In 1887 the Society invited a man of signal ability, Richard Hodgson, A.M., LL.D., sometime Lecturer in the University of Cambridge, to become its Executive Secretary, and he accepted.

This organization later became a branch of the English Society under the very able guidance of Dr. Hodgson until his death in 1905. The American Society for Psychical Research was then re-established with James H. Hyslop, Ph.D., formerly Professor of Logic and Ethics in Columbia University, as its Secretary and Director.

THE ENDOWMENT

The American Society for Psychical Research, Inc., was originally incorporated under the Laws of New York in 1904 under the name of American Institute for Scientific Research, for the purpose of carrying on and endowing investigation in the fields of psychical research and psychotherapeutics. It is supported by contributions from its members and a small endowment fund. The income of the Society pays only for the publications and office expenses, but does not enable the Society to carry on its scientific investigations. A much greater fund is required before this work can be carried forward with the initiative and energy which its importance deserves.

The endowment funds are dedicated strictly to the uses set forth in the deed of gift and are under control of the Board of Trustees, the character and qualifications of whom are safeguarded, as with other scientific institutions.

Moneys and property dedicated by will or gift to the purposes of the American Society for Psychical Research, Inc., whether to the uses of psychical research or psychotherapeutics, are earnestly solicited. The form which such dedication should take when made by will is indicated in the following:

"I give, devise and bequeath to the American Society for Psychical Research, Inc., a corporation organized under the laws of the State of New York, the sum of ..... dollars (or if the bequest is real estate, or other specific items of property, these should be sufficiently described for identification), in trust for the corporate purposes of said Society."

THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

VOLUME XLVII APRIL 1953 NUMBER 2

CONTENTS

THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, Inc.
880 FIFTH AVENUE NEW YORK 21, N. Y.
Single Copy, $1.50 Published Quarterly

THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, INC.

OFFICERS

GEORGE H. HYSLOP, M.D. ..... *President*
PROF. GARDNER MURPHY ..... *First Vice-President*
MRS. LAWRENCE JACOB ..... *Second Vice-President*
MR. EDWARD LATHAM ..... *Treasurer*
MRS. EDWARD W. ALLISON ..... *Secretary and Assistant Treasurer*

BOARD OF TRUSTEES

Mrs. Edward W. Allison	(Jan. 1955)	Miss Margaret Naumburg	(Jan. 1955)
Prof. C. J. Ducasse	(Jan. 1954)	Mr. Cyril J. Redmond	(Jan. 1955)
George H. Hyslop, M.D.	(Jan. 1956)	Prof. J. B. Rhine	(Jan. 1954)
Mrs. Lawrence Jacob	(Jan. 1956)	William O. Stevens, Ph.D.	(Jan. 1955)
Mr. Gerald L. Kaufman	(Jan. 1954)		
Edward J. Kempf, M.D.	(Jan. 1954)	Montague Ullman, M.D.	(Jan. 1956)
Mr. Edward Latham	(Jan. 1954)	Mrs. John J. Whitehead	(Jan. 1956)
Prof. Gardner Murphy	(Jan. 1956)	J. L. Woodruff, Ph.D.	(Jan. 1955)

CHAIRMEN OF COMMITTEES

Research, Prof. Gardner Murphy
Publications, Mrs. E. W. Allison
Finance, Mr. Edward Latham
Lectures, Mr. William Oliver Stevens

Research Associate, Laura Abbott Dale
Executive Secretary, Mrs. Mitchell Kennerley

PURPOSE AND SCOPE OF THE SOCIETY

1. The investigation of claims of telepathy, clairvoyance, veridical hallucinations and dreams, psychometry, precognition, dowsing, and other forms of supernormal cognition; of claims of supernormal physical phenomena, such as raps, telekinesis, materialization, levitation, fire-immunity, poltergeists; the study of automatic writing, trance speech, hypnotism, alterations of personality, and other subconscious processes: in short, all types of the phenomena called psychic, mediumistic, supernormal, parapsychological and metapsychic, together with the bordering subjects.

2. The collection, classification, study and publication of reports dealing with the above phenomena. Readers are asked to report incidents and cases. Names must be given, but on request will be treated as confidential.

3. The maintenance of a library on psychical research and related subjects. Contributions of books and periodical files will be welcomed.

4. Cooperating in the above tasks with qualified individuals and groups who will report their work to the Society.

MEMBERSHIP IN THE SOCIETY

Members, who receive the Proceedings and the Journal, pay an annual fee of $10. (One may become a Life Member or endow a Memorial Membership on payment of $200.) *Fellows*, who receive all publications of the Society and are afforded special library privileges pay an annual fee of $25. (Life Fellowship, $500.) *Patrons and Founders*: For those who wish to make a still larger contribution to the Society's work, these classes are open at $1000 and $5000, respectively.

It is to be remembered that membership in a scientific society means more than merely a subscription to its publications. The work must be carried on largely through the income from membership fees. Therefore members, old and new, are urged to make their membership class as high as they feel they can. *If a comparatively small proportion of the present members went one class higher, the money available for research would be more than doubled.*

THE JOURNAL of the American Society for Psychical Research is published quarterly by the American Society for Psychical Research, Inc., 880 Fifth Avenue, New York 21, N. Y. "Entered as second-class matter July 15, 1941, at the post office at New York, N. Y., under the Act of March 3, 1879."

THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

Responsibility for the contents of any article appearing in the JOURNAL rests entirely with the contributor and not with the A.S.P.R.

VOLUME XLVII APRIL, 1953 Number 2

CONTENTS

Annual Meeting

The Annual Meeting of the Voting Members of the American Society for Psychical Research, Inc., was held on January 27, 1953, at the Rooms of the Society. The President, Dr. George H. Hyslop, presided at the meeting. The following Voting Members were present: Mrs. E. W. Allison, Mrs. Valentine Bennett, Mrs. Lea Hudson, Mrs. Lawrence Jacob, Mrs. Peggy Jacobsen, Mr. Gerald L. Kaufman, Mr. Alan F. MacRobert, Dr. Russell G. MacRobert, Mrs. E. de P. Matthews, Miss Hettie Rhoda Meade, Miss Margaret Naumburg, Miss Gertrude O. Tubby and Mrs. John Jay Whitehead.

The following five Trustees of the Society whose terms of office had expired were re-elected for another term of three years: Dr. George H. Hyslop, Mrs. Lawrence Jacob, Dr. Gardner Murphy, Dr. Montague Ullman and Mrs. John Jay Whitehead.

At a meeting of the Board of Trustees held on March 10, 1953, the following officers of the Society were re-elected for the year 1953: President, Dr. George H. Hyslop; First Vice-President, Dr. Gardner Murphy; Second Vice-President, Mrs. Lawrence Jacob; Treasurer, Mr. Edward Latham; Secretary and Assistant Treasurer, Mrs. E. W. Allison.

Committees for 1953

The President has reappointed the Chairmen of the Standing Committees for the year 1953, with power to select the members of their respective committees.

RESEARCH COMMITTEE

Dr. Gardner Murphy, *Chairman*
Mrs. E. W. Allison
Mrs. L. A. Dale
Dr. Jule Eisenbud
Mr. S David Kahn
Dr. E. J. Kempf
Dr. R. A. McConnell
Dr. Montague Ullman
Dr. J. L. Woodruff

FINANCE COMMITTEE

Mr. Edward Latham, *Chairman*
Mr. Gerald L. Kaufman
Mr. Lawson Purdy
Mr. Benson B. Sloan
Mr. Harold W. Updike

PUBLICATIONS COMMITTEE

Mrs. E. W. Allison, *Chairman*
Mrs. E. de P. Matthews
Dr. Gardner Murphy
Dr. J. B. Rhine
Dr. G. R. Schmeidler
Mr. William Oliver Stevens

LECTURE COMMITTEE

Mr. William Oliver Stevens, *Chairman*
Dr. Gardner Murphy
Mrs. E. W. Allison

The Psychic Fifth Dimension, II

Can the Five-Dimension Theory Become Useful in Psychical Research?

HORNELL HART AND ASSOCIATES

A. Introduction

An experiment in creative-discussion-by-correspondence has been carried out in connection with the article on "The Psychic Fifth Dimension" which appeared in the January 1953 JOURNAL. A preliminary draft of that article was mailed to a dozen or so outstanding thinkers interested in this field, with invitations to comment and criticize. Up to the date of this writing, helpful replies have been received from C. J. Ducasse, F. L. Kunz, Laurence J. Lafleur, Gardner Murphy, Charles E. Ozanne, Dorothy H. Pope, J. G. Pratt, H. H. Price, J. B. Rhine, J. R. Smythies, Robert H. Thouless, the late G. N. M. Tyrrell and others. Several of these persons have written two or more letters each, discussing successive revisions. In the light of criticisms and suggestions contained in these letters, the original article was extensively revised before it was published. Many of the criticisms, however, require more extended discussion than seemed pertinent in the article presenting the basic theory. For the sake of clarity in discussing these criticisms, a brief résumé of the theory may be helpful.

B. The Five-Dimension Theory

1. The Need for Five Dimensions: One's life experience includes innumerable four-dimensional space-time structures, such as (*a*) the room in which one is working at a given moment; (*b*) a vivid dream; (*c*) a science-fiction story, or the like. An infinite number of such four-dimensional objects could exist without intersecting each other at all. But the only place where they *could* so exist would be in a five-dimensional continuum.

2. The Unique Time-Line of Each Individual: Every person who participates in any given four-dimensional structure observes and operates from his own special point of view, which we shall call the individual's "focus of consciousness." The participant's focus moves along the time dimension of the four-dimensional structure, and usually moves about also in the other three dimensions of that structure. From his focus of consciousness in any given four-dimensional structure, the individual can remember a series of four-dimensional

structures in which he has previously occupied foci of consciousness, and he can anticipate structures in which he will occupy such foci in the future. The locus of these successive foci of consciousness constitutes the individual's "unique time-line." His personal identity consists in his recognition and incorporation of the experiences along this time-line as uniquely his own.

3. Interfaces: Between each two successive four-dimensional structures along the individual's time-line is a transition instant, with its attendant structure. In sequences between ordinary sensorimotor experiences, these interfaces are such ordinary structures as doorways or street corners. But every normal person also passes frequently from one to another of the different basic types of space-time structure, as in passing from waking life into a dream or from sensorimotor observation to memory or from memory into imaginative planning, or the like.

4. Intersections: Granted that you as well as I each have our own series of four-dimensional space-time experiences strung on our respective unique time-lines, it seems necessary to adopt the further working hypothesis that we share the same space-time structure whenever we come into each other's presence—or at least that we share the same four-dimensional structure to the extent that we pay attention to the same things, are able to converse about our mutual surroundings, and are able to cooperate in relation to these surroundings, including our relations to each other. If you interview me in my office, or if I call upon you in your home, an intersection occurs between your space-time experience and mine. Similarly, if you and I should both remember having seen and talked with each other in dreams that were very similar (as in the cases of the shared dreams summarized in the Five-Dimension article) it seems natural to regard that as an intersection between our respective four-dimensional dream experiences. When an apparition of a person is seen in the place of which he is dreaming, that would seem to constitute another type of intersection. Since apparitions of persons known to be dead are found to be very similar in many respects to apparitions of persons who are living and who remember having dreamed of being in the places where their apparitions are seen, it is natural at least to explore the hypothesis that apparitions of the dead represent intersections between their post-mortem experiences and the experiences of the living persons who see the apparitions.

5. The "Material World" as a Special Case: The "material universe" is a special type of space-time structure. Within it, movement in time can occur only in the forward dimension, in unison with the rest of sentient beings; movement from one point to another must

traverse a continuous series of intermediate points; and an operator can move or shape matter only by acting upon a continuous chain of material objects intervening between the operator and the matter to be operated on, or by altering a force-field which includes the operator and the object to be operated on. The mathematics of higher space has been developed to deal with the phenomena of this physical universe.

6. *Basic Features of Psychic Space*: Psychic space (except for the "material" universe) conforms to different principles. Movement backward as well as forward in time is possible. Movement to distant points can be achieved instantly, without traversing intermediate points. Objects can be moved and shaped without any chain of intervening objects, and if force fields are involved, they do not involve the vibratory forces to which the law of inverse squares applies. The relative sizes, the relative speeds, and the shapes of objects can be altered, more or less at will, in psychic space-time structures. Moreover, experience-patterns in the fifth dimension are ordered, not by physical distance, nor by sidereal time, but by emotional, ideational and habitual linkage.

C. Difficulties Raised

Several of the distinguished thinkers who have participated in this discussion have challenged the five-dimensional aspect of the theory. The questions raised (in addition to those discussed in the revised article in which the theory was presented) may be classified into two broad groups: first, those challenging directly the proposed use of geometrical concepts as applied to psychical phenomena; second, the points raised which bear only indirectly on five-dimensional geometry. The following seven among the questions are directly concerned with dimensions and space-time structures:

1. *What Kind of Geometry Is Involved?* Charles E. Ozanne says:

> "Definite geometric knowledge is needed if we are to speak with authority of intersections in space of n dimensions . . . . I myself am very doubtful whether in some form of n-dimensional space a helpful frame of reference will be found for psi phenomena. But the various geometries stand there ready for use wherever application can be found for them."[1]

F. L. Kunz asks:

> "Are you using the term dimension in the sense it is used in some social science studies . . .? Or as the physicist uses it? Or as the geometer uses it? If the latter, is your treatment Euclidean?

[1] Charles E. Ozanne, letter to Hornell Hart, July 26, 1952

> Such use as is made of superior dimension in present physics is, in respect to the macrocosm, non-Euclidean. If, therefore, there is to be a firm structure of theory for all forms of experience, the geometric connections need to be worked out more fully."[2]

In response to Mr. Kunz' question whether the geometry of the psychic fifth dimension is to be defined in Euclidean or non-Euclidean terms, the answer is, "Either or both—so long as the spatial concepts adopted are satisfactory for describing and analyzing our observations, and for planning our operations." In other words, our dimensional concepts must be operational.

Various types of self-contradiction arise when concepts of space and time are used without careful examination and statement of their operational implications. Laurence J. Lafleur has demonstrated this.[3] But if space and time concepts are used operationally, as tools for understanding and predicting specified types of experience-patterns, then these paradoxes need not arise—or can be eliminated by stricter operational definition of terms. Toward such consistency and operational validity the present project is directed. Some fundamentals of an operational geometry of the psychic dimension have already been intimated in the résumé of the Five-Dimension Theory. Later in this article, further operational analysis of this problem will be developed.

2. Can the Conscious Self Occupy a Position in Psychic Space? Tyrrell cites cases of conscious apparitions of the living, and of travelling clairvoyance, but then denies that the conscious self can occupy a spatial point of view. He says:

> "There is undoubtedly evidence to show that apparitions behave *as if* they were aware of their surroundings and therefore of being at a particular place among them . . . There is a small amount of evidence that the apparition of a living person can be seen at a place in space and that the person afterwards remembers viewing the scene from that identical position. . . . There are also the cases of 'travelling clairvoyance' . . . in which the sensitive describes a distant scene as from a particular point of view. But . . . I am not prepared to accept this as evidence that the conscious self of the sensitive actually *occupied* that spatial point of view. I . . . refuse to admit that the conscious self of a person who is talking to me in the same room is present in that room, or, indeed, is anywhere in space."[4]

Apparently Mr. Tyrrell holds an absolutist rather than an operational conception of spatial location. For purposes of the present

---

[2] F. L. Kunz, letter to Hornell Hart, July 2, 1952.

[3] Laurence J. Lafleur, "Time as a Fourth Dimension," *Journal of Philosophy*, Vol. XXXVII, 1940, pp. 169-178.

[4] G. N. M. Tyrrell, "Apparitions," *Seventh Myers Memorial Lecture*, S.P.R., 1942, p. 30.

inquiry, being located at a given point in space may be defined as being able to observe and to operate directly from that point, and being capable of being observed and operated upon directly at that point. It means having one's focus of consciousness at that point, and also being observable and accessible directly at that point. That Mr. Tyrrell is using a quite different definition is evident from his denial that the conscious self of a person who is talking to him in the same room is present in that room. Quite clearly, Mr. Tyrrell *does* believe that his own conscious self, the conscious selves of other normally embodied persons, and the conscious selves of at least some apparitions, do observe and operate from, as well as being observed and operated upon at, specific points in space.[5]

3. How Are Shared Dreams Located in Relation to the Places Where the Dreamers Are Sleeping? Gardner Murphy raises this question as follows:

> "If you and I, 1000 miles apart, dream at the same instant of the same event, in what sense is the event localized both in Durham and in Ashland [New Hampshire, where Dr. Murphy wrote the letter]? . . . In what sense is my dream of you *localized at the point* where you are?"[6]

Operationally, location of a given material or psychic object is definable in terms of accessibility to a stated observer-operator, and in terms of observational and operational relationships with his other "material" and psychic experience-patterns. Mr. Newnham, who dreamed of putting his arms around his fiancée in her distant home, at the same time when she felt his apparitional embrace at the location of which he was dreaming (see "The Psychic Fifth Dimension," p. 12) was located psychically right behind his lady-love. If I were to see an apparition of Dr. Murphy in my office chair, at the very moment when he was dreaming that he was sitting there, then he would be located, psychically, in that chair. But Henry Armitt Brown's dream of being murdered has no reported locational relationship to the sensorimotor locations of Brown or of either of the two friends (see "The Psychic Fifth Dimension," pp. 10-11). Operational and observational space relations were evident within the dream. And

---

[5] After seeing a preliminary draft of this article, Mr. Tyrrell wrote on July 27, 1952: "With regard to consciousness occupying a position in space, I frankly deny this. Consciousness is not a substance and we cannot grasp what it is. It is non-spatial. Sense-data of surrounding objects are presented to consciousness by the brain and sense-organs. And sense-data of distant objects (called 'hallucinatory') or sense-data of events distant in time (see the Dieppe Raid case, *Journal* S.P.R., May-June, 1952) can equally be presented to consciousness. If consciousness were in space it would not matter where it was. In fact it is nowhere!" But if the consciousness of the observer-operator is nowhere, what does Mr. Tyrrell mean by "*surrounding* objects"?

[6] Gardner Murphy, letter to Hornell Hart, July 11, 1952.

the dream as a whole had certain relations of observational and operational accessibility for each of the participants. An analogy would be a stratocruiser, flying through a dense layer of cloud, while inside it one man was trying to murder another and two other men were trying to prevent it. But the relation of the shared dream to the other four-dimensional structures of the participants is different from the relationship of the plane to the space-time area which it is traversing. That is where the fifth dimension comes in. This relation will be discussed further in the section on "Pragmatic Space."

4. Is the Concept of "Dimension" Applicable to Psychic Relationships? Dr. Murphy observes:

> "If there is a fifth dimension, it must be orthogonal to the others in the sense that an infinite number of events, in a quantitative continuum, can occur at the same space-time point. To speak of a *dimension* would hardly be warranted if it can merely be proved that two qualitatively distinct events can occur at the same time-space region."[7]

Dr. Thouless comments:

> "There seems to be a lack of parallelism between your case of the dancer's extra dimension and the fifth dimension in which the dreams of the soldiers can be fitted. You talk of the latter as a continuum. But there isn't any continuity between the different soldiers' dreams."[8]

Along somewhat similar lines, Professor Ducasse says:

> "The notion of 'dimension' is in need of analysis. Broadly, a 'dimension' of something S seems to be a character of S admitting of a certain range of variations. That the range of possible variations of a character C of S is 'at right angles to' that of possible variations of another character K seems to mean, in more general terms, that C can vary without K varying, and K without C varying. The characters usually referred to when spatial dimensions are mentioned are positions of something in space. . . . It seems to me that the possible locations of something in a given dimension must constitute a serial order; and I do not see, offhand, that your fifth 'dimension' has this character; rather, it seems to be an unordered collection, and therefore not a dimension in the same sense as the other four."[9]

But, as pointed out in the published version of "The Psychic Fifth Dimension," and as more briefly stated in "Basic Features of Psychic Space," earlier in the present article (p. 49), experience-patterns in the fifth dimension are not "unordered"; they are ordered—not by physical distance, nor by sidereal time—but by emotional, ideational

---

[7] Gardner Murphy, *op. cit.*
[8] Robert H. Thouless, letter to Hornell Hart, August 20, 1952.
[9] C. J. Ducasse, letter to Hornell Hart, July 21, 1952.

and habitual linkage. This point also will be dealt with further in the section on "Pragmatic Space."

5. Imperfect Intersections: Professor H. H. Price notes that a geometrical intersection between two four-dimensional structures suggests a complete sharing of a common four-dimensional area. He says:

> "When the correspondence between the two [dreams] is incomplete though still too great to be explained as mere chance coincidence, it will not be so easy to make the change from the ordinary language of correlation between two numerically-different manifolds to your language of 'intersection' which means that so far as this point of time is concerned there is *one* set of images (say) which are common to the two minds. Is not this what 'intersection' would involve?"[10]

Professor Price goes on to point out that many shared dreams correspond only in part. In response to this objection, it should be noted that incompleteness of sharing is characteristic—not merely of parapsychological intersections, but also of *all* intersections between four-dimensional structures. No two people pay attention to precisely the same aspects of their environment, even if they are very close to each other in space-time. Whenever several witnesses of an accident or of a crime testify independently, their several accounts are likely to vary from one another in major respects.

6. What Causes Psychic Intersections? Professor Ducasse writes:

> "The general notion of Intersection . . . is all right as far as it goes. But such an intersection is an *effect* and the sort of action or event that causes it seems just as unexplained when, let us say, a common dream is described as an intersection of two minds as when it is described simply as a dream common to two minds. To explain an event, after all, consists in pointing to what caused it. And when we know the cause, we can make the effect occur if we have the means of initiating the cause. 'Telepathy' and 'clairvoyance' are names for the fact that intersections of certain kinds occur . . . not for the cause of their occurrence."[11]

7. How Is Precognition Related to the Fifth Dimension? Attempts to deal with the problem of precognition in the preliminary drafts of "The Psychic Fifth Dimension" proved unsatisfactory. In the course of the creative discussion process it became apparent that this aspect of psi can be explained quite satisfactorily in terms of the Psychon Theory. This explanation is developed in a later section of the present article.

---

[10] H. H. Price, letter to Hornell Hart, May 7, 1952.

[11] C. J. Ducasse, letter to Hornell Hart, April 28, 1952.

In addition to the seven questions listed above, the cooperating correspondents have raised a number of other difficulties, and various issues not immediately geometrical are also implied in the seven relating to dimensions and space-time structures. At the present point, however, attention will be concentrated on the problems raised above.

D. Agreements and Issues

1. Some Positive Initial Apparent Agreements: In order to avoid both the needless elaboration of points conceded by the great majority of persons intelligently interested in the subject, and also to avoid taking for granted points which other participants in the discussion would not concede, it may be useful to state briefly some facts and principles which appear to be generally accepted—or to be capable of acceptance—by all concerned.

(*a*) *Dreams, and Images Remembered or Imagined, Have Dimensions*: As Dr. J. G. Pratt puts it: "If we agree to say that a table I imagine has dimensions, just as much as a table I see, then your suggestion seems to follow logically."[12] Similarly Carington says:

> "No one can doubt that the image of an object may be extended and display distinguishable parts which are to right or left or above or below other parts. In fact, I see no particular objection to claiming that there is a kind of psychic space appropriate to psychic entities. But, if so, it will have to be built up from, or its geometry chosen so as to conform to, observations made on psychic entities, and a space of which the geometry is adapted to physical entities will not be applicable."[13]

The above comment by Carington may be taken tentatively as pointing the way toward an answer to question 1 in the preceding section (p. 49) of the present article—namely, "What Kind of Geometry Is Involved?"

(*b*) *Dimensional conceptions of life beyond death* have been offered by various leading psychical researchers. Professor

---

[12] J. G. Pratt, memo to Hornell Hart, May 28, 1952. Robert H. Thouless, in a letter dated August 20, 1952, objects: "That seems to me to put the matter the wrong way round. The dimensions are, I think, a conceptual device to explain the facts, not part of the facts." The agreement tentatively suggested here is merely that dreams and images have dimensions in the same sense that sensorimotor experiences have dimensions. Granted that dimensions are (in the last analysis) conceptual devices, they are not so considered in our perceptual processes. Common sense "perceives" the roundness of the rubber ball as much as it does the softness, or the greyness. But most of the participants in this discussion would presumably agree with Dr. Thouless that "the more difficult question is whether the dimensions [perceived or conceptualized in a dream or imagined experience] can be regarded as related to the dimensions used in the conceptual explanation of physical space and time."

[13] Whately Carington, *Thought Transference*, Creative Age Press, New York, 1946, p. 153.

Ducasse has suggested six theoretically possible forms of survival, which have been combined into the following hypothesis as to post-mortem experience:

"In addition to the dream-consciousness there might be 'critically controlled creative imagination'—the purposive activity characteristic of mental creativeness or discovery. There is also another possibility. It might be that not *all* the images one was aware of were dream-images. Some of them might be caused 'externally.' A certain amount of telepathy or clairvoyance (or, I suppose, precognition) might intrude into our dream, as indeed happens sometimes in some people's dreams in this present life. Such externally caused images would be resistant to our will, as sensations are now. And this provides us with a way of conceiving how a disembodied mind might be aware of a kind of *objective* 'next world' . . . It would also be a *public* next world . . . If we suppose that telepathy operated more freely than it does in our present embodied life (because the pressure of biological needs would have been removed), there might be a close and constant correlation between the images experienced by mind A and those experienced by other minds, B, C, and D; just as there is a close and constant correlation between their sensations now when they are all perceiving the same sort of material objects."[14]

The above summary of Professor Ducasse's theory is from a review by Professor H. H. Price who comments:

"I agree with him that the complex conception of survival which is built up by combining all these different conceptions is at once theoretically possible and 'significant' in the sense of satisfying to a rational person. . . . Professor Ducasse . . . does succeed in showing . . . that the notion of *dis*embodied existence makes sense and that some intelligible content can be given to it" (footnote 14, p. 145).

Five years earlier, Whately Carington said:

". . . I think we can do better than prove Survival—we can find out something about it. . . . I have . . . no doubt at all that, in some sense and in some degree, man survives death. . . . The mind is a psychon system [a dynamic configuration of ideas and images], and the question of whether any particular mind survives is one of the stability of that system under post-mortem conditions, notably as regards the sudden cutting off of the normal influx of sensa . . . I think I should . . . expect the psychical world to be just as vivid as the mundane . . . to pursue in imagination after death the material avocations and activities of mundane life is unlikely to be accompanied by any great degree of satisfaction . . . But as regards intellectual activities . . . there

[14] H. H. Price, Review of *Nature, Mind, and Death*, by C. J. Ducasse, *Journal of Parapsychology*, Vol. 16, June, 1952, p. 143; cf. review of the same book by Hornell Hart, JOURNAL A.S.P.R., Vol. XLVI, April, 1952, pp. 74-75.

seems no reason why you should not indulge [them] to your heart's content after death . . .

"If, when I die, I desire the presence of X, I shall presumably . . . call up various images (visual, auditory, tactile, etc.) of X as I remember him. And since there will be no competing sensa of physical origin . . . these images may be as vivid as the sensations of mundane life . . . My thoughts of X and his of me, with their images of situations and experiences shared, etc., are clearly competent to serve as K's, promoting telepathic interaction and linking our psychon systems together. . . . Our interacting minds might conspire together . . . to construct image-situations . . . far more consistent and satisfactory then either of us could achieve singly."[15]

(*c*) *Collectively perceived apparitions of the dead,* and other veridical apparitions of the dead and the dying have been evidentially reported from many times and places. Such apparitions usually seem to enter into spatial relations with the surroundings in which they are seen, but they also seem frequently to pass through matter, to appear and disappear suddenly, and otherwise to transcend the conditions of the ordinary material world.

(*d*) *Similar apparitions of the living* have also been very frequently reported, and in a number of cases have been found to correspond with dreams or other psychological states in which the appearer, though his physical body was at a distance, observed and to some extent operated from the position at which his apparition was seen.

(*e*) *Reciprocal dreams* have been reported so often, and with such good supporting evidence, that the telepathic sharing of dream experiences seems to have been demonstrated.

(*f*) *Numerous reports of astral excursions,* though not quite so strong evidentially, are yet supported by considerable evidence of veridicality. Such excursionists have reported finding themselves observing their own body from the outside, have noted that they could pass through matter and could not themselves move matter, have discovered that they could shift, more or less at will, to distant or inaccessible places, and have reported having encountered what they believed to be astrally embodied persons who had died.

(*g*) *Psychical Social Relations May Be Conceived Spatially*:

Professor Ducasse, after detailed consideration of the problem, concludes:

". . . The 'psychical location' of a given mind (whether embodied, or conceivably, unembodied) in objective, *i.e.*, social, 'psychical space' and 'psychical time' would thus be defined in terms of what that mind is and is not 'in social position to' do to, and to be done to by, each of the other existing minds.

[15] Whately Carington, *op. cit.*, pp. 209-240. See summary of his Psychon Theory in a later section of the present article.

"This conception of psychical position or location of minds as such . . . appears to be precisely analogous to the conception, as we analyzed it, of position or location of material substances in physical space and time."[16]

(*h*) *Even Ideas Have Locations*: Ducasse says:

"When existence other than physical is in view—for instance, mathematical existence—the meaning of existence is closely analogous [to physical existence]. The difference is only that the place concerned is a place in some order other than the space-time order.

"Thus, for example, the assertion that a square root of 9 exists, but no square root of 3, means that the character 'being square root of 9' characterizes a certain place in the order of whole numbers, namely, the determinate place called 3; whereas the character 'being square root of 3' characterizes none of the places in the series of whole numbers.

"In any assertion of existence, thus, no matter whether it be more particularly one of physical existence, or of mathematical, or psychological, or other existence, two components always are essentially involved, namely, a *what* and a *where*. And generically a *where* or place is the sort of thing specifiable in terms of *ordinal* relations; that is, of relations such as between, next to, beyond, among, outside of, and so on, which, logically, are not specifically either spatial or temporal, since there is such a thing, for instance, as *qualitative* betweenness. The color Orange is *qualitatively* between Red and Yellow, even when it is not placed spatially between them."[17]

(*i*) *Other Sciences Find Hyper-Dimensions Useful*: In addition to the three dimensions which we ordinarily use, geometrical concepts of time, and added spatial dimensions have been employed by many mathematicians, physicists and other scientists, and have been found to be exceedingly useful.

2. *Some Negative Initial Apparent Agreements*: In addition to the nine positive propositions (*a*) to (*i*) listed above, the present writer agrees with several of the correspondents who suggest or imply the following negative propositions about the Five-Dimension Theory:

(*a*) *The Psychic Fifth Dimension Does Not Locate Phenomena by Five-Fold Coordinates*: If one wished to locate an airliner in space-time, one might give its latitude, longitude and altitude, at a stated time. Those four coordinates would fix its space-time position accurately and effectively. If the fifth dimension were fully comparable to the other four, it should be possible to locate a shared dream in terms of latitude, longitude,

[16] C. J. Ducasse, *Nature, Mind, and Death*, Open Court Pub. Co., La Salle, Illinois, 1951, p. 412.
[17] *Ibid.*, pp. 71-72.

altitude, time *and* psychic position. But that is possible only qualitatively. Location in the psychic dimension is basically different in character from that in the other four dimensions. The psychic dimension is not measurable in linear units of uniform magnitude. To ignore such differences would be to close the door to the essential understanding which we seek.

(*b*) *The psychic fifth dimension is not homogeneous* in character with the three dimensions of ordinary space, nor with time, when that is considered as a dimension. But then, neither are the first four dimensions homogeneous with each other *as pragmatically used in geography.* The differences between pure, rectilinear, Euclidean geometry and pragmatic geometry will be explored in a subsequent section of this article.

3. The Basic Issue: If the above agreements be substantially accepted, the central issue is the one epitomized in the subtitle of this article: namely, under the conditions as stated in these agreements, "Can the Five-Dimension Theory Become Useful in Psychical Research?" Professor Price in his review of Professor Ducasse's book has stated the negative position on this issue as follows:

> ". . . There is no *a priori* reason why there should not be many different spatial manifolds in the universe, different in the sense that they have no spatial relations to each other. (It is possible, in addition, that they might have different 'geometries'; for example, some might be Euclidian and others not.) Let us go back to dreams again. The images which we experience in a dream are certainly spatial entities. They have extension and shape, and have relations of 'near,' 'far,' 'between,' etc., to one another.
>
> "But are they *anywhere* in the space of the material world? For example, is a dream-image two inches away from one's left ear, or eighteen inches to the north of the head of one's bed? Such questions, I think, are not only unanswerable, but devoid of meaning. Dream-images are in a space of their own. In relation to the physical world they are nowhere: instead they constitute a 'where' of their own; and the only sensible question we can ask is whereabouts a given image is in relation to other dream-images belonging to the same dream. . . ."[18]

The first paragraph in the above quotation is a restatement of *Some Positive Agreements* in the list given earlier in this section (pp. 54-57). The negative position taken in the second paragraph is based upon the facts referred to in *Some Negative Agreements,* namely, that the "psychic fifth dimension" does not locate phenomena by five-fold coordinates, as the other four dimensions do (*a*, pp. 57-58). But Professor Price does not discuss (nor, apparently, does he take

[18] H. H. Price, Review of *Nature, Mind, and Death,* p. 144.

into account) the facts about psychic intersections to which reference is made in *Some Positive Agreements* (*c*, *d*, *e* and *f*). Professor Price argued that it is meaningless to ask whether a dream image was eighteen inches to the north of one's bed. But consider the following case:

> Lady B. and her daughter were sleeping in the same room in London. In the middle of the night both ladies suddenly started up wide-awake, and saw a female figure in a white garment with dark curly hair hanging down the back. The figure was standing in front of the fireplace, over which was a mirror. Lady B. saw the back of the figure and its long, dark hair; the face was not visible, since the head intercepted its own reflection in the mirror. Miss B. saw the face in quarter-profile, and it was clearly seen reflected in the mirror. Both percipients immediately sprang out of bed to the doors, which were found locked. On turning around again the figure had disappeared. Both percipients later dictated and signed accounts of this experience.[19]

In this case, and in innumerable others, the spatial position of an apparition, as related to the physical surroundings in which it was perceived, has specific and highly significant meaning.

Similarly, in considering accounts of "astral excursions," it has significant meaning to ask what was the spatial position of the excursionist's dream body (or "astral body") in relation to the bed on which his physical body was lying. In the experience reported by Sylvan Muldoon, in which he allegedly made an astral excursion into the home of his future fiancée (whom he had not previously met, and whose home he had never visited physically) it is significant to ask what were the spatial relationships between the house in which Muldoon was sleeping, and the distant farmhouse in which he first (astrally) met his wife-to-be.[20]

In a word, if we accept even hypothetically the reality of apparitions and astral excursions, we cannot accept Professor Price's statement that "Dream-images . . . in relation to the physical world . . . are nowhere." Some sorts of intersections between psychic space and sensorimotor space do occur both in apparitional cases and in astral excursions. Our basic problem is: How can we work out dimensional conceptions which will most usefully explain such psychic intersections, and still take fully into account the differences between the psychic dimension and the four dimensions of ordinary space-time? To that question we now turn.

---

[19] *Journal* S.P.R., Vol. VI, 1894, pp. 145-146.

[20] Sylvan Muldoon and Hereward Carrington, *The Projection of the Astral Body*, Rider & Co., London, 1929, pp. 184-185.

E. Pragmatic Space, Versus Pure, Rectilinear, Euclidean Space

In the most generally familiar form of solid analytic geometry, space is represented as having three straight-line axes, usually called X, Y and Z, each of which is at right angles to the other two, and each of which is measured in units of constant size. Analytic geometry is not concerned with any variables except those specified and measured. It may be assumed that the three dimensions are homogeneous with each other, and homogeneous throughout their extent, except with respect to the measured variables.

Dimensions can be added, at right angles to each of the preceding. A fourth dimension, W, can be visualized fairly well by setting up a series of three-dimensional structures (looking a little like a row of office buildings), each successive structure being designated as located at a further constant interval along the W-axis.

But when we consider the pragmatic space-time system used by geographers to describe our Earth, and its relations to the Solar System, we find that it differs in major ways from pure, rectilinear, Euclidean geometry. The first three dimensions are laid out in modified spherical, not in rectilinear geometry. The time dimension is represented (as to days) by the rotation of the earth on its axis, and (as to years) by the successive positions of the earth on its eliptical orbit around the sun. Setting aside such departures as these, let us consider the ways in which the various dimensions conform to, and depart from, pure Euclidean geometry.

Table 1 summarizes very briefly some of the pragmatic characteristics of the first five dimensions. It will be noted that each of the five is at right angles to each of the others, in the sense that position in each of the dimensions can vary infinitely while all the other four remain constant. On the other hand, it will be seen that not only the fifth dimension but also each of the other four lacks that homogeneity—within itself and as compared with the other pragmatic dimensions—which we associate with pure Euclidean space. The major distinction of the psychic dimension is the fact that magnitude in it is not measured in units of constant size. Is this difference sufficient to rule out the dimension-conception in our analysis of psychic phenomena? Not if a tenable theory of the nature and causes of psychic intersections can be developed. The foundations for such a development appear to be available in a modified form of Carington's Psychon Theory.

TABLE 1. PRAGMATIC VERSUS EUCLIDEAN DIMENSIONS

PRAGMATIC DIMENSION		LIKENESSES TO, AND DIFFERENCES FROM, EUCLIDEAN SPACE		
No.	Name	Is it at right angles to previous dimensions?	Is it measurable in constant units?	Is it homogeneous in other characteristics, with itself, and with the previous dimensions?
1	North-and-south	. . .	Yes: degrees of latitude.	Not homogeneous within itself; climate varies from arctic to tropical.
2	East-and-west	Yes: at a given latitude any longitude can occur.	Yes: in miles; but degrees of longitude vary.	Not homogeneous within itself; surface varies from sea to land and from mountain to plain. Not homogeneous with north-and-south; magnetic lines run to poles, not cross-ways. Sun sets in west, not in other quarters.
3	Up-and-down	Yes: at a given latitude and longitude, any height can occur.	Yes.	No: levels vary from subterranean to submarine, to sea-level air, to stratosphere, etc. Gravitation "pulls" vertically, not horizontally.
4	Time	Yes: at any point on earth, every time has or will occur.	Yes.	No: everything on Earth moves forward simultaneously in time; backward motion in sidereal time is impossible.
5	Psychic dimension	Yes: at any given point in space-time, any psychic location can occur.	No: see text.	No: travel in the psychic dimension takes place usually in a dream body or "astral" body; other basic differences are involved —see text.

F. Psychon Systems and Psychic Space

Professor Ducasse's question as to the causes of psychic intersections, Professor Price's question as to the incompleteness of such intersections, and his consequent suggestion that intersections may take place on subconscious levels—all these lead into, and find helpful answers from Whately Carington's Association Theory of Telepathy. But that theory is a development from his Psychon Theory of Personality, which will be summarized briefly in his own words before taking up the Telepathy Theory.

The Carington Theory of Personality: Whately Carington says:

> ". . . the mind consists of sensa and images [psychons], and of nothing else whatsoever . . . . the mind is a psychon system, or psychon structure, in very much the same sense that the body is a cell system, that a protein molecule is an atom system, or that a galaxy is a star system. The psychons are linked together into groups and sub-groups and patterns, and all these with each other, by the 'forces' of association in much the same way that cells are linked by adhesive forces, atoms by electrical forces ('valency bonds'), or stars by gravitational forces. . . . The word 'consciousness' should refer to the system of relations between psychons in very much the same way as the word 'space' refers to the relations between bits of matter [N.B.].
>
> ". . . any psychon system will have a degree of purposivity or autonomy appropriate to its constitution.
>
> "The field of consciousness, at any moment, consists of those psychons which are [at that moment in the process of] being associated with . . . 'sensa resulting from the stimulation of endosomatic [inside the body] receptors' . . . [together with those sensa themselves].
>
> ". . . Various events take place in the physical world, of which your body is a part; some of these occur inside your skin and others outside it; some of each class stimulate sense organs or 'receptors,' thereby occasioning the production of sensa; some of these sensa are associatively linked, directly or indirectly, and more or less strongly, with images; your field of consciousness at any moment consists of all those sensa and images (psychons) to which the foregoing remarks apply."[21]

H. H. Price has set forth a theory which, he says, "is very like the late Mr. Whately Carington's Psychon Theory":

> "We must take as our fundamental unit something far less complicated than a complete mind, something like an individual idea, and build up the various grades of psychical entity out of them: from not-very-purposive ghosts and Freudian complexes at one end, to the complete and healthily integrated human mind

[21] Whately Carington, *op. cit.*, 164-178.

> at the other, with mediumistic 'controls' somewhere in the middle. All these different sorts of mental entity, we must say, and any others there may be, are idea-systems of different degrees of complexity and different degrees of autonomy and internal coherence."[22]

The conception of personality as built up out of coordinated psychon systems, each of which has its own degree of autonomy and purposivity, is thus advanced both by Carington and Price. Ducasse has developed a closely related conception of personality:

> "A mind . . . is literally a society of semi-independent, semi-interdependent role-selves, which during life all use the same body and get along together more or less harmoniously and efficiently. . . . a mind is a composite of parts more or less well integrated, the parts, which we have denominated role-selves, being sets of systematically interrelated capacities or properties. These various parts too—down to what we have called molecular minds—are genuinely minds, though simpler, more specialized, less versatile than the whole of which they are parts."[23]

Recognizing that each of these three conceptions has its own special contribution to make to a conception of personality suitable to be made basic in psychical research, we may employ Carington's term—psychon systems—to designate the partially autonomous components. But I should prefer to interpret "psychon system" as implying some such concept as "personality sub-configuration," including under that term any dynamic pattern of conscious ideas, memories, conscious and unconscious value attitudes, neuro-muscular habits and skills, and so on. And instead of the intellectualistic implications of the "association of ideas" as used by Carington, I should prefer some such term as "linkage," to include not only logical and habitual idea-sequences, but also all processes of conditioning and conscious insight which tend to build up experience-configurations. Such changes, however, would constitute developments rather than repudiations of Carington's basic conception of personality.

Carington's "Association Theory of Telepathy": This is the theory to which Professor Price apparently referred in his letter when he said:

> "The [conceptual framework] which appeals most to me personally is the one which starts from the notion of 'common unconscious'."

Carington, in his chapter on "The Association Theory of Telepathy," offers as his key suggestion: "Suppose we have a common subcon-

---

[22] H. H. Price, "Psychical Research and Human Personality," *Hibbert Journal*, Vol. XLVII, 1949, p. 110.

[23] C. J. Ducasse, *op. cit.*, pp. 413, 481-482.

scious." Around this idea he has built up what is, perhaps, the most elaborate, promising, and experimentally testable hypothesis which has yet been advanced in this field. This theory is epitomized in the following sentences, taken from the author's exposition:

> ". . . Let us give the name 'O' to the object which I . . . decide on drawing [in one of the telepathy experiments] . . . suppose that before I started I placed on my desk some special and rather unusual object not ordinarily there . . . let us call it 'K.' Then . . . the idea O will become associated with, among others, the idea K.
>
> "Suppose we have a common subconscious . . . . so that associations formed by me are effective for you. Then presentation of K to you *will* tend to draw up the idea O . . .
>
> ". . . What, then, acts as a K-object or K-idea, without which the mechanism I have just described evidently will not work? My answer is that it is the 'idea of the experiment.'
>
> "Let us for brevity write E for 'the-idea-of-the-experiment,' X for the Experimenter, and Y for the Subject. Then the Association Theory of Telepathy may be succinctly stated thus: 'X associates O with E; E is presented to Y, and tends to call up O.'
>
> "Putting it somewhat less compressedly, we may say: . . . 'When the idea-of-the-experiment (E) is presented to the mind of the subject, it automatically tends to evoke the idea (O) of the object depicted in the original, because the association formed is operative for both parties.' "[24]

Carington presented evidence showing that his experimental data are consistent with at least three of the "Sub-laws of Association:" namely, (1) The Law of Recency; (2) The Law of Repetition; and (3) Rapport.[25]

The Causes of Psychic Intersections: The theory outlined above provides an answer to the question raised by Professor Ducasse, and listed as number 6 in the section on "Difficulties Raised" near the beginning of this article (pp. 49-54), namely, "What Causes Psychic Intersections?" Carington's Association Theory of Telepathy holds that we share a common unconscious. Psychons (dynamic patterns of associated ideas—or of linked-up stimulus-response configurations) belong to groups of minds. Some psychon systems are spatial in character; some are not. A psychic intersection occurs (according to this theory) when two or more persons at the same time get onto the same track in their shared unconscious, and when this meeting is brought up into the full consciousness of both of them, in the form of a shared, four-dimensional psychon system.

---

[24] Whately Carington, *op. cit.*, pp. 103-106.

[25] *Ibid.*, pp. 108-125.

Henry Armitt Brown's dream of being murdered in a narrow street by the stocky man who split his head open with a hatchet in spite of the rescue-efforts of his friends, was a spatial psychon system—a four-dimensional structure in psychic space-time. Presumably it was constructed out of materials in Brown's subconscious mind. But (according to the Association Theory of Telepathy) this was not merely his private subconscious. It was shared by his two friends, and perhaps by the person who appeared as the murderer in the dream. Between these three or four people (and perhaps others in the dream) there were numerous shared association links—enough so that the psychon structure was shared. Similar association links would provide the beginning of an explanation for any case of psychic intersection.

Sequences Between Psychic Scenes: Characteristic of experiences in the fifth dimension is the swift (and at times frequent) shifting from one scene to another. For example, a daydreaming man might be recalling, in memory, a picnic which he had with his younger brother when they were boys. That might bring to mind a memory scene from a few days ago, in which his brother and he were playing with the brother's children. That might call up an imagined scene from the future, in which one of the brother's children has grown up. So the sequence might continue. If two different people, separately but at the same time, were following sequences of this sort in dreams, they might both happen onto clues which would bring them both into the same scene at the same time, thus bringing about a psychic intersection in a shared dream. Or, instead of chance coincidence, the fact that one of them was dreaming vividly of the scene might provide the associational clues which would bring the other into the intersection.

The same types of causal factors which determine the construction of a psychon system (or dynamic configuration) in an individual determine also the construction of interpersonal or shared configurations. The same types of factors which determine how an individual's attention will wander—or will proceed logically—will determine also what psychic intersections will emerge between two or more observers. If we can determine what makes an individual think of certain things, or dream certain dreams, under given circumstances, we should be able to apply similar principles to discovering why two or more people, under given circumstances, gravitate to the same segment of their common unconscious.

The Incompleteness of Psychic Intersections: The above analysis leads to an answer to one of the questions raised, earlier in this article, by Professor Price. Like any process of the association of ideas (or of the formation of dynamic psychological configurations), the telepathic sharing of psychon systems would almost necessarily

be imperfect and incomplete. Even in our daily intercourse, we often have great difficulty in understanding one another clearly and fully. The numerous points on which participants in the present creative-discussion experiment have misunderstood or incompletely understood each other provide illustrations of the incompleteness with which even persons of advanced academic training share each other's ideas, in spite of sincere efforts to do so.

On the other hand, it seems clear that telepathy is most likely to take place between individuals who have large bodies of interlinking psychons—or who are, in other words, in close rapport. The completeness or incompleteness of a conscious psychic intersection, then, would depend in part on the completeness of the interlinking of the psychon systems of the representative individuals.

This same line of interpretation would apply, not merely to the incompleteness of the sharing of dreams, or the deficiencies of personality as represented by apparitions of the living and of the dead, but also to the incompleteness noted in alleged communicators through trance-mediums. The linking of psychon systems, according to the theory presented by Carington, might produce either an imaginative form created by the dreamer, percipient or sitter, or it might bring forth a fictitious form, created out of the minds of other persons whose psychon systems were linked in; or it might produce a thought-form through which the conscious observer-operator of the deceased person might be expressing himself more or less coherently.

The Tyrrell Theory of Apparitions: The Carington theory of psychon systems has close functional relations with Tyrrell's "Idea-Pattern" Theory. Tyrrell says:

> ". . . an apparition cannot be merely a direct expression of the agent's *idea;* it must be a drama worked out with that idea as its *motif*. . . . The work of constructing the drama is done in certain regions of the personality which lie below the conscious level; . . .
>
> "Perhaps it would be useful here to introduce a metaphor and to compare the consciousness of the agent with the author of a play, and that 'something' within him which works out the idea in dramatic form to the 'producer'. . . .
>
> "There is a good deal in the apparition which suggests consciousness and there is a good deal which suggests automatism. . . . We are dealing with something which is to a certain extent *like* an idea, and, at the same time, to a certain extent *like* a pattern. . . . This idea-pattern is the dramatic production of the agent's idea; while the apparition itself is the sensory expression of the idea-pattern. . . .
>
> ". . . all cases, whether of experimental or crisis-telepathy, are the result of the producers of two or more persons uniting

> to form a collective idea-pattern of some sort. Telepathy is no more than the result of a 'natural' relationship between the producers of different personalities, and probably they are only doing much the same kind of thing with elements of other personalities that they normally do with their own."[26]

The issue between the above Idea-Pattern Theory and the Psychic-Fifth-Dimension Theory is one of emphasis rather than of contradiction. Tyrrell seems to think of any given apparition as a special, *ad hoc* dramatic construction. The Five-Dimension Theory conceives rather that personalities produce constantly a rich background of four-dimensional dream structures, which are largely outside the ordinary waking consciousness. Because of the existence of the common unconscious, and the interlinking of the psychon systems of personalities related in various ways, intersections between these four-dimensional structures occur—probably much more frequently than our waking consciousnesses are aware. On special occasions, the intensity of emotional factors, the special capacities of percipients for projected eidetic imagery, and other unusual conditions, bring such intersections up into ordinary consciousness.

Why Psi Phenomena Are Relatively Rare: If telepathy, clairvoyance, psychokinesis, apparitions, spiritistic communication, precognition, and the like, are merely special cases of the association of ideas (or linkage of experiences) and of intersections within the five-dimensional psychic continuum, why is it that they do not occur more frequently, and "normally"? Two lines of explanation suggest themselves.

First, such ordinary experiences as memories, flashes of insight, creative ideas, impulses to write letters to a friend, and the like, tend to occur most often along those paths of association or lines of linkage which are strongest, most abundantly reinforced, and most multiple in their points of possible contact. Granted that the unconscious areas of our personalities do merge (on certain levels) with a common unconscious, shared with our friends and with people having interests in common with us, it also seems clear that the strongest bonds, and the most deeply trodden paths are those which grow up out of our own bodies and out of our own sensorimotor experiences. The subtler contacts of psi tend to be drowned out by the stronger contacts of the sensorimotor self.

The second line of explanation is closely related with psychological repression. We all tend to push back into the subconscious those experiences which are out of line with the dominant value patterns which we have developed—and especially those which we have

---

[26] G. N. M. Tyrrell, *op. cit.*, pp. 71-73, 78.

accepted from the current mores. In an age in which success is linked up with money, machinery, physics, chemistry, geology and biology, and in which the acceptance of psi phenomena would require a revolutionary reconstruction of the "natural" sciences on which our whole mechanistic civilization is built, the mores tend strongly to push these psychic phenomena back into the unconscious.

A few years ago I made written records of over 900 of my own dreams. Sometimes I recorded as many as 17 different dreams in one night. Yet, when I do not devote special attention to my dreams, I am likely to have clear memory of not more than one a month. At least 98 per cent of my dreams never emerge clearly into my waking consciousness. It seems reasonable to inquire whether somewhat the same overwhelming tendency to repression may be excluding parapsychological phenomena from our individual and group consciousness.

G. Precognitive Contacts with Psychon Systems

Before outlining the implications of the five-dimensional theory relative to precognitive phenomena, it may be well to consider briefly two alternative theories which have been much discussed.

The first alternative is the theory of "The Specious Present."[27] This theory holds that the present instant is not a mere three-dimensional slice of space-time, but is actually a duration, in which both the past and the future are definitely involved. This theory is well illustrated by the fact that if one is listening to a musical theme from a symphony, one does not hear each individual note as an instantaneous and isolated fact. The note itself is heard as a summation of a series of vibrational beats, and the note does not stand alone but is heard in relation to the notes which precede it and (if the theme is familiar) to the notes which are to follow. Some theorists have held that the "specious present" involves precognition of the immediate future, and that if our subconscious minds have "specious presents" of longer range, this might explain precognitive phenomena.

The fallacy in this argument is the fact that the "specious present" includes—not *precognitive* knowledge of the immediate future—but merely our anticipation or forecast of what the future will be. Quite often a musical phrase may be given an unexpected turn—sometimes with humorous results. If one is walking up a flight of stairs in the dark, the specious present sometimes presents us with an extra stair beyond the one actually at the top. If one attempts to take the extra stair, one's foot comes down on the floor with a jolt. Such instances

[27] H. F. Saltmarsh, "Report on Cases of Apparent Precognition," *Proc. S.P.R.*, Vol. XLII, 1934, pp. 74-93.

could be multiplied indefinitely. The specious present involves little or no demonstrated precognition; it involves simply our forecasts as to the immediate future.

The second theory which might be considered briefly is Dunne's idea of multiple time-dimensions.[28] This theory involves the difficulties of an infinite regress, and it becomes highly complex and artificial when one attempts to apply it to actual problems.

The Five-Dimensional Theory develops a conception of precognition which seems relatively simple and straightforward. The first basic proposition is that psychon systems are four-dimensional, and extend both in time and in psychic or material space. A second fundamental proposition is that all events have adequate causes. Any given experience-configuration might be traced back to causal antecedents, some of which are mechanical, physical or biological in character, but others of which involve human purposes, plans and decisions. A third basic principle is that the psi faculties involve extrasensory awareness of psychon systems—not merely when they are in the conscious or subconscious minds of other persons, nor merely when they are in the contemporaneous physical world beyond sensory contact—but also when they extend into the future or the past. Precognitive and retrocognitive phenomena, like other ESP experiences, involve the unusual but natural contacts which some minds occasionally experience with psychon systems which are beyond sensory access.

What, then, of the question of intervention? How would one explain instances of the sort in which a man dreamed of being killed in an automobile wreck, at a certain intersection between two roads with which he was unfamiliar, and then in later waking life found himself coming to that very intersection, jammed on the brakes, and saw the automobile which might have killed him streak past in front of his car? The explanation of such events is fairly simple. Any *precognitive* awareness is inevitably commingled with *anticipatory* awareness. In our daily lives, at any given moment, we are more or less conscious of the fact that various alternative lines of action are possible to us, and that various alternative events may occur without our volitional intent. In our daily living we deliberately select among these alternatives, and the one we select becomes "the real future," while the others recede as "might-have-beens." A precognitive dream would be very likely, of course, to dramatize one of these potential outcomes, and to by-pass the "real" outcome.

In our daily living, we observe that some individuals are unusually foresighted, while others seem to have relatively poor awareness of

[28] J. W. Dunne, *An Experiment with Time*, Macmillan, New York, 1927; and *The Serial Universe*, Faber and Faber, London, 1934.

what is about to happen. Usually this capacity to foresee is correlated fairly highly with intelligence. The intelligent individual, who thoughtfully explores the potentialities of the situations in which he finds himself, and who makes the normal sorts of forecast, adjusting his behavior to the probable effects of that behavior, and to the probable outcome of trends beyond his own control, is more wise and successful than his associates who act impulsively, without due consideration or appraisal of the future implications of present actions and events. Now suppose that an individual not only foresees intelligently the outcome of present trends, but also has ESP awareness of the future. Such an individual would be super-wise. He would be able to direct his behavior in accordance with his normal foresight, but also in connection with his precognitive awareness of future developments. This would not involve a denial of free will, but would be a simple extension of the sort of wisdom which we all seek to employ and which we regard as perfectly natural when it involves merely intelligent foresight.

What, then, about J. W. Dunne's "observer"? The reality of the observer, moving in a time more or less independent of the events which he observes, seems beyond dispute. However, this aspect of the problem seems to be covered adequately by the recognition of the individual's unique time-line. Each one of us, looking back upon his previous experiences, can identify a series of four-dimensional experiences, some of which were sensorimotor in character, and some of which were dreams, imagination or planning. Also we may be able to recall some intervening experiences which were not four-dimensional in character, but which were rather in the nature of abstract thought or of intuitive experiences. This time-line of the individual is synonymous with his awareness of personal identity, and it obviously is not equivalent to sidereal time nor identical with the time-dimensions of the various four-dimensional experiences through which his focus of attention has moved. In any one of these four-dimensional experiences, his time-line may have *coincided*—and perhaps necessarily did coincide—with that local time. But it is entirely possible for the individual to go back to a previous four-dimensional experience and look at it from his new position on his own time-line, regarding the time-dimension of that experience as a static extension, analogous to footage on a movie film rather than as equivalent to the time-period during which he is reviewing it. To elaborate these facts into an infinite regress of time-dimensions is needlessly confusing. Any one of us can look at a four-dimensional structure from his own unique time-line, which meanders through the psychic fifth-dimension. Precognitive experiences can be thus examined, just as memory experiences or imaginative experiences can.

H. Issues Postponed to a Later Article

Earlier in the present article, in listing the "Difficulties Raised" by the distinguished correspondents who have participated in this project, only those were presented which challenged directly the proposed use of geometrical concepts as applied to psychical phenomena. Other difficulties, however, have also been raised—either explicitly or implicitly—during the correspondence out of which the present article, and its predecessor, have emerged. Among these are the following:

1. What relationship between mind and matter is to be taken as basic in developing theories of psi? At least three alternatives are to be considered: (1) dualism; (2) psychosomaticism; and (3) operational idealism. Is there any practicable procedure by means of which a verifiable and valid choice can be made between these (and perhaps other) alternatives?

2. What conception of personality is to be taken as basic in developing theories of psi? Leading thinkers in this field have advanced at least six theories of personality, each of which (on the surface, at least) appears to be different from each of the other five. Again, is there any verifiable means of choice?

3. Can personal identity be established by verifiable operational tests, when dealing with ostensible personality embodiments encountered in the psychic dimension? In other words, how can we tell whether a purported personality of a deceased person (encountered as an apparition or in a dream or through a mediumistic message) does embody the purported identity?

The above issues root back so deeply into philosophical problems that it seemed impracticable to attempt even an initial discussion of them in the present article. However, an attempt to deal with them is to be made in a subsequent article, to be entitled: "Theories of Psi: A Constructive Critique of Underlying Assumptions."

Before closing the present article, it seems desirable, first, to mention some further research implications which have emerged from it, and second, to summarize, from the present standpoint, the possible advantages which the exploration of the Five-Dimension Theory may have for psychical research.

I. Research Suggestions Emerging from the Continuity of Psi with Other Phenomena

At the end of the article on "The Psychic Fifth Dimension," a specific research program was outlined. The discussion summarized

in the present article has indicated the need for supplementing this program, but it does not seem to invalidate it. The program, as published in the earlier article, had already benefited from various amendments and a number of supplementary suggestions, based on constructive criticisms by those who have participated in this discussion. But, in addition to the research program previously formulated, a number of further suggestions emerge from the present discussion.

The Incorporation of Psi into the Natural Scheme: From several different angles the fact is beginning to emerge that parapsychological phenomena must be treated as an integral part of reality in general. One common trend which appears in the work of Rhine, Thouless, Wiesner, Carington and others, and which is fundamental to the two present articles, is the recognition that psi phenomena can be understood only if we are able to incorporate them into the basic scheme of thought by means of which we deal with life in general. Eight different developments indicate ways in which parapsychological phenomena are being brought under the fundamental concepts used in dealing with other types of data.

1. That telepathy, clairvoyance, PK and other psi phenomena are simply the normal psychological processes, operating through, or acting upon, organisms other than that of the agent, is the essence of the hypotheses suggested by Thouless and Wiesner in their article about Shin, psi-gamma, and so on.[29]

2. That telepathy is simply the normal process of association of ideas, taking place through a shared unconscious, is Carington's hypothesis (see footnote 24).

3. That "telepathy is no more than the result of a 'natural' relationship between the 'producers' of different personalities, and probably they are only doing the same sort of thing with elements of other personalities that they normally do with their own" is suggested by Tyrrell.[30]

4. That extrasensory perception, in all but the stimulation aspect of the process, appears to be much like normal sensory perception, as far as comparative knowledge is at hand, is the conclusion of Rhine and his associates, in their definitive study of ESP.[31]

In line with the foregoing developments are the following aspects of the Five-Dimensional Theory, which carry further the incorporation of psi into the normal scheme:

---

[29] R. H. Thouless and B. P. Wiesner, "The Psi Processes in Normal and 'Paranormal' Psychology." *Proc.* S.P.R., Vol. XLVIII, 1947, pp. 177-196.

[30] G. N. M. Tyrrell, *op. cit.*, p. 78.

[31] J. B. Rhine, J. G. Pratt, *et al*, *Extra-Sensory Perception After Sixty Years*. Henry Holt and Co., New York, 1940, p. 326.

5. Our ordinary space-time universe is a special case of the unlimited number of four-dimensional continua contained in the five-dimensional psychic continuum.

6. Apparitions of the living, and shared dreams, are merely special types of intersections between four-dimensional structures.

7. Apparitions of the dead, and personality-representations encountered in dreams, present merely special cases of the general problem of determining whether any given personality-representation —in the sensorimotor world or otherwise—is the vehicle of an essential spirit, and if so, what is the true identity of that spirit.

8. Precognition, under the Five-Dimension Theory, is merely an extension of normal foresight, involving extrasensory perception of four-dimensional psychon systems which are extended in time as well as in space. "Intervention" in "the future" is no more mysterious than ordinary choices between alternative courses of action, made in the light of foresighted wisdom.

Some Research Implications: Such basic relationships as those pointed out in the above eight paragraphs become of crucial importance when psychical research priorities are being considered. At the present point six major research implications may be pointed out.

1. Psychic Transitions: Since various psychical phenomena are related to intersections between four-dimensional structures within the five-dimensional continuum, the phenomenon to which Dr. Smythies refers as a "dimensional interface" becomes particularly important. If we could learn how to perceive apparitions more frequently, how to experience and remember shared dreams regularly, how to launch ourselves onto astral excursions—and the like, we should have a much richer supply of psychic phenomena to which to apply research techniques. Since, however, the interfaces between ordinary mental experiences and sensorimotor experiences are (according to our current hypothesis) homogeneous with the interfaces between ordinary and psychic experiences, much light might be shed upon our basic problems by studying the process of remembering dreams, the process of inducement of clear dreams, the processes used by mediums in going into trances, and the like. Such processes need to be studied in relation to such possibly causal factors as relaxation, hypnosis, auto-hypnosis, psychological dissociation, yogi-techniques, and so forth.

2. Improving Telepathy via the Common Unconscious: If the Carington hypothesis of a common unconscious is valid, then the process of telepathy is closely related to the building up of vivid and accessible psychic configurations in agents and subjects of telepathic experiments. Here the increasing knowledge of the laws of learning,

obtained by normal psychology, should shed light. The processes of conditioning, linkage, and the association of ideas, the effects of repetition, of various types of emotional intensity, of insight, and the like, need to be explored as they apply to the types of configuration which result in telepathic transmission.

3. Repressed Psi: Since the process of repression of subconscious ideas and motives is a factor common to both "normal" and parapsychological phenomena, intensive study needs to be applied to the factors which result in shutting out psi experiences from the conscious mind. Various beginnings have been made in parapsychology toward an understanding of these factors, but certainly far more attention needs to be focussed on this crucial problem.

4. Apparitional Psychology: The perception of apparitions seems (on the face of it) to be closely related to various psychological phenomena, such as eidetic imagery, delirium, hypnotic induction of hallucinations, psychopathic hallucinations, and the like. Also involved, undoubtedly, are subconscious factors which determine whether the conscious attention is to be directed toward the perception of apparitions or whether such experiences (even if they develop in rudimentary form) are to be suppressed. The knowledge already available, relative to such real phenomena as those enumerated in the previous sentence, needs to be reviewed in the light of the present theory. It needs to be analyzed for possible improvements in the theory which these data may suggest.

5. Spirit Identities: The question of whether the dramatized personality structures observed in apparitions, clear dreams, mediumistic trances, the materialized "spirit entities" which various persons claim to have found to be veridical—and the like, are actually vehicles for the conscious selves of the persons represented, is parallel in essential features to questions of the identity of sensorimotor personalities. The whole problem of the techniques by means of which personal identity can be established is one which needs to be explored searchingly. For example, suppose that a soldier had gone into foreign military service, leaving a young wife behind. Suppose that after six months he was reported missing in action, and suppose that three months later, the wife, serving as a nurse, came across an extremely mutilated soldier in a hospital who had complete amnesia. Let us suppose that he had lost both hands, so that fingerprints were not available for identification, and that other identifying marks were not recorded or were not available. By what sorts of test could this wife establish whether or not this mutilated individual was or was not actually her husband?

6. Do Coherent Worlds Exist Apart from the Sensorimotor? The prominence given to dream phenomena in the Five-Dimension Theory

raises a fundamental question. Practically all of our experiences of dreams are very unsatisfying from the standpoint of providing a permanent basis of existence. Dreams are usually fragmentary, illogical, incoherent and definitely restricted in their intellectual scope or level. Any survival theory which would attract intelligent minds would presumably need to hypothesize four-dimensional worlds outside our sensorimotor experience, in which intellectual life, human relationships, and the like, would be at least as intelligent, as consistent, and as progressive as the best which we know in earth life. But is any such hypothesis reasonable?

Immediately there comes to mind the fact that, in the realm of fiction, coherent systems of imagination and thought have been created, to which access is obtained through the symbolism of the printed page, the moving picture, radio, television, and the like. Beyond these, it is evident that there are vast worlds of abstract thought—such as mathematics, philosophy, and so forth, which are orderly, highly organized, indefinitely expansible, and challenging to the best intellects. But what most of us (at least at times) feel a craving for is something more or less approximating the so-called "astral" world. We feel the need of a realm of experience in which, even after taking leave of our sensorimotor bodies, we can recognize our friends, find ourselves in objective, tangible, visible, audible surroundings, in which we can engage in creative activities, and the like. Ducasse and Carington have both worked out in some slight detail their conceptions of the possibility of worlds of this sort. Non-evidential spiritualistic communications frequently assert that such realms do exist. Theosophy developed a highly elaborate and complicated system allegedly describing realms of this sort—also mental and spiritual realms towering far beyond them. What we need is adequate research techniques by means of which the delusory factors in such beliefs can be identified, and the question of the actual realizability of that sort of life can be tested.

Criticisms of the Research Proposals

Several correspondents who have participated in this discussion have expressed interest in, and approval of, the research suggestions which were offered in the article on "The Psychic Fifth Dimension." However, various correspondents also have raised significant challenges, which need to be confronted frankly in considering whether any such program is worthy of further attention. These criticisms may be enumerated as follows:

1. Practicability: In replying to a review of Ducasse's book, *Nature, Mind, and Death,* in which a research program of this type was intimated, Rhine said:

> "It is easy . . . to think that certain things ought to be done which are at present practical impossibilities. . . . There is no use in expending our energies in approaches which can only result in frustration in the end. . . . We have to be practical, and we want to be intelligent in the use of our energies and time . . ."[32]

2. Research Momentum: J. G. Pratt, of the Duke Parapsychology Laboratory, after expressing the wish that the enthusiasm embodied in the present plan might be implemented by actual research activity, pointed out:

> "It is awfully difficult (as I am sure you will agree) to get one of the active workers in the field of parapsychology to let go of a line of investigation which he feels is paying off and for which he feels he has had too little time as it is, in order to take up another line in which he lacks experience and for which the prospects would at best represent something of a gamble. . . . I would say that our salvation lies not in discontinuing some of the things which we are doing, but in actually finding more people with the interest and the inclination who will undertake the things that the present and past workers in the field have been neglecting."[33]

H. H. Price comments:

> "I thoroughly approve of the research program suggested at the end of the paper, though the labor it would involve is very great and I think you would need a large number of full-time collaborators to do all you want."[34]

3. Possible Dangers of the Proposed Program: Those who are strongly convinced that the sensorimotor or material world constitutes the only important reality, are likely to scoff at the suggestion that the proposed lines of research might bring the investigator into contact with forces and perhaps personalities who would be genuinely dangerous. But if our "material world" is actually only a special case among an unlimited number of four-dimensional worlds, and if in some of these four-dimensional continua personalities survive beyond death, it would seem fairly obvious that there must be spiritual realms in which potent, mischievous and misleading observers and operators might be encountered. Moreover, the hypothesis of the survival of human personality carries with it the natural corollary hypothesis that non-human spiritual entities may exist. The fact is that a considerable fraction of those who have seriously undertaken to explore the psychic continuum report having encountered malignant and

---

[32] "Rejoinder by J. B. Rhine," JOURNAL A.S.P.R., Vol. XLVI, April, 1952, pp. 77-78.

[33] J. G. Pratt, letter to Hornell Hart, June 4, 1952.

[34] H. H. Price, letter to Hornell Hart, May 7, 1952.

dangerous—or (more frequently) misleading and untrustworthy—spiritual entities. If such is the case, then the average investigator is in a situation somewhat analogous to that of an unsophisticated and soft-handed city dweller who insists upon plunging suddenly into wild-animal hunting in the heart of Africa or India.

Even those skeptics who scoff at any hypothesis which implies the existence of surviving human spirits—or particularly of non-human spiritual entities—will acknowledge the possibility that investigators along these lines may become obsessed with this interest, that they may as a result neglect their ordinary responsibilities, and may become socially, financially and intellectually maladjusted as a result. Some individuals certainly do develop paranoia in forms which involve the belief that they are being persecuted by spiritual entities. Whether one interprets such entities as veridical or purely delusionary is a matter of hypothesis rather than of proof.

Dr. Smythies writes:

> "I strongly second your warnings as to the possible dangers entailed in any exploration of the psychic continuum. My experience using mescaline and a study of schizophrenia have amply hinted at these dangers."[35]

The conclusion would seem to be that very real and serious dangers may menace anyone who undertakes research along the proposed lines. The justification for encountering these dangers is the same as the justification that scientists have found wherever the unknown challenged them to investigations which involved personal danger—whether biological, material, sociological or psychological.

The Risks of Commercializing Parapsychology

When a great research organization grows up, such as the Parapsychology Laboratory at Duke, some highly practical problems of financing arise. A large payroll has to be met. Considerable travel expenses are incurred. Publication costs are high. But contributions are irregular and undependable. High pressure develops to adopt policies which will increase—or at least maintain—income.

Such pressures pull in various directions. Some potential donors of large sums are suspicious of anything "occult"—including any researches which might stress apparitions, astral excursions, or the like. They might perhaps be induced to contribute to studies of dowsing, homing pigeons, or the like. On the other hand, if books and articles are to be published, they are likely to win acceptance and high fees in proportion as they stress the spooky, bizarre or

[35] J. R. Smythies, letter to Hornell Hart, August 9, 1952.

sensational aspects. Support from the university (to cite a third angle) is likely to be affected by attitudes of faculty members, trustees and administrative officials.

Ideally, the psychical researcher may wish to pursue the truth in this very elusive but potentially extremely significant field. But pressures related to financial needs may tend to deflect research energies.

J. Some Advantages of the Five-Dimension Theory

The question raised in the title of this article can now (at least tentatively) be answered. If one accepts the conclusions which appear to emerge out of the discussion summarized in these two articles, the Five-Dimension Theory does have definite advantages which make it potentially useful to psychical research. If psychical researchers who disagree with these findings can be stimulated to publish the reasons for their disagreements, the present article will have served a useful purpose. As goads toward further inquiry, not as final conclusions, the apparent advantages of the Five-Dimension Theory may be summarized as follows:

1. Since fifth-dimensional space-relationships do exist, it would be highly unscientific for parapsychology to refuse to investigate them, or to fail to bring them into an operational system. The following types of spatial relations clearly require some sort of five-dimensional system:

   (*a*) Projection of self-conscious apparitions of living persons into the sensorimotor space-time locations of which they are dreaming or thinking;

   (*b*) Intersections between the "clear-dream" space-time structure of an astral excursionist and the sensorimotor space-time structure in which his sleeping body is located;

   (*c*) Intersections between the space-time structures of two or more persons who share a reciprocal dream;

   (*d*) The intersections implied by the occurrence of apparitions of the dying and the dead, similar in character to the self-conscious apparitions of the living;

   (*e*) The fact that each of us, as an observer-operator, moves along his own unique time-line, on which are "strung" the successive foci of consciousness of the series of four-dimensional structures in which we observe and operate.

2. The Five-Dimension Theory outlined in this and the preceding article provides a coherent and integrated system in which the above space relations and also those of sensorimotor space-time are found to be operationally meaningful.

3. This theory brings into operational perspective the crucial concepts and problems which need to be investigated if the basic problems of human personality—of its spiritual resources and powers, and of its destiny beyond death—are to be subjected to fruitful and verifiable research. Some of these outstanding research problems, thrown into high priority by the Five-Dimension Theory, have been outlined in this article and in its predecessor.

4. This theory opens the way to developing a rational conception of the possible—and probable—character of life beyond death, particularly in its most earth-like phases. As compared with the suggestions produced previously by psychical research, the Five-Dimension Hypothesis as to post-mortem existence promises to be less fragmentary, and more integrated with ordinary experience. On the other hand, as compared with conceptions emerging from uncritical acceptance of "spirit communications" and from reports of "astral excursionists," this hypothesis, being inductively and deductively derived, is more open to dispassionate verification and correction.

5. The Five-Dimension Theory provides a framework within which other psi theories can readily be classified and compared, with a view to formulating operationally the research processes by which the issues between them may be tested verifiably.

6. Finally, this theory leads to a proposal for at least a first approximation of a crucial experiment—namely, the attempt to induce shared clear dreams of the personalities of deceased persons, and to apply to such personality-representations appropriate tests of identity such as are used in borderline identity tests in the sensorimotor world, and such as might be developed in the study of reciprocal dreams between living persons.

Some Comments on the Recent Harvard Research in ESP[1]

R. A. McConnell

S David Kahn and his associates have made an outstanding contribution to parapsychology by their "Studies in Extrasensory Perception" which was published as Volume XXV of *Proceedings*. It is hoped that the following discussion of the presentation of this experimental work will not be construed as indicating a lack of admiration for the experimental work itself.

In his introduction Mr. Kahn, referring to the occurrence of ESP, says:

> ". . . it would seem that the burden of proof is on the parapsychologist, in the sense that intelligent counter-hypotheses, even if considered in his *personal* judgment to be highly improbable, must be dealt with. For in the present state of scientific method it is all too easy to observe that agreement will simply not be reached by *arguing the probability* of a counter-hypothesis. It must be considered experimentally, by actually eliminating all reasonable possibility of the counter-hypothesis. This, then, is what this research has primarily attempted to accomplish."

Here and elsewhere in the report one gets the impression that all, or essentially all, of the preceding research purporting to establish the occurrence of ESP has failed to eliminate all reasonable possibility of suggested counter-hypotheses. As one who has never published an experimental paper in parapsychology, the present writer feels free to question this implication, if implication it is.

The key word here, of course, is "reasonable." What possibilities of a counter-hypothesis are reasonable? In this connection the present writer ventures the following opinion: When the future historian, having abandoned all emotional bias toward this phenomenon, examines the record of organized investigation begun in 1882 by the Society for Psychical Research (London), he will say that the occurrence of this class of phenomenon was established beyond all scientifically reasonable doubt long before J. B. Rhine adopted the term ESP in the early 1930's.

Since that time there have been increasingly rigorous demonstrations of the occurrence of ESP. At what point these demonstrations became secure against all *rational* doubts by competent but emotionally antagonistic scientists is, of course, difficult to say exactly.

---

[1] S David Kahn, "Studies in Extrasensory Perception: Experiments Utilizing an Electronic Scoring Device," *Proc.* A.S.P.R., Vol. XXV, 1952.

That these demonstrations have been secure in this latter sense for more than a decade, however, can be seen by examining the critical literature. Since the publication of *Extra-Sensory Perception After 60 Years* by J. B. Rhine and associates (Henry Holt, 1940) there has been no attempt at a detailed and analytical attack on any of the best work. The few criticisms which appeared have been general and ill-informed. In a recent publication Professor G. E. Hutchinson of Yale, a member of the National Academy of Sciences, summarized the situation as follows:

> "The reason why most scientific workers do not accept these results is simply that they do not want to and avoid doing so by refusing to examine the full detailed reports of the experiments in question."[2]

Among the many admirable features of the work by Kahn and associates is the rigorous manner in which they have guarded against all reasonable counter-hypotheses to the operation of ESP. Theirs is one more in a series of such experiments. It is eminently worth while to continue to fight disbelief with additional experimental evidence. Only in this way will the field attract the widespread experimental attention that its intrinsic importance warrants.

From the point of view of experimental rigor it is only fair to previous investigations to add that nothing new has been added by this Harvard work. Mr. Kahn may disagree, for after referring to the "highly reliable IBM machine" which he used, he says on page 7, "The crucial advantage of the IBM technique is the *independent* check of the results which it provides."

Now the use of the International Business Machines test scoring machine is a brilliant experimental innovation for a variety of evident reasons, but accuracy in scoring is not among them. The IBM "mark sensing" technique (as distinct from the IBM card punching system) is for the two reasons described by Mr. Kahn not inherently precise. The response of the scoring machine depends upon the laying down of a pencil mark that will conduct electricity when the paper is placed in the machine. According to IBM literature, dependable results can be obtained by *trained* personnel using the special pencils furnished by IBM. A second reason for inaccuracy is that the IBM scoring machine does not directly discriminate against multiple and omitted responses. The operation of the machine must be supplemented by hand inspection, and the hand inspection process must be considered an integral part of the use of this machine. As reported on page 44 (footnote) there were found to be 31 errors (without regard to sign) in the machine scoring of the data of Appendix I. It is hardly

[2] "Methodology and Value in the Natural Sciences," *Journal of Religion*, Vol. 32, 1952, pp. 175-187.

proper to say, as Mr. Kahn does, that only six of these were "inherent in the IBM technique" and, about the other twenty-five, that "adequate preparation of the sheets for the machine . . . would have prevented them."

As a matter of fact, this kind of accuracy is considerably better than is being obtained at the University of Pittsburgh in IBM examination scoring where an error of one per cent is not uncommon despite the use of the IBM pencils and a pre-scoring hand inspection of the sheets. It should be emphasized that the IBM scoring accuracy obtained by Mr. Kahn is more than adequate for most research purposes, and that practically all of the remaining errors may be assumed to have been caught by the independent manual rechecks that were carried out. But it should also be made clear that the final over-all accuracy which he obtained cannot be presumed to be better than that obtained in past ESP experiments where the original, independently made, objective records of card calls and responses were independently rechecked by professional scientists.

Among the questions investigated by Mr. Kahn is the matter of correlation between a subject's attitude and his ESP performance. It may be permissible to lump together free responses and questionnaire answers, as Mr. Kahn does, and to say that by definition these are a measure of "attitude," but it is hardly then proper to conclude, as he does, that "The widespread opinions held by parapsychologists as to the extreme importance of proper attitudes in the demonstration of ESP should be looked upon with some suspicion . . ." (pp. 31-32). The present writer is not aware of any widespread opinion about the importance of attitudes as Mr. Kahn defines that term. On the contrary, the Harvard experimental results may fairly be said to be foreshadowed by the mixed findings of the prior literature.

In working with individual high-scoring subjects other experimenters have sometimes encountered sudden, unexplained changes in scoring rate. To judge from the literature, it is often the clinical impression of these experimenters that these changes were of a non-chance nature and were bound up with the personality of the subject in some psychological interaction with the experimental situation. As any psychoanalyst will agree, this might be far too subtle a thing to be caught in the coarse mesh of a questionnaire. Those psychologists who call themselves "tough-minded" will typically deny the value of such clinical observations until pertinent factors have been operationally defined and their interaction statistically validated. What is involved here is the methodology of psychology. There is room for various approaches in any field, but it is perhaps well to

remember that if the investigation of psi phenomena had been left to the "tough-minded" school of psychology, the occurrence of these phenomena would still be universally regarded by scientists as a superstition of ignorant people.

From an informational point of view, Mr. Kahn's report is adequate except perhaps in one regard. If, as many experimenters believe, the subconscious attitude of the subject is important, then the method of recruiting subjects may critically determine the population that is actually sampled. It would be helpful to anyone attempting to repeat the present experiments to have a fuller description of the experimenter-subject relationships in Series 1, 2, and 5. What colleges did the subjects come from? How were the contacts made? What sort of appeal was used? How were the contacts developed and maintained up to the time of the experiment?

Department of Physics
University of Pittsburgh

Note on Attempt to Repeat the Kahn-Neisser IBM Results

During March and April, 1952, a repetition of the Kahn-Neisser experiments using IBM answer sheets as targets was undertaken at Hunter College by Mrs. Dale. This project was made possible through the kind cooperation of Dr. B. F. Riess, then in the Dept. of Psychology at Hunter College. One hundred and fifteen students were tested in six different classes and a total of 34,246 calls was registered. The total deviation was positive, but statistically non-significant. It will be recalled that very striking decline effects were found in the Kahn-Neisser data when the hits obtained on the first side of the answer sheet were compared with those on the second side. Analysis of the Hunter data failed to reveal such decline effects or any other significant internal relationships.

Research Committee.

Unusual Experience

The following case of a fully externalized apparition experienced by six persons was described in a letter to the Society from George Grobicki, a former Colonel in the Polish Army now living in Toronto, Canada. As will be seen below, no corroboration is now obtainable; nevertheless the case seems well worth putting on record. Col. Grobicki wrote as follows on September 29, 1952:

Dear Sirs:

In connection with many stories about well-documented cases of seemingly inexplicable happenings, I want to present you with an experience which happened to me some years ago.

I am a Polish Army Colonel, aged 60, and living at present in Canada. The incident I want to narrate to you happened to me in Poland on the first of September, 1939, at the beginning of Hitler's invasion of my country. I want to describe to you only the bare facts without any commentaries from my side, and in this way to represent to you the happenings as truthfully as possible.

At the beginning of the War, the 1st September, 1939, I was a Brigade Commander, and with my Staff was stationed in an old and big country house not far from the German border [see Fig. 1]. The building was a two-story house, solidly built of bricks, not really old—at most 50 years—and well preserved. Along the entire second floor ran a corridor divided in two parts by a small hall from which went the stairs to the floor below. These stairs were the only entrance to the second floor. [Col. Grobicki had drawn a sketch of the floor plan in the margin of his letter. It is reproduced below as Fig. 2.] My staff and I were billeted in the rooms leading to the *left* of the hall.

It was 8 hours A.M. and though the day was a misty one the inside of the house was well enough illuminated so that we could see every detail inside the corridor. At this time I and five officers of my staff were standing in this small hall discussing the exciting news of the declaration of war and the incursion of German troops into Poland, when all at once we were aware of the presence of a stranger who attentively listened to our conversation. Not one of us had seen where he came from and we all stared at him with some astonishment. He was an elderly gentleman with a short-trimmed beard, dressed in an old-modish suit. We saw nothing supernatural about him, at least he did not strike us as such at the time. As we stared at him, he lifted his hat and asked us politely "Is it really war?" to which question we answered affirmatively. "Then it is time for me to go," he said, and went down. As we were preoccupied with much important work, we did not bother much about him and forgot nearly at once about the interruption, believing him to be some

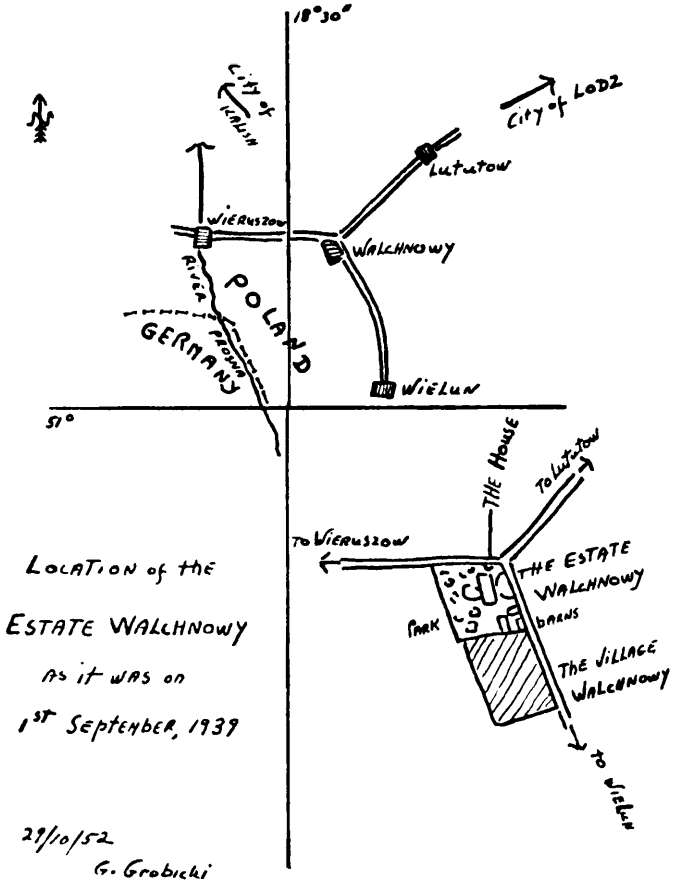

FIG. 1. Map showing location of the Walchnowy Estate, as drawn by Col. Grobicki.

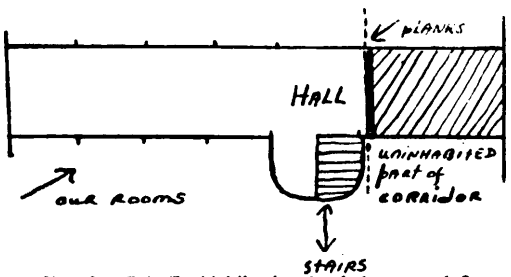

FIG. 2. Col. Grobicki's sketch of the second floor.

resident of the house who lived in the *right-hand* part of the corridor, which was unoccupied by us.

During lunch I casually asked the old butler who attended us—"who is the old gentleman living in the right wing on the second floor of the house?" The butler showed great astonishment and absolutely denied the presence of any person living in the right side of the corridor on the second floor. When we definitely explained to him that such a person must have come from there and had spoken to us all, he said: "Gentlemen, if you will follow me upstairs, I will show you that it is quite impossible." We followed him to the second floor and there he showed us that the corridor to the right of the stairs was crosswise closed by planks in such a manner that it absolutely barred entrance to anyone. "There is nobody living here and therefore nobody came from this place. Besides, if you look at the cobwebs, you will agree that no one has passed through here." After we had examined the place we had to state that this was true—nobody could have entered the hall from this side. But as all the rooms on the left side of the corridor were occupied by us, and there was an absolute impossibility for a stranger to come from there, from whence did he appear?

The old butler, who was much more excited about this matter than we were, asked us some details about the strange apparition, and when we told him how the old man looked, he quickly went downstairs and brought back an old picture. Showing it to us all, he asked "Was the man like the gentleman in this photograph?" And truly, there was our stranger as he had stood before us some hours before. As we confirmed his question, the old butler became still more excited and said in a trembling voice "This was the old master, but he is already twenty years dead." He denied that there was any such apparition earlier in the house, but stubbornly insisted that it was the "ghost" of the father of the present owner of the estate, and that his apparition predicted some disaster. We dispersed, talking with some skepticism about the matter, and quickly forgot the incident.

That evening we were forced to abandon the place, and the Germans who came after us during the night burned the house and killed the owner. The forebodings of the butler proved to be true.

Until the present day I cannot find any plausible natural explanation for those happenings, and therefore must believe in an apparition of the old gentleman, which event is most interesting as it happened in full daylight and was witnessed by six persons. I hope these facts will interest you, and should you like some further details or explanations, I am at all times at your disposal and willing to help you in this matter.

I remain, dear Sirs, very truly yours,

(signed) G. GROBICKI

Col. Grobicki very kindly answered a series of questions which we sent him on October 23, 1952.

[1. Did you make any written account, diary notes, etc., concerning the experience prior to writing to the Society? If so, when? Does this account, or diary notes, still exist?]

After coming from Soviet captivity in 1942, I mentioned the matter in my diary. These notes are still with me, written in Polish.

[2. At the time of the experience, how long had you been billeted in the house?]

Only twenty-four hours.

[3. Am I correct in understanding that you and your fellow officers were standing in the hall on the second floor, close to the rooms you occupied, when you saw the "stranger"?]

Yes.

[4. You say that the apparition spoke, asking "Is it really war?" and you answered affirmatively and then "he" said: "Then it is time for me to go . . ." and *went down*. Would you please clarify what you mean when you say he *went down*. Do you mean he seemed to go down the stairs leading to the ground floor? Or that he seemed to sink through the floor, or what?]

We were so occupied by our conversation that really afterwards nobody remembered how the "stranger" left us. One moment he was there and the next moment he was gone. We all just accepted as a natural thing that he went down by the stairs and therefore did not place any importance on it. As you mention this subject, however, I now remember that afterwards we talked the matter over, and really nobody could remember how he left us.

[5. Can you now recall whether you had seen any family portraits in the house which could have given you an impression of the old gentleman's appearance?]

I am sure we had seen no portraits of the old man. We had been in the house for only 24 hours.

[6. Was the owner living in the house at the time of the occurrence? If so, where were his quarters? Was the old butler also killed?]

On the morning of the occurrence, the owner of the house was not there, but he lived there permanently, his quarters being on the first floor. On the 1st September, 1939, only his old mother, a lady about 70, two maid-servants and the butler were there. As we never came back to the place, I don't know the fate of the latter.

[7. Would it be possible for you to give the names and addresses of any of your fellow officers who shared in your experience? Independent accounts from them would be of the utmost value.]

The occurrence was witnessed by me and five officers of my staff. One of them was killed that same evening, one later in September, 1939; two were murdered by the Soviets in the Katyn Forest Massacre in 1940, and the last lost his life in Italy in 1944 at Monte Casino. Therefore I am the only one left alive of the six of us who, on the morning of 1st September, 1939, saw and talked to the apparition, if we accept that it was one.

Col. Grobicki, in a letter dated October 29, 1952, said that he was quite willing for his real name to be used in connection with his experience in the event of its publication. We had hoped to be able to talk with him at first hand about the occurrence, but he wrote: "I was in Washington, D. C. in February as a witness at the hearing of the Katyn Massacre Investigating Commission, but now I have no plans for coming again to the States."

In a letter dated November 30, 1952, Col. Grobicki made the following observations:

> I am very glad I could provide the Society with such an interesting problem . . . the more I think about it the more I am persuaded of its reality. The most important points are:
>
> (1) We were only about 24 hours in the house at the time of the occurrence and there was no time nor possibility for preparing a trick, and no purpose in doing so.
>
> (2) Except for the old lady, the butler and the two maid-servants, there were no civilian persons in the house.
>
> (3) There was no possibility for a civilian to enter the corridor where we lived because of a soldier-guard posted at the bottom of the stairs leading to the second floor. He would not permit any civilian to go upstairs without first calling for the officer on day-duty.
>
> (4) Because of the restricted living facilities on the second floor, there was no possibility for somebody to hide there without being at once detected by us.
>
> (5) The apparition occurred during the day, in good light, and was witnessed by six individuals who never before had discussed such problems or even thought about them.
>
> (6) In my opinion mass-hypnosis is out of the question.
>
> It is really a pity that all the other officers are dead, but after all these events happened thirteen years ago and during this period we had six years of war, when officers happen to be killed. . .

L. A. DALE

HISTORY OF THE SOCIETY

The First American Society for Psychical Research was formed in 1885, in consequence of a visit by Sir W. F. Barrett to this country, and Prof. Simon Newcomb became its President. In 1887 the Society invited a man of signal ability, Richard Hodgson, A.M., LL.D., sometime Lecturer in the University of Cambridge, to become its Executive Secretary, and he accepted.

This organization later became a branch of the English Society under the very able guidance of Dr. Hodgson until his death in 1905. The American Society for Psychical Research was then re-established with James H. Hyslop, Ph.D., formerly Professor of Logic and Ethics in Columbia University, as its Secretary and Director.

THE ENDOWMENT

The American Society for Psychical Research, Inc., was originally incorporated under the Laws of New York in 1904 under the name of American Institute for Scientific Research, for the purpose of carrying on and endowing investigation in the fields of psychical research and psychotherapeutics. It is supported by contributions from its members and a small endowment fund. The income of the Society pays only for the publications and office expenses, but does not enable the Society to carry on its scientific investigations. A much greater fund is required before this work can be carried forward with the initiative and energy which its importance deserves.

The endowment funds are dedicated strictly to the uses set forth in the deed of gift and are under control of the Board of Trustees, the character and qualifications of whom are safeguarded, as with other scientific institutions.

Moneys and property dedicated by will or gift to the purposes of the American Society for Psychical Research, Inc., whether to the uses of psychical research or psychotherapeutics, are earnestly solicited. The form which such dedication should take when made by will is indicated in the following:

"I give, devise and bequeath to the American Society for Psychical Research, Inc., a corporation organized under the laws of the State of New York, the sum of ..... dollars (or if the bequest is real estate, or other specific items of property, these should be sufficiently described for identification), in trust for the corporate purposes of said Society."

THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

VOLUME XLVII JULY 1953 NUMBER 3

CONTENTS

THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, Inc.
880 FIFTH AVENUE NEW YORK 21, N. Y.
Single Copy, $1.50 Published Quarterly

THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, INC.

OFFICERS

GEORGE H. HYSLOP, M.D. ..... *President*
PROF. GARDNER MURPHY ..... *First Vice-President*
MRS. LAWRENCE JACOB ..... *Second Vice-President*
MR. EDWARD LATHAM ..... *Treasurer*
MRS. EDWARD W. ALLISON ..... *Secretary and Assistant Treasurer*

BOARD OF TRUSTEES

Mrs. Edward W. Allison	(Jan. 1955)	Miss Margaret Naumburg	(Jan. 1955)
Prof. C. J. Ducasse	(Jan. 1954)	Mr. Cyril J. Redmond	(Jan. 1955)
George H. Hyslop, M.D.	(Jan. 1956)	Prof. J. B. Rhine	(Jan. 1954)
Mrs. Lawrence Jacob	(Jan. 1956)	William O. Stevens, Ph.D.	(Jan. 1955)
Mr. Gerald L. Kaufman	(Jan. 1954)		
Edward J. Kempf, M.D.	(Jan. 1954)	Montague Ullman, M.D.	(Jan. 1956)
Mr. Edward Latham	(Jan. 1954)	Mrs. John J. Whitehead	(Jan. 1956)
Prof. Gardner Murphy	(Jan. 1956)	J. L. Woodruff, Ph.D.	(Jan. 1955)

CHAIRMEN OF COMMITTEES

Research, Prof. Gardner Murphy
Publications, Mrs. E. W. Allison
Finance, Mr. Edward Latham
Lectures, Mr. William Oliver Stevens

Research Associate, Laura Abbott Dale
Executive Secretary, Mrs. Mitchell Kennerley

PURPOSE AND SCOPE OF THE SOCIETY

1. The investigation of claims of telepathy, clairvoyance, veridical hallucinations and dreams, psychometry, precognition, dowsing, and other forms of supernormal cognition; of claims of supernormal physical phenomena, such as raps, telekinesis, materialization, levitation, fire-immunity, poltergeists; the study of automatic writing, trance speech, hypnotism, alterations of personality, and other subconscious processes: in short, all types of the phenomena called psychic, mediumistic, supernormal, parapsychological and metapsychic, together with the bordering subjects.

2. The collection, classification, study and publication of reports dealing with the above phenomena. Readers are asked to report incidents and cases. Names must be given, but on request will be treated as confidential.

3. The maintenance of a library on psychical research and related subjects. Contributions of books and periodical files will be welcomed.

4. Cooperating in the above tasks with qualified individuals and groups who will report their work to the Society.

MEMBERSHIP IN THE SOCIETY

Members, who receive the Proceedings and the Journal, pay an annual fee of $10. (One may become a Life Member or endow a Memorial Membership on payment of $200.) *Fellows*, who receive all publications of the Society and are afforded special library privileges pay an annual fee of $25. (Life Fellowship, $500.) *Patrons and Founders*: For those who wish to make a still larger contribution to the Society's work, these classes are open at $1000 and $5000, respectively.

It is to be remembered that membership in a scientific society means more than merely a subscription to its publications. The work must be carried on largely through the income from membership fees. Therefore members, old and new, are urged to make their membership class as high as they feel they can. *If a comparatively small proportion of the present members went one class higher, the money available for research would be more than doubled.*

THE JOURNAL of the American Society for Psychical Research is published quarterly by the American Society for Psychical Research, Inc., 880 Fifth Avenue, New York 21, N. Y. "Entered as second-class matter July 15, 1941, at the post office at New York, N. Y., under the Act of March 3, 1879."

THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

Responsibility for the contents of any article appearing in the JOURNAL rests entirely with the contributor and not with the A.S.P.R.

VOLUME XLVII JULY 1953 Number 3

CONTENTS

The Importance of Spontaneous Cases[1]

GARDNER MURPHY

I am going to talk to you this evening about a problem in which every man and woman, if interested, can take part. Perhaps this branch of psychical research can meet the democratic ideal of participation by all, each in terms of his or her interest and capacity to find time and a way of working in the investigation. We are concerning ourselves this evening, Professor Hart and I, with the problem of spontaneous cases—cases which belong to our field of psychical research but do not call for the special equipment of a laboratory.

I

Classes of Spontaneous Cases

Now, what do we include under the term "spontaneous cases?" I could not possibly cover examples of the entire area, but I am going to devote myself primarily to the following groups of experiences. First, spontaneous telepathy, the exchange of ideas or feelings between persons or, as we shall see, between animals and persons, under conditions which patently belong to another realm of discourse from that of the use of the sense organs. In the second place, precognition, the capacity to make contacts with events which have not yet occurred.

[1] This paper was read by Dr. Murphy at a Meeting of the Society held on January 22, 1953.

Third, apparitions, in the broad sense in which Mr. Tyrrell used the term in his extensive and brilliant analysis of apparitions ten years ago[2]: to include both crisis experiences, for example, impressions of a person at the time of his death at a distant point, and the perennial or recurrent apparitions to which we may apply the term, "haunting" or "ghost" or "revenant" and many other appellations. And then we shall include, also briefly, the physical phenomena which occur spontaneously, such as the cases of unexplained raps, lights, movements of objects. To be concrete, we shall cite examples which would give the general character of each of the spontaneous phenomena with which we are concerned.

I will quote, as an illustration of telepathy, Rider Haggard's account of a very strange nightmare of his in which he felt oppressed as if he were being forced down by an unbearable pressure, awakening with the horror of it still present. The body of his daughter's dog was found a little later. Apparently, he had been shaken or knocked off a railroad trestle into the river below. Apparently, the death of the dog, preceded probably by a struggle, had been close enough in time to suggest that the dying animal had somehow registered on the sleeping mind of Mr. Haggard.[3]

As an illustration of precognition, one might cite a very curious British account of collective impressions in which a group of people all observed a horse-drawn vehicle, the individual horse being very clearly seen, and the occupants of the carriage recognized so that they were about to be greeted. Actually, they were not there. A woman came in from outside who had seen the whole equipage go by and was frightened because they hadn't spoken to her.

Then, actually, a half-hour later, all of this was fulfilled.[4] Apparently, the first impression had been crystallized a half-hour or so before the actual appearance of the visitors; there had been a joint experience referring to what occurred a half-hour later. In this case, as in many of our cases of precognition, there is the possibility that telepathy may have been a more basic explanation, and a possibility that telepathy and precognition may be combined.

In general, the precognitive dream has come in for a special amount of attention among us, since a pretty large number, at least of the good precognitive cases, are dreams which had been recorded or recounted so that they make better evidence when the final facts are available. But I would also mention as precognitive, Dr. Walter

---

[2] G. N. M. Tyrrell, "Apparitions," *Seventh Myers Memorial Lecture*, S.P.R., London, 1942.

[3] *Ibid.*, p. 53; also *Proc.* S.P.R., Vol. XXXIII, 1923, pp. 219-231.

[4] *Ibid.*, pp. 45-46; also *Phantasms of the Living*, Vol. II, pp. 97-99.

Franklin Prince's case, which I personally find particularly striking, of the woman he had been studying and who had some sort of peculiar second sight. She sketched a drawing of a woman's figure with long hair and with blood pouring down her face and the letters, "K. B." and the words, "struck down." "K. B.," some weeks later, well known to Dr. Prince, was actually struck down and gashed in the face.[5] The whole thing, anchored upon a flashing impression of an automobile which was not fully enough recorded at the time, suggests, however, a precognition of a serious accident from an automobile, realized in considerable detail to the point of the recognition of the type of injury and where it was on the body.

As an illustration of an apparition, I can hardly do better than refer to the long recurrent haunting of a British home in which at least six different individuals, most of them members of the household, and some of them neighbors, over a period of seven years, saw a female figure come and go, frequently remaining in clear sight a long time.[6] The young woman, a student of medicine, who gives us the report, made a pretty scientific study of this apparition, followed it over and over again, tried to corner it until the figure, when unable to escape, would disappear. So hard-headed was she that she decided to test the materiality of the phantasm by inserting the ends of fine strings into small pellets of marine glue and attaching one pellet to the wall and the other to the banister, the strings being thus stretched across the stairs. Under these conditions she saw the figure pass through the strings, leaving them intact. So far is this from the stereotyped idea of an extravagant fantasy which a frightened or disturbed mind may produce that we have a calm and objective study of this apparition, almost a member of the household for a period of years.

Then, as an illustration of physical phenomena, still spontaneous rather than experimental, I would mention the extraordinary case which I hope many of you have read, reported by Mrs. Hale, of Montreal.[7] This is one of the people not afraid to have her name known (it is always better so). Dr. Schwartz talked with Mrs. Hale; I talked with her last summer. This is an experience in which a certain clock had been especially associated with her son. The clock itself would be a symbol, he said, when he left to join the Royal Canadian Air Force. So long as he was alive she felt the clock would go on running.

---

[5] Gardner Murphy, "An Approach to Precognition," JOURNAL A.S.P.R., Vol. XLII, 1948, p. 5.

[6] Miss R. C. Morton, "Record of a Haunted House," *Proc.* S.P.R., Vol. VIII, 1892, pp. 311-332.

[7] Emanuel K. Schwartz, "The Study of Spontaneous Psi Experiences," JOURNAL A.S.P.R., Vol. XLIII, 1949, pp. 128-130.

When a cable was received announcing that the young man was missing, and the terror of death began to face the family, Mrs. Hale's eyes fell on her son's clock and she cried, "If W. were not living I *know* his clock would stop!" Upon this the clock made a big whirring noise and stopped.

The case is a particularly good one in the sense that it is carefully reported and that Mrs. Hale's husband also verifies the fact. As you know, if you have read our JOURNAL in recent years, there have been other cases involving timepieces similarly related to the problem of death crises and the problem of continuity beyond the death crisis. Consequently, if we are interested in spontaneous cases, we find ourselves getting into almost every problem of psychical research. We find telepathy. We find precognition. We find the recurrent appearances connected with catastrophe or with death and some cases which, at least on their face, suggest a continuity of personality acting in the same way after death as before.

II

Why More Cases?

Now, at this point a good many people are going to ask very naturally and rationally: "But haven't you been telling us for a long time that we really ought to try to get experimental control of phenomena? Isn't it desirable to find out the exact conditions under which something happens and not just gather in more and more spontaneous cases?"

Yes. And I would invite you specially to consider the analogy which we have to make here between our science and certain other sciences which have to deal with both spontaneous and experimental cases. It is by no means only psychical research that has to deal with both. Think for a minute of the situation in geology. What would a geologist be like if he had no laboratory? If the study of mineralogy, the study of the optical properties of crystals, could not be carried out in the laboratory, if these problems could not be approached through experimental techniques, where would geology be? On the other hand, where would geology be if it did not have spontaneous occurrences? Take earthquakes. You don't have experimental control over earthquakes, but what you do is to have your very delicate observation techniques ready. And when the spontaneous occurrence is manifested, you have a carefully made, systematic study of the registration of those shocks at different points in the earth, very much as you have the different observers of an apparition recording how it appeared to each of them at a different point. That is to say, you

attempt to construct a rational interpretation of a phenomenon by being ready when the phenomenon occurs. The same is true, of course, in the science of astronomy, in which you don't have experimental control. But you do have a careful and well-organized way of studying the spontaneous events like, let us say, the sudden appearance of a new star in the heavens, which we don't today regard as a portent of disaster, but which we see in the light of the systematic knowledge of astronomical science.

I believe, therefore, that our job in psychical research consists in having a plan with reference to the gathering of spontaneous cases—a systematic, careful interpretation, the best we can think out—and then testing our hypothesis against fresh facts. There have been quite a number of serious interpretations, in fact I would say, several brilliant, systematic interpretations of spontaneous phenomena. I shall talk to you about three of them this evening. And these are always useful, partly in guiding us toward the better observation of new spontaneous cases, so that as we have a new precognitive dream or see an apparition or even have a trivial telepathic experience, we see how it fits in. We build these phenomena into rational orders and classes the way you classify animals or birds or plants into natural groups, and then if a strange bird appears that doesn't fit your classification, you learn something. It forces you to a new category, a new way of thinking. Or, if you have a theory, you can always check up to see whether it fits the facts. You have a theory about the migration of birds, and if your song sparrows don't come back in the third week in February, you begin to ask yourself: "What is it about the birds or the season?" And you revise your ideas about the migration of birds until you find a way that fits the facts. So it isn't ever quite sound to say that we have too many cases or to say: "Let's simply get down to the classification of what we already have."

The two things go hand in hand: the systematic interpretation of the cases we already have always calls also for the gathering of new cases which throw new light on the nature of these phenomena.

I might give you an illustration of the extraordinary richness of the material if I quote a couple of cases that show how far we are from understanding these phenomena in the light of the cliché that I mentioned a minute ago. Through the various collections of cases in the past—among them the two great British collections, *Phantasms of the Living*[8] and the "Census of Hallucinations";[9] Dr. Richet's

[8] E. Gurney, F. W. H. Myers, and F. Podmore, *Phantasms of the Living*, 2 Vols., Trübner & Co., London, 1886.

[9] "Report on the Census of Hallucinations," *Proc.* S.P.R., Vol. X, 1894, pp. 25-422.

collection[10] and some others in France; Dr. Walter Franklin Prince's collection;[11] and the collection Mrs. Dale has made here at the American Society[12]—we have developed a certain idea about telepathy as involving the emergence of a conscious idea, perhaps as the representative of the conscious idea of some other person.

All right, take the following case now, and see if this fits. The father of a young man in the service awakes early one morning. He is unusually restless and spends an hour walking the floor. Then he sets his son's watch by the clock but not quite accurately. He had been carrying the watch but never kept it running. He sets it at 8:17.

Why? No special reason. He is depressed and worried but not aware of what he is worrying about. He sets the watch at 8:17. His motions are somewhat mechanical—just something to do. He doesn't see his son crashing in flames. He doesn't hear any words saying "The end has come."

Not at all. What he does is to register 8:17. And then the fateful message comes through. And it turns out that 8:17 by his time is correct, with allowance of the hour's difference for the region in which his son died—exactly an hour's difference between the death which was at 8:17 and the 8:17 recorded in his own zone.[13]

What we have then here is a motor impulse combined with a vague idea. Is this telepathy? Well, if this *is* telepathy, then the term covers an extraordinary range of phenomena. That is to say, we begin to get the idea that interactions between human beings are enormously richer and more complicated than those which are represented by my thinking of an orange and then calling up on the 'phone and you say the idea you thought of was an orange. At this kind of conscious level, one might say that what we call naive telepathy is only one of the many phenomena which it is our business to study, and the deeper implications of which are to be investigated.

I just got a letter from a correspondent in Oklahoma City, a woman whom I met when I was lecturing at the University of Oklahoma more than a year ago (and I just had time to get permission from her to present her experience). I thought it would give you an idea of the kind of thing that pours in all the time. Most of the cases come to Mrs. Dale. In this particular instance, it came to me because I had met this woman at the time I lectured there.

---

[10] Charles Richet, *L'Avenir et la Prémonition*, Editions Montaigne, Paris, 1931.

[11] W. F. Prince, "Human Experiences," *Bulletin* XIV, Boston S.P.R., 1931.

[12] L. A. Dale, "A Series of Spontaneous Cases in the Tradition of *Phantasms of the Living*," JOURNAL A.S.P.R., Vol. XLV, 1951, pp. 85-101.

[13] L. A. Dale, "Spontaneous Experiences Reported by a Group of Experimental Subjects," JOURNAL A.S.P.R., Vol. XL, 1946, pp. 55-63.

"I dreamed I was looking in the show window of a store and saw the display of artists' supplies with easel, tubes of paints, and other items. The tube of white paint was open and looked as though it had been used. On observing this, I realized suddenly that all these items actually belonged to me and had been sent to me as a gift from my daughter. I resented the merchant's having used them for display.

"This dream took place on Sunday morning. I had planned to go to a certain movie that afternoon. But when afternoon came, I changed my mind and I went to another movie, entitled, *An American in Paris*. Midway in the picture was an incident in which a wealthy woman gives to a young artist a studio and all the supplies for his work. He is torn between the pleasure of the gift and the sense of obligation. As he thrills at the sight there is a close-up of the easel with the tubes of paint, etc., with the white paint tube open and, in fact, the close-up was an exact duplication of my dream which I had interpreted as a show window display five hours earlier.

"Then a couple of weeks ago, while I was sitting at a movie, looking at a newsreel, a sharp odor of the kind of preservative we used in biology laboratory when I was an undergraduate came to my consciousness. I could not account for it. Following the newsreel, there was a short in technicolor. It started as a gay vacation experience in California waters, then showed that it was actually an exploration cruise for some members of the California Institute of Oceanography. Half way through the picture were views of the cruising party doing a study of fish in southern waters, and soon a view of one member opening a bottle containing a specimen and grimacing as she held the bottle to her nose and indicated the unpleasantness of the odor. For me, the odor was perceived fifteen minutes earlier, and it continued until this scene, when it suddenly left as it came."

Now, of course, the first thing that you do is try to get detailed corroborative evidence, records made, or statements from other people to whom this was told. We have followed for some years a policy of saying: "Anything that looks like a paranormal communication interests us and we will deal with these materials under two general heads: the best authenticated evidential material, and other cases which are not evidentially of the highest order but may nevertheless throw some light on the psychology of the process."

Would you count these as cases of telepathy? Would you count them as cases of precognition? Well, if you forced me to use a category, I would probably call them precognitive. But at the same time I would say: "This isn't telling us much."

What we are doing here is to take a little tag—in this case the impression of the evil odor which comes without any logical meaning

at the time. This is a tag, so to speak, like a little symbol that appears in our half-waking or our dream experience, and later on we may be able to understand this. We may see through the symbol, as in the interpretation by Joseph of Pharaoh's dream. We may be able only to "half-guess" it, but very often it is only by the systematic gathering of such cases that we begin to understand the extraordinary richness of the symbolic apparatus, on which, very largely, we are dependent when a thing as complex and difficult as telepathic communication is involved.

I would guess, then, that the collection of these cases in which we have symbolic reference to the future may be very instructive in helping us to understand our relation to time and place even when the cases do not belong in the category of fully authenticated experiences.

If one still asks, "Why are new spontaneous cases useful?" I would reply: "They challenge our theories." When people have begun to organize an hypothesis—and it is difficult to keep in mind all the hundreds of published cases—they become addicted to a theory and publish the theory, and then there are a few stray cases that don't quite fit. There is an enormous temptation to make the stray cases fit in Procrustean fashion in the scheme once set up.

You know, the only thing we can do is what is done in all science, and that is to keep experimenting with interpretations until we find the one that really squares with all our facts without any forcing. And we plainly have not yet got an interpretation which squarely meets all the facts.

III

Theories of Spontaneous Cases

But I thought I should tell you about three of the theories of spontaneous experiences. They all deal rather heavily with telepathy, although they all make some place for precognitive experiences and they all make a place for crisis apparitions and hauntings.

The first is the theory of Frederic Myers, the first great systematist in psychical research whose extraordinary two-volume work was published just fifty years ago, *Human Personality and its Survival of Bodily Death*,[14] which contains hundreds of well-organized cases documenting the various categories which have been described. Now, Myers, with special reference to death coincidences and crisis apparitions (for example, seeing the image of a person with his clothing

[14] F. W. H. Myers, *Human Personality and its Survival of Bodily Death*, 2 Vols., Longmans, Green & Co., London, 1903.

drenched and dripping water at the moment when the person at a distance is actually drowning), is particularly concerned with the question of what the dying person contributes to our experience. Sometimes the impression is as if clairvoyant rather than telepathic, in the sense that the person who sees the dying man doesn't get any response from him; the dying man doesn't seem to turn and look at him or call to him.

Take the much-quoted case of Mrs. Paquet who, busy at her household duties, suddenly sees her brother trip over a rope and fall to his destruction shortly after he had been tripped by a hawser on a harbor boat in Chicago.[15] In these instances, the experience suggests that the receiver, the percipient, is, so to speak, outside, looking at something happening. But in an extraordinary number of these cases there is a more direct contact, as if the person undergoing the crisis could in some way be reaching out or trying to make a contact.

There are actually experimental cases, of course, where a person has tried to project himself at a distance. Now Myers convinced himself that what typically happens in these cases is that the person who is undergoing the crisis manages to occupy the space in which the percipient is located. In particular, he urged this in the case of collective experiences where two or three or more people see the apparition. The striking fact, you know, is that in collective experiences, there is not a mechanical carbon-copy process by which all the individuals receive the same impression. On the contrary, each sees it appropriately in terms of the point from which he is looking. If you think over cases you have read about, you will immediately realize how this makes sense. Each person gives structure to the experience as if there were a physical object to be seen from his own vantage point.[16]

What actually is happening then, says Myers, is that the person undergoing the crisis is invading the percipient's space. Sometimes Myers falls back on the conception of a metetherial environment, which is not quite space, but another kind of space-like something. But to all intents and purposes, he is arguing that you transport yourself through space at the time of your own death or catastrophe and register upon other people.

Actually, I think one could say that no great advance over this theory, which might account for many cases, was made until the time

---

[15] Mrs. Henry Sidgwick, "On the Evidence for Clairvoyance," *Proc.* S.P.R., Vol. VII, 1891-1892, pp. 32-35.

[16] Tyrrell has particularly developed the point that when the apparition appears, it blocks off the light just as a solid object would, and that it is reflected in a mirror just as a solid object would be, although actually one can pass one's hand through the image and there is every evidence that it is not a physical reality.

of the systematic thinking which Mr. Tyrrell had to do when he was asked to deliver the *Myers Memorial Lecture* in 1942. He took this job very seriously. As a matter of fact, he produced a volume of over 120 pages. It is not just a little lecture, but is an amazingly close-thought, brilliant, integrated, all-around consideration of the problem of apparitions. If you really want some exciting, serious reading on psychical research; if you really want something that will make you think and will give you lots of live, interesting, and well-authenticated cases, I cannot urge upon you anything more important than Mr. Tyrrell's book, *Apparitions.*

Now what, according to Tyrrell, are the problems that have to be taken into account?

In the first place, there is the fact that the impression obeys psychological laws and doesn't follow physical laws as we know them. The structure of an apparition is determined to a very large degree by our knowledge of how people and things behave. We tend to cast the impression into a reasonable form. And if there are, as I said, several people present, each one will use the dynamics of his own basic ways of perceiving in giving structure to this impression. Moreover, the different feeling-tones of respect, affection, fear, and so on, toward a person are registered just as if the living entity were still present.

Can this be explained on the basis of telepathy? Can this be explained by saying, as some have done, that the telepathic image represents a certain force projected from the brain of the person undergoing the crisis? Or can we say, as F. C. S. Schiller did, "Apparitions are the dreams of the dead"? This might seem plausible, insofar as the apparition may occur many months or years after the time of death. Can we actually do this, when we have to face the fact, documented by dozens and dozens of cases, that it takes work by the individual perceiver to produce the apparition, each person producing the kind of apparition that makes sense to him?

Suppose I have a dream of driving up a steep road to Walnut Grove in California. You haven't happened to be in Walnut Grove. If I try to convey this to you, I won't try to throw a sort of motion picture impression of it into the mind of each one of you. But you will actively try to understand me; you will ask: "Did you mean this?" You will remember similar places where you have been, and each of you will construct a picture of Walnut Grove based upon my words, poor as they are, but each of you will construct a different picture, each in his own way. This is very different from mere photographic reproduction.

Now this is just what Tyrrell finds as he analyzes apparitions. He gives, I think, unimpeachable evidence that it takes not only work on

the part of the person initiating the impression but work, integration, meaningful activity on the part of every person receiving it. That is not a mechanical process of passive reception.

Tyrrell goes on to show that this is not done consciously. You perceive actively, but unconsciously. This is true of all perception, both normal and paranormal. Suppose I show you a watch and a match box, and I say: "Which one is nearer?" You instantly solve the problem. You don't do this by figuring out the size of your retinal impression or the amount of effort taken to focus the eyes, and all the things which indicate that the watch would have to be so far and the match box so far. You do this instantly, or as we say, intuitively.

A series of beautiful experiments has been going on at Dartmouth College and at Princeton University and elsewhere on the ways in which we are able to make these distant intuitive interpretations, so that we can appropriately gauge the distance and size and shape of an object. The task takes us months and years to acquire, as you will see if you watch an infant gradually learning how to interpret the various cues which are received through the sense organs from the outer world.

Tyrrell shows that we interpret these apparitions in the instantaneous and intuitive way that you and I use when we perceive that a person is angry or frightened. It is an amazingly complicated and mostly unconscious rather than conscious integration. This is what he means by mid-level functioning. The process is not conscious; only the *end-result* is conscious, by which you instantly recognize that a certain person is happy or frightened. Tyrrell says, then, that your perception of an apparition is not like the impression on a photographic plate; you use your own personality when you are involved in experiencing an occurrence; and therefore it represents, not just a conscious impression, but something much deeper.

Finally, he goes on to show that there is in all this a sort of coming to terms, a sort of a compromise between the communicator and the person receiving the communication. He uses the analogy of getting an effect across through the device of the stage. He speaks of the producer and the stage carpenter. In this case, you realize that the producer has the fundamental basic personality function of communicating to another person. But he may not be able to communicate at a conscious level; he may be able only to register upon the other person the fact, let us say, that he is undergoing a crisis. And the percipient instead of seeing him may get an impression, let us say, of disaster, and later may see a tomb, or may see flames or something characteristic of the percipient or of the crisis, not a mechanical

impression from the agent. The stage carpenter is the mid-level function, the deep unconscious process by which the message is converted into an impression.

In addition to Myers' theory and Tyrrell's theory we have one other theory to consider and its proponent is here with us this evening: Professor Hart, who will talk to you about a fifth-dimensional conception of the way in which the paranormal represents an integrated personality function which goes beyond the ordinary three space dimensions and the single time-dimension that we ordinarily use in science.[17]

I would say that this also is one of the attempts to go beyond the earlier hypotheses which have been tested, which have been found to be good, but which don't seem completely to cover the facts. To give an illustration of something not covered by any theory of spontaneous cases: the celebrated cases reported by Pagenstecher in Mexico to which Dr. Walter Franklin Prince gave so much attention.[18] They involve a very complicated series of catastrophes, perceived under clairvoyant conditions, as if the individual clairvoyant were able to get out of the ordinary time-space world and find there a way to another time-space point at which a catastrophe had occurred —as if there were a sort of moving bead which can get outside of the ordinary firm structure of this world and tune in at different points in time-space.

Now, we have, therefore, what we might call a pretty good, but not an ideal theory, as far as we know. We are working constantly to try to get a better theory in the sense that it will explain more spontaneous cases, and in the sense that it may so deepen our understanding of human personality and its relationship to other persons and things of this world that it may enable us to develop a better philosophy of man. On the other hand, it may help us in the establishment of experimental studies through which we may be able to find out more exactly what is involved. In other words, we may be able to do better laboratory work if we have more and better spontaneous cases. We have lots of cases, but we always need a new angle: a case that teaches us something we haven't been able to get before; a case that helps us to decide between different theories and to go on from where we are.

Here is a place where we have to pause in terms of a very serious

---

[17] Hornell Hart, "The Psychic Fifth Dimension," JOURNAL A.S.P.R., Vol. XLVII, 1953, pp. 3-32 and (with associates) "The Psychic Fifth Dimension. II," JOURNAL A.S.P.R., Vol. XLVII, pp. 47-79.

[18] Gustav Pagenstecher, "Past Events Seership: A Study in Psychometry" (edited by Dr. Walter Franklin Prince), *Proc.* A.S.P.R., Vol. XVI, 1922. See also "Psychometrical Experiments with Senora Maria Reyes de Z.," *Proc.* A.S.P.R., Vol. XV, 1921, pp. 189-314.

question that can always be raised, which I think was first well-formulated by Margaret Pegram Reeves.[19] She argued, I think, very effectively, that there is a basically different kind of dynamics involved in experimental cases and in the spontaneous cases. That is to say, the telepathy or the precognition that you can get in the laboratory is different, partly because the motivation is less intense. Perhaps the situation may seem somewhat artificial. Basically, she says, it is not quite the same thing. You are calling into play a different level of the personality, because in the experimental case, you cannot produce crises in the laboratory. You have to respect the individuality of the people you are working with. You get merely the desire to cooperate, the desire to do the job. The result is that the symbolism which is used and the method of working are at the conscious level. It isn't deep-level work. In fact, she intimates toward the end of her paper that maybe the basic dynamics worked out to explain laboratory telepathy may not be adequate, and may not give a complete picture of the dynamics of spontaneous telepathy, which springs from a deeper level.

If that is true, then how are we to respond to Dr. Rhine's belief that the value of spontaneous cases lies in suggesting hypotheses which then can be tested in the laboratory? This doesn't quite ring true to me. I would think that there were certain instances where spontaneous cases would indeed lead to hypotheses that could be tested in the laboratory. But remember the analogy that I drew a few minutes ago with geology and astronomy. I tried to make the point that there is a definite place in science for the systematic arrangements of events which are not under experimental control. And I firmly believe that psychical research will be able to create a systematic and intelligible picture of what happens in the deep-level interactions of human beings, under the heads of telepathy, clairvoyance, precognition, whether we happen to be smart enough to document these things in the laboratory or not. If we can document them in this way, fine. I don't think that this means that the *only* purpose in spontaneous cases lies in the preparation of laboratory tests.

IV

Individuality

Now, of course, the whole picture so far suggests that human personality is a generic universal thing, that you will recognize the presence of human personality anywhere, in the same way that you

[19] Margaret Pegram Reeves, "A Topological Approach to Parapsychology," JOURNAL A.S.P.R., Vol. XXXVIII, 1944, pp. 72-82.

would recognize a walnut or a spruce tree. But we differ more from each other than spruce trees do. We are dynamically more complex in our individuality than spruce trees. And we begin to see as we study the dynamics of apparitions, precognitive dreams, and so on, that the qualitative differences between people are very great. This is the sort of thing that suggests to me that as we gather more and more cases, we shall contribute to personality study, not only in the way that Mr. Tyrrell suggests—throwing light upon the deep unconscious sources of power, capacity to live, to make contacts with other people, which belong to all humanity—but also by throwing light upon those complex and subtle factors which make one person more able to convey information than another, and another person more able to *receive* impressions than another.

If you go through the reports the English Society has published, and those which Mrs. Dale has published for us, I think you will be impressed with a sort of chronic individualism and the fact that a person who has recurrent experiences reveals himself in his experiences. You begin to realize that Miss Bishop,[20] who wrote a long series of accounts of precognitive dreams, was probably *not* a person who would be equally good, let us say, at perception of crisis apparitions. Each person seems to betray also qualitatively a certain kind of symbolism as in the case of the record I read you from the woman in Oklahoma. So that along with our understanding of the nature of this mid-level or unconscious contact we make with each other, we have the possibility of understanding individuality. I think it is an extraordinary thing that although we have had psychical research with us for three-quarters of a century, we know very little about individuality in relation to these phenomena. We can talk about telepathy quite a long while. We can talk about apparitions quite a long while. But who sees them and why? How explain the fact that certain people in this audience have had precognitive dreams at times, and that others have not? Or that some may have seen an apparition, while others have not? Some people haven't experienced either of these things but they have had uncanny hunches and other unexplained experiences.

There is a very rich field here for the study of human individuality. That is the final answer that I will make to people who say: "With all this stuff that you people have published, why do you want more cases?"

In summary, we have three aims: first, to test how far the principles suggested by Myers, Tyrrell, Hart, and others are right;

[20] G. M. Bishop, "Foreknowledge in Dreams," *Journal* S.P.R., Vol. XXXII, 1941, pp. 50-59.

second, to understand their dynamics more fully; and third, to understand human individuality more fully in the course of these studies.

V

A New Study of Spontaneous Experiences

That is the reason we are starting a comprehensive study of spontaneous experiences at the American Society for Psychical Research A number of us had been thinking for years that the time had about come. Almost simultaneously, Mr. Stevens, Mrs. Allison, and I all came to the idea recently that it might be possible to launch in 1953 a large-scale study of the phenomena I have described—cases having to do with precognition, clairvoyance, telepathy, apparitions, hauntings, physical phenomena—all the spontaneous cases of the sort you see if you follow our JOURNAL, about which, fundamentally, the same basic rules are to be laid down that we have in the past. These rules include (1) emphasis upon well-described cases; (2) emphasis, if possible, on recent cases; (3) emphasis on cases where there is confirmation. But there is no final, absolute, or arbitrary rule. The collection of the cases will be in the hands of a committee, probably enlarged, ultimately, beyond what it is today. Professor Hornell Hart, who has been a pioneer in this area, and, together with his wife, has made signal contributions to the understanding of spontaneous cases, has come up from Duke University to be with us tonight. He will serve as Chairman. Professor Ducasse of Brown University is another member. Mrs. Allison, Mrs. Dale, and I are the other members. We shall all be working on the problem of collecting and editing spontaneous cases; trying to make sense, trying to get new insights, trying to test hypotheses. And, as I said at the beginning, there is an opportunity for everybody who is interested to help us do our work. Oftentimes the question is: "What can we contribute?" Here is something you can contribute. You can help gather cases. Nothing is more important. And we will try to explain to you how it is to be done.

Now, I would like to ask Professor Hornell Hart to take over and talk to us for a few minutes.

[Following Dr. Murphy's lecture, Professor Hornell Hart gave a brief account of his theories bearing on the processes of paranormal phenomena (see footnote 17). He then administered a short questionnaire on psychical experiences to those present, which he had prepared for the occasion. A more comprehensive questionnaire was promised to those whose answers warranted further inquiry. We look forward to Professor Hart's report on the results of the questionnaires in a lecture he has been invited to give to the Society in the autumn.—Ed.]

Robert Chambers and the "Supernatural"

MILTON MILLHAUSER

The details of the two "conversions" of the encyclopedist Robert Chambers (1802-1871), first to spiritualism, then to Episcopalian orthodoxy, are not readily accessible. The story is glossed over and distorted in the official biography, a typically Victorian fraternal memoir;[1] a few facts lie scattered in unlikely places, but much of the pertinent material remains unpublished. This is the more unfortunate in that his new beliefs influenced Chambers' literary career directly, leading him to compose some works and apparently to abandon others; they also stand in an interesting relation to the thesis of his once widely debated *Vestiges of the Natural History of Creation*. Altogether, the tale is worth the telling, if only to round out our picture of an insufficiently studied minor Victorian worthy—a personage both representative and not without importance in his day.

Among the considerable group who penetrated the anonymity of *Vestiges*, Chambers enjoyed a reputation as a hard-headed if fundamentally pious materialist. (It did him no great personal harm, though there was one attempt to organize a denominational boycott of his publishing firm,[2] and the mere challenge to acknowledge or deny authorship of the notorious volume was sufficient to drive him from candidacy for a coveted municipal honor.[3]) This reputation, from what we can make out of his personal life, was at least partially justified. For one reason or another—partly *Vestiges*, partly his interest in the cause of secular education—Chambers had come to associate with a group of liberal-minded scientists like Neil Arnott and Edward Forbes, who were considered to be unduly tolerant of "speculative philosophy";[4] his closest friend among them was the phrenologist George Combe, whose *Constitution of Man* had caused some scandal in its day as tending to "materialize" the human mind. In his private correspondence, Chambers expresses a mixture of deistic piety with positive hostility toward the clergy and institu-

---

[1] William Chambers, *Memoir of Robert Chambers*, W. & R. Chambers, Edinburgh, 1872. (3rd ed., 1872, 13th ed., 1884.)

[2] Charles Gibbon, *Life of George Combe*, Macmillan, London, 1878, Vol. II, p. 188.

[3] William Chambers, *Memoir*, Ch. XII; Andrew K. H. Boyd, *Twenty-five Years at St. Andrews*, Longmans, Green, London, 1892, Vol. I, p. 175; Margaret W. Oliphant, *The Victorian Age of English Literature*, Lowell & Coryell, New York, 1892, Vol. I, p. 33.

[4] On their views, see *Dictionary of National Biography*, ed. by Leslie Stephen & Sidney Lee, Smith Elder, London, 1885; see articles "Neil Arnott" (G. F. Rodwell) and "Edward Forbes" (G. T. Bettany). Also "Memoir of Dr. Neil Arnott" in *Transactions of the Aberdeen Philosophical Society*, 1884, Vol. I.

tional religion. One letter describes a reviewer of *Vestiges* as "very clerical indeed—stupid and dishonest, as might be expected from his cloth on such a subject"; another speaks of "enlightening the people out of the present fatal Christianity."[5] As a parent and a more or less public figure, he attended church occasionally, but is said to have devised an ingenious scheme for omitting this gesture without incurring blame;[6] his interest in geology developed out of private evolutionary speculations, dating back to the mid-'thirties, which were the very antithesis of accepted religious doctrine.[7]

Of this materialism, *Vestiges* is the clearest and least inhibited expression.[8] Here we see defined a position which in his personal papers is merely suggested: a rather pallid deism, consonant with an entirely mechanical universe; a deism which regards an afterlife as a matter of probabilities, and treats the Creator occasionally as mind or will but more frequently as natural force or philosophic principle. And it is worth noting that the book repeatedly attacks the idea of miracle, of abrogation of natural law, which Chambers recognizes as a primary argument against his own "developmental" theory. He would materialize everything, but first of all the central mysteries. Life is no miraculous creation but a kind of chemical accident—a mere affair of albumen and electricity, not wholly beyond the power of the laboratory scientist. Mind (or soul) is material in its medium and principle of operation; it presents analogies to an electric current, and some of its phenomena recur with statistical regularity. The very concept of the miraculous is rejected in an elaborate excursus, based on the involutions of Babbage's *Ninth Bridgewater Treatise*, the point of which is that even the most exceptional phenomena can be treated as instances of particularly involved physical laws. We are left with an essentially mechanical world, in which God is the object of a distant reverence as First Cause while

---

[5] Unpublished correspondence in the possession of Mr. A. S. Chambers (see footnote 38). The first phrase comes from an undated letter, probably 1845 by internal evidence; the second from a letter dated April 4, 1849. (All letters cited in this paper were addressed to Alexander Ireland, of Manchester.)

[6] W. H. Oliphant Smeaton, *Edinburgh and its Story*, Dent, London, 1904, p. 291. The trick—he rented pews in two churches, so that his absence from either might be attributed to his presence in the other—is widely referred to by other anecdotists of the period.

[7] See a letter to William Wilson, dated July, 1847, quoted in *Lippincott's Magazine*, Vol. VIII, 1871, p. 22, in an article by James Grant Wilson. On the general repute in which geology might be held, even at this late date, by the narrow-minded, see C. C. Gillispie, *Genesis and Geology*, Harvard University Press, 1951, *passim*.

[8] Reference throughout is to the early editions, which made the reputation of the work; either the first London edition (Churchill, 1844) or the first American (third London) edition (New York, 1845) may be consulted. But there is no substantial change in later editions, for that matter.

His universe evolves into ever "higher" and more elaborate physical forms, the most recent of which is mind, according to laws which have been set down as the sciences of chemistry and physics. Only the harshest and least reasonable of Chambers' critics called this atheism, but not even the most generous could suppose that it was intended for Christianity.

Chambers prepared an edition of *Vestiges* in 1853, the year of his conversion to spiritualism;[9] he published another in 1860, when he was a believer of long standing. Evidently he saw no inconsistency between the extreme materialism of that volume and his new faith. It may help us to understand his attitude if we recall that he was entirely self-educated in science, and that consequently his viewpoint, his underlying habit of mind, reflected the eighteenth quite as much as the nineteenth century. Thus he had complete faith in the principle which his contemporaries had come to entertain only with qualifications and exceptions: the essential unity and simplicity of all phenomena. Subscribing to this faith, it was natural for him to trust in large hypotheses and all-embracing explanations: to believe that life is a mere continuation of, or development from, inorganic nature, and that the advance from life to mind is equally direct and simple. The root alike of his ridiculous errors and of his solitary and courageous insight was the conviction that all nature did really hang together, that the Great Chain of Being was a clear logical progress, without breaks or special cases, each stage of which could readily be traversed. It was entirely characteristic of him that he should have derived the first hint of an essentially biological theory from the nebular hypothesis.[10] The same conviction that made him an evolutionist made him a convert to phrenology and statistical sociology; each seemed to apply scientific method fruitfully to what had hitherto been the domain of mysticism or chance. And precisely the same conviction—that matter, mind, and spirit are related and continuous phenomena—explains his interest in spiritualistic displays.

The subject had engaged his casual attention since the heyday of *Vestiges*,[11] but he seems at first to have looked at the activity of the local mediums with a half-sceptical and journalistic eye. The interest

[9] The significance of this fact is minimized by the date of his "conversion"—late spring or summer, 1853. The book had probably been prepared for the press while he was still sceptical or undecided. Note, however, the 1860 edition.

[10] *Vestiges*, Preface to the 10th Edition; also Lady Eliza Priestley, *The Story of a Life-Time*, Kegan Paul, London, 1908, Vol. I, p. 41.

[11] An undated letter, which by its position in a rather disorderly collection is probably as early as 1845, speaks of his "giving some attention to what are called the Spiritual Manifestations," in which he sees not an "absurd imposture" but more probably "some new development of electricity in connection with mental operations on the parts of the media—no spirits in the case."

mounted somewhat in the early 'fifties.[12] Still, on the supposition that nothing profoundly displeasing to him would be printed in the periodical of which he was joint editor and owner, we may take it that he did not mind seeing "Rappings" treated as a comical topic early in 1853.[13] A few months later, however, the tone of the articles in *Chambers's Journal* changes to one of guarded and quizzical respect,[14] and we have the private statement of Mr. E. Hardinge, a mesmeric "doctor" and lecturer on Mesmerism and "electrobiology," that he visited Chambers on April 29th with one of his mediums and found him impressed, if not partially converted.[15] He was unable to detect deception in the phenomena of the séances he had witnessed, and was particularly impressed by the fact that some unidentified member of his household was able to reproduce them independently in his own home.[16] By the middle of the year his attitude appears to have been one of tentative conviction, based on a considerable accumulation of evidence, but qualified by doubts concerning the conclusiveness of the phenomena as well as by a continued vigilance for fraud. He persisted in this frame of mind for some months, perhaps a year, until gradually the last reservation had worn away under the impact of repeated demonstrations, and he was willing to accept a good portion of spiritualist doctrine as established and decisive for his view of the world. (He clung to the notion that what the world called spirits were merely a "higher" and subtler or more rarefied form of material existence; but this was little more than a difference of names.) After the embarrassment in which *Vestiges* had involved him, however, he preferred to keep his new opinions to himself; and, although he entertained no further doubts as to the reality of spiritual phenomena in general, he seems for some time to have regarded the claims of any new medium as suspect, and deserving of the narrowest

---

[12] His notebooks contain occasional references to apparitions, visions, and so on, as subjects of intellectual interest, from 1849 on, but with greater frequency after 1851—at about which time he also began to communicate on the subject with various persons such as Robert Dale Owen and Harriet Martineau.

[13] "Rappings," *Chambers's Edinburgh Journal*, March 26, 1853; "The Spirits Come to Town," *ibid.*, May 21, 1853.

[14] In *Chambers's Journal* for June 11, 1853, there is an article on spiritualism signed "A. R." to which is appended an editorial comment "reserving judgment regarding these so-called phenomena." Frank Podmore in *Modern Spiritualism*, Charles Scribner's Sons, New York, 1902, Vol. II, pp. 5, 6, and 21, suggests that the articles for May 21st and June 11th might have been composed by Chambers himself.

[15] See Frank Podmore, *Modern Spiritualism*, Vol. II, p. 21. Hardinge's subject and Mrs. Roberts were the first mediums Chambers consulted.

[16] See *Chambers's Journal* for June 11, 1853; also Podmore, *Modern Spiritualism*, Vol. II, pp. 5-6 and 6n. An unpublished letter dated March 4, 1854, says: "I now forbid any persons under my influence from tampering with the subject."

scrutiny.[17] For these reasons the date of a final moment of conversion cannot be fixed precisely, but everything points to late 1853 or 1854, with a fresh access of enthusiasm following his meeting with the famous Daniel Dunglas Home in 1855.[18]

During the next half-dozen years, Chambers' new belief passed into the habitual texture of his thought. He became the intimate of a number of writers on spiritualism, among them Robert Dale Owen, Catherine Crowe, Mrs. Newton Crosland, and the Samuel Carter Halls; toward Home his attitude was very nearly that of a disciple. He continued, however, to guard himself against ridicule by silence, and Home was unable until 1867 to cite his name among those of the many eminent persons who were persuaded of his honesty. In that year he supported the medium publicly during the unsavory Home-Lyon trial in which Mrs. Lyon, a wealthy widow, after transferring a large sum of money to Home, sued him for its recovery;[19] and in 1869 and 1870 he testified as a believer before the Dialectical Society, which was conducting an investigation of spiritualist phenomena.[20] In general, however, he was careful neither to commit his views to print nor to authorize the use of his name, and the records of séances at which he was undoubtedly present refer to him under some such title as "a distinguished literary figure."[21]

Chambers found it the easier to accept spiritualism because the

---

[17] Mrs. Newton Crosland (Camilla Dufours Toulmin), *Landmarks of a Literary Life*, S. Low and Marston, London, 1893, pp. 251-252, says that he spent "years" coming to a conclusion. An unpublished letter of Chambers' dated as late as February 28, 1862, says of "explanations" of spiritualistic phenomena: "I am quite open to any satisfactory one apart from that set forth by the seer himself—if it would only come. At the same time, I believe all these people play tricks occasionally."

[18] Mme. Home, in her *Daniel Dunglas Home, His Life and Mission*, London, 1888, p. 9, claims Chambers as a convert to Home; but her view is naturally partisan, and she appears to minimize his earlier experiences. There is no question, however, that Home was responsible for a certain intensification of Chambers' conviction.

[19] Mme. Home, *op. cit.*, p. 82.

[20] A. Conan Doyle, *History of Spiritualism*, George H. Doran Company, New York, 1926, Vol. I, p. 323.

[21] Mrs. Newton Crosland, in *Landmarks*, p. 254, says that Chambers' letters to her on this subject were marked "private." Note also that Alfred Russel Wallace, in his *A Defence of Modern Spiritualism*, Colby & Rich, Boston, 1874, cites his friend Chambers as a believer, but does not list him among the faithful in his sixth and seventh chapters ("Evidence of Men of Science" and "Evidence of Literary and Professional Men") where the records of specific experiences would have been particularly useful to his purpose. Wallace had attended numerous séances with Chambers. The first series of Home's *Incidents in my Life*, published during Chambers' lifetime (Longmans, London, 1863), mentions in Chapter IX a rather notorious séance which Chambers had attended, but suppresses his name. Such incidents were legion. Jean Burton in *Heyday of a Wizard*, Alfred Knopf, New York, 1944, p. 146, refers to Chambers' well-known "protective anonymity."

evidence for it, at least, was material; at first he sought a pseudo-mechanical explanation for it,[22] and later was disposed to regard the spirits themselves as representative of a new level or aspect of matter—much as, in *Vestiges,* he had regarded mind. "I am satisfied that the phenomena are natural," he writes on one occasion, "but to take them in I think we shall have to widen somewhat our ideas of the extent and character of what is natural."[23] Reliable accounts indicate that he finally accounted for these phenomena by a kind of extension of his "developmental" philosophy, according to which electricity and magnetism (both regarded as having some affinity to mind) constituted a bridge between matter with its simple laws and spirit with its complex ones.[24] This was merely a logical development of his earlier position. *Vestiges* itself had left open the possibility of individual survival after death; during the 'fifties, the idea seems to have been current in the Chambers circle that spiritualism fits neatly into the evolutionary view of things.[25] One of his acquaintances, a Miss Douglas whose name escapes even the dreary immortality of the biographical dictionaries, earned Chambers' extravagant praise by a brochure on the occult which specifically declares it consonant with the views of "those who believe in a progressive principle imparted *ab origine* to the works of creation";[26] much the same idea—that electricity and magnetism are "media by which spirit acts on matter"—occurs in Mrs. Crosland's *Light in the Valley.*[27] It has already been pointed out that Chambers prepared the 1860 edition of *Vestiges*—a particularly elaborate one, in which to a certain extent he even challenged Darwin—a number of years after his conversion. During most of the same period he continued to contribute papers to geological societies, and though his interest in this field eventually waned, he maintained his contact with science and scientists to his death.

---

[22] Cf. footnote 11, with its reference to "some new development of electricity." Note that "development" in Chambers' day meant what "evolution" does in our own; its connotation is thus essentially materialistic.

[23] *Chambers's Journal* article of June 11, 1853, ascribed to Chambers by Podmore (see footnote 14). There is an unpublished letter in the same vein, dated February 10, 1867. It runs, in part: "My idea is that the term 'supernatural' is a gross mistake. We have only to enlarge our conceptions of the natural, and all will be right."

[24] D. D. Home, *Incidents in my Life,* second series, Holt & Williams, New York, 1872, p. 14; Mrs. Newton Crosland, *Landmarks,* p. 253.

[25] The morbid Mrs. Catherine Crowe managed to be at once a spiritualist and a disciple of the "materialistic" phrenologist Combe. She was privy to the secret of the authorship of *Vestiges,* and was once briefly suspected of having written it.

[26] D. D. Home, *Incidents,* second series, pp. 11 and 14; Mme. Home, *Daniel Dunglas Home,* p. 85.

[27] Mrs. Newton Crosland, *Light in the Valley,* G. Routledge, London, 1857, p. 31; see also her *Landmarks,* p. 253.

About 1860, then, his creed did not differ materially from the mechanistic deism of *Vestiges*, except that to this there had been added, as a kind of extrapolation, a rather anti-mystical version of personal immortality and communion with the dead. This remained distinct from Christianity, though not necessarily antipathetic to it; Samuel Carter Hall is of the opinion that not until "the sixtieth year of his age" (that is, 1862) could Robert Chambers have been called a Christian.[28] Taking this date as a broad approximation, it agrees both with William Chambers' extremely circumspect account in the *Memoir*, and with the actual circumstances of his life.[29] From 1861 to 1863 Chambers was in London—his only prolonged absence from the neighborhood of his beloved Edinburgh—working alone, in default of expected editorial aid, on *The Book of Days*. Later he called that book his "death-blow"; the labor proved unexpectedly fatiguing, and near the end of it he suffered the loss first of his wife and then of a favorite daughter, his last remaining intimate companion. In a state of exhaustion threatening actual physical collapse, and in a weariness of spirit unprecedented in his buoyant career,[30] he drove the last sheets through to completion, and then withdrew to several years of lonely recuperation at St. Andrews.

It was at some point in this history, and presumably under the pressure of emotional need, that Chambers returned to the church. It was not a sudden conversion, but a gradual and probably insensible development, in which spiritualist doctrine worked to reconcile the one-time foe of clericalism to particular points of Christian faith. His new creed was of the simplest, differing from the old deism largely in its livelier conviction of immortality and its more personal sense of God. He had always been an occasional church-goer, out of prudence and social habit; he continued now in his old communion, the Episcopalian, but for reasons of convenience and sentimental association rather than sectarian conviction.[31] The actual tone of his belief may be inferred from a fragmentary *Catechism* and *Life*

[28] S. C. Hall, *Retrospect of a Long Life*, Appleton, New York, 1883, p. 474.

[29] Cf. a passage in his Notebooks, dated 26 July, 1857: "The truth is, God is properly an object of reverence and awe, but not of any moral feeling. A *duty* toward him is an absurdity . . Such being the case, the attempt to enforce upon each other supposed interests of his, is a sure way to produce mischief, as experience amply proves." (It should be noted, however, that the ground of this argument is philosophical, and that it apparently relates to such matters as Sabbatarian legislation, a subject on which Chambers entertained strong opinions.)

[30] To a friend who suggested that he while away his time by writing his autobiography, he replied: "I couldn't. It would be too sad a story." Andrew Boyd, *Twenty-five Years at St. Andrews*, Longmans, Green, London, 1892, Vol. I, p. 174.

[31] He had first joined it as a result of a disagreeable personal experience in the Scottish Kirk. Lady Priestley, *The Story of a Life-Time*, p. 30

and Preachings of Jesus Christ, from the Evangelists, both intended for the use of children, which he composed in the last decade of his life. They are unfortunately inaccessible now, but have been described and briefly excerpted in the *Memoir;* the concern that appears to predominate is with morality rather than sectarian doctrine, and though of course this is merely an indication, it agrees with such other hints and clues as scanty biographical data afford. We may suppose a rather broad faith, centered about reverence for God and the person of Christ, and beyond that limited by few doctrines except the hope of immortality and the necessity of virtuous living according to the *mores* of the nineteenth century. Coupled with this went a continued faith in spiritualism, which comforted him both in his bereavements and in the face of approaching death.[32]

It is thus inaccurate to speak of Chambers as undergoing "conversion" from one form of belief to another, however puzzling it may have been to his friends to see the author of *Vestiges* attending Home's séances or devoutly reciting private prayers of his own composition. The process was rather one of intellectual accretion, involving in the long run a marked change of tone and emphasis, but not the actual sacrifice of any conviction. In his old age Chambers believed equally in biological evolution, in spirit messages, and in the fatherhood and providence of God. The change, however, was none the less real for being gradual, and it is reflected in his career as a writer.

For one thing, he moved through a considerably altered atmosphere. His old rationalist friends were not deserted, but they had now to compete in intimacy and influence with a spiritualist circle: Mrs. Crowe, Mrs. Crosland, the Halls, Home, and numerous others. Several of these contributed to *Chambers's Journal*—in which, for example, excerpts from Robert Dale Owen's *Footfalls from the Boundary of Another World* appeared. It is also suggestive that his active interest in geology (as measured by contributions to the field) waned perceptibly after 1855, and virtually ceased about 1858, or that the only edition of *Vestiges* after 1853 was all but provoked by the condescending tone of Darwin's reference to it in the first edition of *The Origin of Species;* Chambers had not in any sense repented of these activities, but his sense of values—of what was vitally and immediately important—had undergone a radical shift.

The sole reference to his new beliefs that Chambers permitted himself in his acknowledged writings was a brief, noncommittal passage toward the end of the curious pamphlet *Testimony,* one of the *Edinburgh Papers* of 1859. From the vantage-point of present

[32] S. C. Hall, *Retrospect,* p. 473

knowledge, however, it is evident that the entire pamphlet was intended as an indirect defense of these beliefs. It was aimed against a particular kind of scepticism—that with which scientific minds regard oral testimony to phenomena (such as supernatural occurrences) which contravene their preconceived opinions and are not subject to experimental verification. It is argued that (under the usual safeguards) the weight of such testimony can establish facts, and theoretical systems based on such facts, as conclusively as observed experiment:—that, indeed, both everyday decisions and the principal faiths of the world are based on just such evidence. To accept such a thesis would, of course, add materially to the solidity of the spiritualist position, which depends on a long series of accounts of apparitions and similar phenomena as well as on the relatively objective evidence of the séances. The argument as actually presented, however, is qualified and tentative, and inclines toward "common-sense" and scientific examples which disguise its actual tendency. Only an occasional inconspicuous sentence confesses the governing intention.

> "Of the vast multitude of alleged things often heard of and habitually rejected, there are many entitled to more respect than they ordinarily receive. . . . There is a whole class of phenomena, of a mystically psychical character, mixing with the chronicles of false religions and of hagiology, in which it seems not unlikely that we might discover some golden grains . . . and perhaps add to our assurance that there is an immaterial and immortal part within us, and a world of relation beyond that now pressing upon our senses."

But, besides this modest paragraph and reticent pamphlet, there was a certain amount of unacknowledged or unpublished writing. Thus, it has been suggested, apparently on the basis of personal knowledge, that two articles in the *Chambers's Journal* giving a sympathetic account of séances were actually written by Robert Chambers.[33] It is known that he contributed an Introduction and Appendix to Home's *Incidents in My Life*—stipulating, however, that they appear unsigned.[34] The Introduction praises Home fulsomely:

> "a man of religious turn of mind, pure-hearted and unworldly, and producing phenomena of an elevating character, tending to

[33] Frank Podmore, *Modern Spiritualism*, Vol. II, pp. 5, 6, and 21. It is also possible that the authorship is dual: the narrative accounts by one hand, the brief editorial comments by another.

[34] A. R. Wallace, *My Life*, Dodd, Mead, New York, 1905, Vol. II, pp. 305-307; Mrs. Newton Crosland, *Landmarks*, p. 253; Horace Wyndham, *Mr. Sludge the Medium*, G. Bles, London, 1937, p. 109. The Appendix and Introduction appeared only in the British edition, a special Introduction having been composed by an American judge for the American edition.

> heal sickness, to smooth away sorrow, and to chasten and exalt the minds of the living."

Spiritualism is defended along the lines sketched out in *Testimony*:

> "The phenomena of Mr. Home's mediumship are not opposed to the experience of mankind. On the contrary, facts of this kind have been reported as occurring in all ages; nor is it more than two centuries since they began to be doubted."

There is an embarrassed attempt to explain away the awkward and often undignified mode of spirit communications, on the ground of the gap between the two levels of being; and a somewhat more convincing plea that the world investigate before it passes judgment. There is further discussion of the evidence for spiritualism in the Appendix, which considers, in a rather technical vein, "The Connexion of Mr. Home's Experiments with those of Former Times."

The authorship of this Introduction was disclosed by Home in the "Second Series" of *Incidents*, which appeared in 1872, the year after Chambers' death.[35] This volume also contained a number of private letters from Chambers, attesting to his faith in Home's manifestations; a few more such letters are cited by Mme. Home in her biography of her husband (1888), and by A. R. Wallace in his *Miracles and Modern Spiritualism* (1875).[36] Finally, in 1905, the spiritualist journal *Light* published the contents of Chambers' notebook on psychical phenomena, covering the period between February, 1857, and May, 1858.[37] This is a record of a series of séances held at private homes, in the presence of the Samuel Carter Halls, Mrs. Newton Crosland, Professor Augustus De Morgan (whose wife was one of Chambers' earliest confidants in such matters), and others. The manifestations were of the usual sort, and uniformly successful; some proved convincing to novices, others afforded recent converts an opportunity to display their mediumistic skill. Chambers' attitude throughout is that of a believer, and indeed the conditions of the

---

[35] Home (p. 1) may have felt liberated from the obligation of secrecy by Chambers' relative openness concerning his beliefs in the period 1867-69, or may simply have felt the need of respected names testifying in his favor. F. W. H. Myers, in *Human Personality and its Survival of Bodily Death*, 1903, Vol. II, p. 579, tells us on the authority of W. M. Wilkinson, Home's editorial assistant (or "ghost writer") for *Incidents*, that Chambers read the proofs of it and thus apparently approved the disclosure. The statement seems dubious, however; Chambers died in 1871, a year before the book appeared in print.

[36] D. D. Home, *Incidents* second series, pp. 8-11; Mme. Home, *Daniel Dunglas Home*, p. 152; A. R. Wallace, *Miracles and Modern Spiritualism*, p. 186n. A further letter appears in Wallace's *My Life*, 1905, Vol. II, p. 103.

[37] *Light* (London), Vol. XXV, July 15, 1905, pp. 331 ff; continued in issue of July 22, 1905.

demonstrations precluded prearranged fraud; one is amused, however, to find him gravely accorded the compliment paid him by one medium—he had a gigantic aura—and the advice transmitted through another that he become a spirit-writer because he was "attuned to truth."

Besides this document Chambers composed, apparently also in 1857, a rather extended essay on spiritual phenomena under the title of *Illusions*. It is written in a moderate spirit, asking no more than an unprejudiced consideration of the facts, and offering as the author's own conclusion not dogmatic conviction but tentative assent based on the balance of probabilities. Certain minor peculiarities of manner, such as the editorial "we," suggest that this manuscript was at one time intended for publication; it is thus uncertain whether this reserve is due to any actual lingering trace of doubt (which would advance the date of "conversion" from about 1854 to nearly 1860), or merely to prudential motives.

The Introduction contrasts the long history of belief in the supernatural—a belief continued into modern times by religious faith—with a comparatively recent scepticism, associated with the rise of physical science since the seventeenth century.

> "It is remarkable, nevertheless, that this faith has never died out, and that it is sometimes found to have a lurking unacknowledged existence even in minds which, if challenged for it, would give it the most resolute disclaimer. It is also remarkable that facts are continually occurring, or said to occur, of the same nature as those on which the faith was formerly based, and that these are reported from mouth to mouth, with a certain degree of respect, as if there were after all some truth in them. . . . All this seems to make it worth while to enquire into the state of the question as to such phenomena as dream-revelations, apparitions, and spiritual communications and influences, with a view to ascertaining, if possible, whether there is, or ever has been, a respectable amount of evidence in favour of their reality, and whether and to what extent the repudiation of them by modern men is justifiable."

The religious bearing of the question is urged on the reader's notice; Chambers does not insist on a necessary connection, but remarks the

> "considerable importance for a doctrine generally acknowledged to rest rather on religious convictions than on any philosophical probation, if *facts* could be adduced leaving no room for doubt that an immaterial and immortal part exists in man and that spiritual influences surround him here on earth."

Chambers, however, does not present himself as an absolute believer.

> "We are amongst those who witnessed facts which we could not account for on any imaginable principle but that of spiritual agency. And we have thus been brought to a mental difficulty—afraid to give up conclusions in which we have the support of nearly the whole philosophical intellect of the country, yet powerfully drawn towards opposite conclusions which appear to have full warrant in actual and, we may add, careful observations of our own. We wish to get out of this difficulty in one direction or another . . . prepared to find that all can be explained on the usual sceptical principle, and to submit to this issue, if so the investigation is to end; at the same time, not unwilling to receive, in a reasoning review of tangible facts, that corroboration for the immortality of man which has been alluded to as so much to be desired."

This Introduction is followed by a long list of purported instances of the supernatural, garnered from sources as diverse as old books, travellers' tales, and recent medical reports. Here again the attitude is detached and scientific; the material is submitted for review rather than paraded as evidence, and the reader is warned against excessive credulity as well as against impulsive scepticism. But the material thus assembled constitutes an impressive documentation, not perhaps for any particular set of facts, but for the abiding belief of mankind in a type of experience unusually difficult to account for on mechanistic lines.

The conclusion, though strongly "slanted" in favor of the supernatural, avoids any dogmatic finality.

> "Having formed the resolution not to dogmatise on the subject, but rather to limit ourselves to affording the means of judgment to others, we shall not pretend to decide on the great question; and, indeed, after all the attention we have paid to the subject, we really do not feel a sufficiently confident conviction to enable us to make this decision. We may ask, however, if there be, after all, any such tremendous objection as is generally assumed to the idea of a spiritual world pressing round and communicating with the world of the living? Is it inconsistent with any of the great ordinary beliefs of mankind? Have mankind in all ages unanimously repudiated it? Is it not rather the fact that only a small portion of mankind, during about one century of the enormous stretch of time, have held it in any doubt?"

(A curious argument to come from an evolutionist.) By way of further discouragement to prejudice, there is an enumeration of the advantages that would follow from our acceptance, in something like the scientific spirit, of the supernatural. Our hopes of immortality would be enormously strengthened; but, beyond that, certain mysteries

might be solved, certain historical anomalies clarified. We should have a rational explanation of the conduct of supposedly inspired persons, such as Mohammed or the Emperor Julian, and should understand the rise of false religions, with their enormous popular appeal, as due to communications from the spirit world being mistaken for communications from Divine Wisdom itself. To put it more succinctly than Chambers himself does: in the face of certain phenomena of belief and conduct, spiritualism deserves the standing of a working hypothesis.

The author of *Vestiges*, as might have been expected, pays particular attention to the question of the relation between the material system and the supernatural.

> "Granted that all the physical affairs of the world go on after an unvarying order—God governing and even creating these theatres of being in that orderly manner which we speak of as natural law—there is also the host of spiritual beings hovering around living humanity, cheering and to some extent actuating it."

Spiritual phenomena do not contradict natural law; the spiritual is not so much outside it as an extraordinary manifestation of it: "It may be *worked in*." For this reason, acceptance of spiritualism will actually resolve the contradictions it is supposed to present, embracing them within a higher synthesis:

> "Apparent discrepancies between the religious and the scientific views of mankind, which have ever been a trouble to philosophers, and are even now threatening great revolutions of thought and conviction, might by this new light be reduced to a perfect harmony."

Personal considerations evidently determined Chambers not to publish this manuscript, and it remains today among his private papers, with a number of slighter essays on cognate topics such as Clairvoyance, Presentiments, Dreams, Miracles, Scientific Scepticism, and the like, all in a similarly tolerant but cautious vein.[38] It was a year or so after the presumed date (1857-58) of the mass of this material that he composed *Testimony*, that infinitely more cautious presentation of an isolated aspect of his case, in an effort to win favorable consideration for at least this much of the logic upon which his views were founded. And it is a fair inference from this admixture

---

[38] For the opportunity to examine transcripts of this material, as well as letters and passages from the Notebooks, I am indebted to the graciousness of Mr. A. S. Chambers, of the firm of W. and R. Chambers, Ltd., Edinburgh and London, without whose generous cooperation this study would have been impossible.

of caution with his zeal that, despite the contemporary vogue of the occult, the climate of opinion was in some influential quarters so hostile to it that this was as much as, without prejudice to his fortune or reputation, a public figure might dare in its defence.

The most drastic result of Chambers' new principles, however, was not the composition but the destruction of a manuscript.[39] The *History of Superstition* was the fruit, he later said, of three years' labor; almost certainly it occupied him during the period 1850-53, when he was also productive of scientific papers but of no major general work. We may guess—having little but a few *Chambers's Journal* articles and a perhaps inaccurately reported conversation to go on—that it would have spoken of the supernatural in terms which, even if temperate, rendered communication between one realm and the next utterly implausible. Such a work would naturally have been broken off about the middle of 1853. Chambers seems to have kept it by him, however, during his period of partial or tentative conviction. At length, returning one night from a particularly impressive séance, he realized that his whole view "concerning Immortality and the Hereafter" had been transformed; and, on the impulse of the moment, he burned the offending pages. This appears to have occurred about the middle 'fifties—perhaps 1854—and to have signalized, as much as any other single fact, the exact moment of the final phase of his "conversion."

If it occurred. We have the story on the authority of a single brief account, long after the event, and must accept it with appropriate scepticism. It does, however, square with the ascertainable facts. It fits in with the gradual character of his change of views; it would explain an otherwise puzzling gap in his literary output; it is corroborated by the appearance in *Chambers's Journal*, about the time involved, of a series of short articles dealing with the folklore of the occult—werewolves and the like—in a rather superior tone. It is, of course, a pity that the story must remain no more positive than this. If it could be firmly established, we might be justified in drawing from it two inferences: first, that it was in connection with this work that Chambers found his interest in contemporary spiritualism renewed;[40] second, that—whatever happened to the actual manuscript—the bulk of the notes from which it was prepared served his turn

[39] S. C. Hall, *Retrospect*, pp. 473-474. Mrs. Crosland, in *Landmarks*, p. 225, repeats the story, but apparently on Hall's authority rather than on Chambers'. At best her testimony is feebly corroborative in the sense that she knew Chambers well, and would have rejected an anecdote that struck her as implausibly uncharacteristic.

[40] He was, however, friendly at this time with Mrs. Catherine Crowe, who sympathized with his intellectual position in *Vestiges* but preceded him in her adherence to spiritualism; she may have encouraged his interest in such matters.

later as the basis for the more tolerant *Illusions*. As matters stand, however, we are obliged to regard the story as no more than a possibility.[41]

The literary consequences of his ultimate acceptance of Christianity are much slighter: partly because this coincided with a sick and enfeebled old age, partly, no doubt, because this was a form of belief which required no defence from him. We have his brother's account[42] of a number of private prayers and graces composed during this period, as well as of the *Catechism* and *Life of Jesus* referred to earlier in this paper. These do not appear at the moment to be accessible among the family papers; but fortunately we can depend upon William Chambers' description of them, supported by the independent testimony of Home for an indication of his general view of life at this time.

Taking all the circumstances together, we are presented with an intellectual history compounded of enthusiasm and precautions—the counterpart in many ways of the history of *Vestiges*. (There is even the same impatience with preconceived and dogmatic scientific opinion.) A substantial measure of conviction takes place in a matter of months, the destruction of the manuscript—logically necessitated by it—waits a year or more. Henceforth he casts his lines among the believers, yet maintains a positively sceptical vigilance for fraud. He opens the pages of *Chambers's Journal* to stories of the occult, but, in his own person, holds his peace for four years, and finally utters only a faint and timid hint of what he believes. Another four years, and he gives Home a preface—which he will not sign; and even when, hard on seventy, he testifies formally to his faith in the supernatural, he still will not publish a document ten years old in which that faith is described as no more than a logical possibility deserving of a trial. Everything suggests that he was trying to maintain an almost impossible balance and objectivity: the evidence of his senses, accepted gamely at its face value; the scepticism of a lifetime, acknowledged as a prejudice but honored as a test; and the parochial, paradoxical Victorian mood, part and parcel of the very air he breathed, demanding faith and deriding superstition in the name of the same irrefragable verities.

University of Bridgeport
Bridgeport, Connecticut

[41] The story is unlike him in one way. He had always—but especially at this time—a host of confidants; it seems odd that so good a story should have been repeated only once.

[42] William Chambers, *Memoir*, Ch. XIV

Reviews

A PHILOSOPHICAL SCRUTINY OF RELIGION. By C. J. Ducasse. Pp. 441. Ronald Press Company, New York, 1953. $4.50.

This is a title which any Ph.D. would claim for any essay he might care to write about what is both the least defined and most provocative of subjects. And whether such theses be truly philosophic or not, they would not be the concern of this JOURNAL. There is much in religion that is not within the purview of psychical research and vice versa. But when Professor Ducasse uses this title, students of his work know that "scrutiny" means far more than "criticism," and students of psychical research know there are few, very few, philosophers of his rank who can survey with such competence that strange no man's land of the psychic which lies between the realms of the spiritual and the material. Further, this book is all the better because it is the substance of lectures given to student classes. Dr. Ducasse is not here addressing his peers who, alas, all too often resemble, in their deafness to subjects they may find distasteful, the peers of the British Parliament. He is addressing us, "the commons." It is however doubtful if many of us will welcome his judicious survey any more than do most of the specialists. For religion and especially that aspect of it with which psychical research is rightly concerned is an unique subject. To put the matter bluntly neither its enemies nor its friends want the truth spoken about it. This arises from the fact that its patrons believe that their interpretations of its data (whichever of the many dogmatic interpretations is being employed) are only true and final, while its enemies deny the data.

Dr. Ducasse insists on being fair. The data when they arise must be justly scrutinized. The many orthodox interpretations must be as judiciously examined. Very soon in this wise book we come across the Law of Parsimony, one sharp edge of which was once called "Occam's razor," the censor principle which is always needed to check a persistent human weakness. When we find a few facts pointing in a hopeful direction we tend to believe they will, with a little stretching, cover and confirm our prejudices. Unless the facts will take no other interpretation we must not claim they have established our hope. This we know and the educated are supposed to act with such necessary restraint. But in the very effort to avoid stretching facts, through our fear of suggesting the false, we may suppress the true. It is here (and it is a live and sore enough issue in all conscience) that psychical research impinges on religion and provokes equally most of the

religious and of the scientific. For psychical research refuses, on the one hand, to disregard much of the religious data which most scientists reject as consciously or unconsciously fraudulent. On the other hand, psychical research equally declines to put on the data the interpretations given by the orthodoxies.

Of course we must note here that before Dr. Ducasse deals with this delicate but intensely important issue, he has prepared the student for the preliminary difficulty, the basic semantic problem involved in using such a word as religion and the further problem of deciding what a religion is. This difficulty arises whenever, for instance, Buddhism is discussed. Here is a faith which has been followed by hundreds of millions. Many westerners however deny it is anything but a philosophy because in its strict form it seems to disregard, if not deny, deity as the central religious term. And Buddhism in what Dr. Ducasse, with most scholars, holds to be its initial form refuses to consider any creed or dogma as necessary for salvation—indeed it would seem to have taught that these formulae are obstacles, "fetters" holding a man from liberation. Dr. Ducasse examines specific evidence offered by all the theistic religions as proofs for Deity's existence. He finds none of them conclusive. On the other hand he decides that neither are the atheist counterproofs decisive. He therefore proceeds to show that when William James' notorious phrase "the will to believe" is employed, it can and does serve a necessary purpose. When informations for or against are both inadequate, a man may choose which construction of events yields him a viewpoint which will best encourage him. "Faith," as Dean Inge said many years ago, "is the choice of the noblest hypothesis." Is that then all philosophy can say, leaving the ultimate problems of human existence to be confronted with no other assurance but the inborn tendencies of temperament? Dr. Ducasse is certainly inclined to approve those who make a constructive answer to the challenge of experience. Further, he seems to hold that those who are able so to confront fate do so best if they have a method, a system. He notes that many of these systems make conflicting statements as to the nature of the universe. The working part present in all of them appears then to be the belief that in Arnold's phrase (not used by Dr. Ducasse) "A power not ourselves making for righteousness" is contactable.

This the sceptics say is undemonstrable for righteousness is not shown in nature. Man alone is righteous, and he is righteous only by reason. The rest is dangerous superstition—look at the horrors committed by orthodoxies in the name of God. A real God would surely show evidence of his goodness by checking at least the evil of his advocates. And even when religion has its claws clipped by

Humanist reason, it is unworthy of a free man's worship. No brave soul is an escapist seeking a fool's paradise.

To this familiar peroration Dr. Ducasse has three telling answers. First: If reason cannot establish conclusively for or against the hope and dream of the soul, then you have to choose (for life is, like a game of chess, subject to time and after a certain time you are "deemed to have moved"). And if the choice, of necessity, must be in the realm of hope not certainty (and indeed can true choice ever be in any other realm since absolute certainty makes a fully free choice impossible) then one may as well choose to live in a fool's paradise as in a fool's hell. This is a neat rebuttal but Dr. Ducasse is not content simply to hold his opponent. His second answer presses forward. It is of course the pragmatic argument, the question: Have not many of the saints, many of whom have held the most fantastic metaphysics, lived lives that have in selfless joy, in service to others and peace within themselves surpassed what rationalism can achieve in this world now and here? To the attack that these are odd exceptions, the answer is given: Granted they are exceptional yet religion itself is like medicine. Though both have made grave mistakes and advocated harmful superstitions, each has wished to do good, has often done so, and has been organized to give men the chance of helping their fellows.

Dr. Ducasse's third answer completes and gives contemporary point to his counter-attack on the extreme critics of religion. And it is here his book will cause most opposition and do most good. For here he will offend the religious as well as the rationalistic mechanists. A bridge builder however must be prepared for that. The one contribution that he usually receives in full measure from either bank is mud. Dr. Ducasse allows that the religious often release admirable energies beyond the force of the good rationalist. He cannot allow that the religious' explanation of the source of such energies is necessarily accurate. The Law of Parsimony being used on such claims makes us ask, is there no other fount of power before we claim that only supreme being can be producing such works.

And here we come to our own subject, psychical research, and here our author is prepared to go with us. Do we know the nature and capacity of man? As for the dilemma (the facts must be false because man has no such powers, but the facts are true and therefore they are evidence of God) there is a central path between those horns. For what is man? Only those who are prepared to study psychical research patiently, only persons conversant with such surveys as, for instance, G. N. M. Tyrrell's *Personality of Man* (Pelican Books) can begin to answer such a profound and disturbing question. For

man is much more than his reason or his "instincts," his mind or his appetites. He has (or is the occasional focus of) faculties the limits of which we at present cannot map. Yet, on the other hand, his too frequent belief that such powers are sure evidence of the fully divine speaking and working through him has surely not been sustained. The more informed a researcher in this field, the less comfort can he give to either the positive dogmatist (the ecclesiastical) or the negative dogmatist (the logical positivist). But, and this is the big but of this book, the more this research is advanced, the more the hope seems to grow that (as in vitamin research) we may hope from the traditional religious diet to extract those essential factors which are the working elements in the highest religious practice. That is Dr. Ducasse's hope and it seems a highly reasonable one that will, when it is effected at last, satisfy both the reasonable and the devout.

This book then is one of those advocacies—wise, open, firm, informed, which may help the public to entertain a new research—the way whereby what has been until now a traditional art may become a rational science and man may learn to understand himself and deploy his power. Maybe he will find himself then, as the Humanists hope, adequate to be his own providence. As nothing but a rationalist he certainly is not. Maybe he will find that, as the Upanishads have said, his true full self is not his ego but one with the One who is All. In either event he will have advanced, and may well be able to accept either verdict. Certainly Dr. Ducasse is right. No other inquiry and research is more promising or more pressing, and all who know this must be grateful for a master of accurate and lucid thinking, and one who speaks with authority, for having given the world this supremely important counsel.

The book has a comprehensive sweep that will reassure any reader that no issue has been shirked. Even demonology and witchcraft are examined (as every psychical researcher knows they must be) and here in conclusion one small query may be allowed. In dealing with the meaning and process of malevolent religion, why is not Dr. Margaret Murray's classic study *The Witch Cult in Western Europe* cited? This seems the only gap in an otherwise unbroken front of knowledge and presentation.

GERALD HEARD

THE PHYSICAL PHENOMENA OF MYSTICISM. By Herbert Thurston, S. J. Edited by J. H. Crehan, S. J. Pp. viii + 419. Henry Regnery Company, Chicago, 1952. $6.00.

This volume consists of a series of studies on the physical phenomena of mysticism written by Fr. Thurston between 1919 and 1938.

All except one—a lecture on stigmata—were published at the time as articles in periodicals, but notes were made by the author before his death for revisions and additions, which have been incorporated by the editor.

The phenomena considered in the book's seventeen chapters include levitation, stigmata and other body marks, telekinesis, luminosity, fire immunity, odor of sanctity, incorruption of the cadaver, living without food, and a number of others.

Readers familiar with Fr. Thurston's earlier book, *The Church and Spiritualism* (1933) will be prepared for the combination of open-mindedness, extent and thoroughness of scholarship, and intellectual honesty evident in the present work; and some of them may share the doubt Fr. Thurston expresses (p. 120) as to whether his desire to admit no more than the evidence strictly warrants may not at times have led him to some oversceptical judgments. His caution, at all events, is in marked and welcome contrast both to the avid belief characteristic of some other discussions of the physical phenomena of mysticism, and to the readiness to base conclusions of fraud on suppositions *ad hoc* instead of on actual evidence, which, for example, is occasionally to be found in Podmore's writings.

Fr. Thurston's caution relates not only to the factuality of the phenomena reported, but—when as in the case of levitation he accepts it—also to the explanation of them. He is not ready to commit himself to "the rough and ready solution that in the case of holy people [levitation] is a manifestation of divine power . . . but that in such cases as those of Simon Magus, sorcerers, and spiritualistic mediums, it is the work of the devil." It seems to him that "in the present state of our knowledge we cannot even decide whether the effects observed do or do not transcend the possible range of what may be called the psycho-physical forces of nature" (pp. 30, 31).

The evidence for the reality of some of the phenomena, which is recorded in the processes of beatification and canonization is, Fr Thurston declares, "often more remarkable, and notably better attested, than any to be found in the *Proceedings* of the Society for Psychical Research" (p. 2). But that he will not accept supernatural explanations if natural ones can be found in the facts of abnormal psychology is made evident for example by his discussion of stigmatization. He points out that no case of this was heard of before the beginning of the thirteenth century, but that as soon as the stigmatization of St. Francis became widely known, other unquestionable cases of stigmata began to occur, and have continued to occur down to the present day. He further notes that the stigmata have varied in position, size, and shape, corresponding in these respects with those

of the representations of the wounds on the crucifix before which the particular mystic concerned customarily prayed (p. 123). And Fr. Thurston cites the fact that a Lutheran physician, Dr. Alfred Lechler, reported in 1933 his success in causing by hypnotic suggestion not only wounds in hands and feet, but also tears of blood, and bleeding punctures on the forehead, in the case of Elizabeth, a Lutheran peasant girl in Austria.

As regards the phenomenon of incorruption of the body for a long time—in many cases, years—after death, Fr. Thurston points out that this too is not confined to saints, and is not present in all saints. He does, however, give evidence that the proportion of exceptions from the ordinary course of decomposition is much higher in the case of the bodies of holy mystics than in that of the bodies of ordinary persons (pp. 245 ff.). But he does not conclude that this is necessarily due to divine intervention.

Nowadays, of course, the hypothesis that such greater frequency of incorruption is a natural, though not yet understood, psychosomatic after-effect of the mystic's peculiar psychological states, would be regarded as the most economical hypothesis.

The various other types of physical phenomena connected with mysticism are considered by Fr. Thurston in the same cautious spirit. As a Catholic, of course, he believes that "miracles"—in the sense of divine interferences with what the course of nature would otherwise have been—are possible and have occurred. But, because he is acquainted with the facts psychical research and abnormal psychology have brought to light, he does not believe that every paranormal phenomenon, even when manifested by a mystic or a saint, is necessarily miraculous in that sense. He does hold that "in the mystical state things really happen which are not reconcilable with nature's laws as commonly understood" (p. 141); but he repeatedly points out that things closely similar to these have occurred in connection with mediums who were neither mystics nor saints. And—although without committing himself—he quotes what Stainton Moses conceived as rather being the truth, namely, that those saints or mystics who did manifest those various extraordinary physical phenomena were "powerful mediums"—who, moreover, "gave themselves the best conditions—seclusion, prayer, fasting . . ." (p. 226).

Fr. Thurston's *The Physical Phenomena of Mysticism* provides an account, both scholarly and critical, of many highly interesting but not widely known such phenomena, for the historicity of which strong testimony nevertheless apparently exists. It is good reading and its spirit is admirable. The book can be recommended alike to believers in miracles, to sceptics, and to persons who approach paranormal

phenomena with scientific curiosity and wish to broaden their range of acquaintance with well-attested cases.

Brown University C. J. Ducasse

THE PSYCHOLOGY OF THE OCCULT. By D. H. Rawcliffe. Foreword by Julian Huxley. Pp. 551. Derricke Ridgway, London, 1952. 21*s*.

In a field so full of tensions as parapsychology, it is not easy to avoid giving unintended offense; and though this branch of study is, on the whole, rich in good will and cooperative spirit, it still has too many unnecessary outbreaks of bitterness that are wasteful of the energies much needed for the advancement of the research. The book under discussion is a case in point.

It may help to understand the book to have a little previous history. Back in 1947 I received a letter from Mr. Rawcliffe—it was my first acquaintance with him—announcing that he was writing a book on parapsychology. He wrote with considerable assurance to say that he did not like the terminology of the field—it was outmoded and misleading—and that he was devising a new one. In that letter and a following one he elaborated on this new system of terms and on his projected book, *The Background and Principles of Critical Parapsychology*, which he believed "will be a standard work on the subject."

In these letters Mr. Rawcliffe was full of enthusiasm about the field and generous in his attitude toward what he called "your most valuable research work." I was, naturally, pleased to see such favorable and constructive interest and on my part recognized much truth in what he complained about in the old terminology.

Then something went wrong. Our research group held a discussion of Rawcliffe's terminology and recognized that it had a certain amount of logical merit; but we were afraid that its adoption at that stage of the research, even if it could be accomplished, would be extremely burdensome and confusing to the lay readers that compose parapsychology's main public. It would have entailed the adoption of many new strange words such as "psimatology," "surlimination," and the like; and since we were troubled with big words and awkward expressions as it was, we thought it unwise to take on another batch.

Accordingly, I wrote Mr. Rawcliffe that the reaction of our research group was not favorable to the adoption of his system at that time. I wrote the letter from the point of view of the already harassed and burdened research worker, but, as I realize now, I did not keep

in mind nearly so well as could have been done the point of view of this eager, would-be terminologist who had hoped to make his contribution in terms of the semantic aspect of the work. As a matter of fact, one of my colleagues called my attention a few weeks later to the unintentional bluntness of my reply to Mr. Rawcliffe, and, recognizing it, I wrote him a second letter explaining more fully the reaction of the group. Mr. Rawcliffe did not reply. I heard no more about his new terminology, nor about the book for which he had made such great plans.

Now, in extreme contrast, we have here a book by a seemingly embittered man. It is probably good for us all to keep the setting in mind, not merely in interpreting the book itself, but in meeting the many and often delicate problems of cooperation in connection with the field of psi research.

The Psychology of the Occult is presented by the publisher as opening "a sane and rational approach to those mysterious and confusing phenomena which have long been the hunting-ground of psychical research and parapsychology." Even a glance over its chapter headings, however, would tell anyone familiar with parapsychology today that it is, for the most part, about what parapsychology is *not*. Not only are there many chapter headings belonging under general and abnormal psychology, such as "The Subconscious Mind," "Mental Dissociation," "Suggestion," "Hysteria," "Hypnotism," "Hallucinations," "Somnambulism," and the like; but there are also chapters on "Lycanthropy," "The Oriental Thaumaturgists," and even "The Indian Rope Trick." As a survey of a wide range of little-understood human behavior that needs more careful study, both in and out of parapsychology, Mr. Rawcliffe's book has merit. It could have performed a valuable service had he been in a mood to render a balanced judgment on the material considered.

One cannot miss, however, the author's passionate efforts to reduce all the scientific work in parapsychology to the same level of confusion and uncertainty as the shadowy occult realm with which he links it. Not only are the best-controlled experiments in Britain and the United States slurringly described and daubed with dubious implications; they are in the end written off as scientifically worthless; in that regard Rawcliffe outdoes all those who have thus far attempted to offer a critique on the experimental work in parapsychology.

Obviously, this is my correspondent, Rawcliffe, in reverse, and it is worth while to consider what reversed him and whether it was unavoidable. There is, of course, no way ever to tell which would have been worse, for us to have attempted to go along with Rawcliffe's

grandiose scheme of terminology on the one hand, or, as it was, to have contributed unwittingly to this petulant effort of his to foul the nest he was not allowed to rename. There may well have been a middle course of reasonable cooperation that might have been productive for us all. We could only have known by trying. That, at least, is one lesson the book may hold.

Julian Huxley, in a short foreword, frankly disagrees with Rawcliffe "in stigmatizing studies on telepathy, clairvoyance, etc., as 'occult research,' unfit to be admitted to our universities." Dr. Huxley's few but more dispassionate words will probably carry more weight with most readers than the rest of the book. He calls for a pretty broad program of research in and around the area of the psi investigations, beginning with a general inquiry into the problems of value, of qualitative experiences apart from quantifiable ones. He would like to see "a full study of human possibilities, taking account of values." He stresses the present ignorance of "the basic relation between mental activity and physical brain activity," and even adds, "It is extremely important to try to find out whether under certain conditions mental activity may be detached from physical . . ."

One begins the book wondering how Julian Huxley could bring himself to write the foreword to such a book as this, but one ends feeling very grateful that he did. Apparently Dr. Huxley did not need the lesson mentioned above; he was able to cooperate profitably with Rawcliffe in spite of an enormous lot of disagreement. The example is a good one to show the range of difference that can be tolerated by focusing on the common ground of interest. Parapsychology already has too few productive people and can ill afford casualties over unnecessary emphasis on divergences.

J. B. RHINE

TELEPATHY AND SPIRITUALISM: Personal experiments, experiences and views. By J. Hettinger. Pp. xi + 150. Roy Publishers, New York, 1952. $3.50.

Dr. Hettinger is already known to the readers of this JOURNAL, not only for his articles which have appeared here, but even more for his other books. It is with reference to the ultra-perceptive faculty, especially, that his name is associated. Just as J. B. Rhine is the inventor of the term "extrasensory perception," so Dr. Hettinger is to be credited with having created the expression "ultra-perceptive faculty."

People who coin new terms try to reflect in those words much of what they think. The reason why they create new words, new tech-

nical terms, it seems to me, is that they are convinced that the language immediately available does not really cover the conceptions they have in their minds. This is certainly true of both Dr. Rhine and Dr. Hettinger. It is interesting that Dr. Hettinger stresses that he became involved with the ultra-perceptive faculty before he was aware of Dr. Rhine and his work.

It seems that for Dr. Rhine the term extrasensory perception was necessary because he felt that in the psi experience the human being was perceiving something, and that this perception was not dependent upon sensation, that is, it was more than or better than or other than sensory. This has been Dr. Rhine's usual position. For him the psi experience is based upon some non-physical, non-sensory capacity in man to experience things beyond the laws of time and space, and the material universe.

Dr. Hettinger in his conception of the ultra-perceptive faculty starts with the assumption about the human personality that there is a perceptive faculty in all people, which, for want of a better word, he calls the sixth sense, and which is superior to all other perceptive modalities. It is not only a sixth sense in that it is beyond the other senses, or different from the other senses, but it is the sense par excellence, the only sense by which truth is achieved.

Obviously, a man may believe that truth can be perceived by a special sense, but it is somewhat arrogant to believe that the truth may be achieved only by this one special sense about which we know all too little. Dr. Hettinger feels that he is the only one who knows how to achieve the truth, and that everybody else's efforts at searching for the truth are wasteful, and that history is meaningless, as if he were the sole and only exponent of the search for the truth.

It seems to me that this book, *Telepathy and Spiritualism*, deals with telepathy without relation to spiritualism. It is only by a kind of scruff-of-the-neck technique that telepathy is coupled with spiritualism as a general philosophical approach.

The subtitle of the book really tells the story; it states that the author is describing personal experiments, personal experiences, and personal views. It is not germane to the purposes of a book review to interpret the personal experiments or experiences of an author, for the experiences and the experiments are somehow reflected in his views. This book is, in fact, largely a philosophical work in which a personal belief, a credo, is expressed by a review of all the preceding writings and experiences of the author. Dr. Hettinger writes nothing essentially new in this book. He is dealing largely with a recapitulation and a summary of what he has expressed in other writings. But what

we do have here is an attempt on the part of Dr. Hettinger to formulate into some kind of systematized thinking what he has come to believe about the nature of man's capacity to achieve the truth.

I read Dr. Hettinger's arbitrary denial of history. The rejection of all those who worked before him, contemporaneously with him, and since him, as being inadequate and off on the wrong beat, makes him something very special and as such, his whole position must be questioned. I cannot believe that he is the lone Messiah in the seeking of the truth about men and that in the area of the investigation of psychical experiences we have all been hoodwinked by each other, and that we have not really recognized the one who wishes to bring us to the truth. Curiously, a man who himself says that we do not know all realities and that therefore we should be tolerant of one another and of new ideas or of different ideas or of different experiences, is not tolerant or humble. And it is mostly this quality as it comes through the book that makes the whole character of Dr. Hettinger's experiences, experiments, and views of doubtful value.

There is no doubt that Dr. Hettinger has many good ideas. There is no doubt that Dr. Hettinger has devoted a large portion of his life to investigation in this field. There is no doubt that Dr. Hettinger as a person and as a scientist would be a very stimulating colleague if he ever allowed himself to become cooperatively involved with colleagues. But the present book contributes little or nothing to the progress of science in general or to our understanding of psychical experiences in particular.

EMANUEL K. SCHWARTZ

ENIGMA: A POETIC MYSTERY. Presented by Mrs. Louis K. Anspacher. Pp. 96. Exposition Press, New York, 1953. $2.50.

This is a volume of attractive format, bearing a challenging title, *Enigma*. That word springs from the fact that the book is a record of poetry that came via the ouija board, taking its place, therefore, beside those other enigmas of communication literature such as the poems of Patience Worth and Thomas S. Jones, Jr.

In her Introduction Mrs. Anspacher tells how it all began. Dr Anspacher died on May 10, 1947. On the following July 26th, a poet friend was visiting Mrs. Anspacher. She suggested trying to get a message from her husband by way of the ouija board. He agreed; the pointer moved rapidly, and messages and poems came, purporting to be from Dr. Anspacher himself. In subsequent sittings different types of poetry were recorded. There were many sonnets, Petrarchan and Shakespearian, and various other forms such as quatrains, all

recorded with speed. A perfect sonnet would be completed in eight to nine minutes.

In 1951 the poetic flow ceased, but in the four years since it began one hundred and twenty-one poems had been received, only forty-six of which are presented here, selected as of greatest general appeal. The last twenty-eight pages of the book contain poems by Louis Anspacher written in life, some published, others unpublished. The editor's purpose in this is to show that the poems that came on the board closely resemble in style and tone those that Dr. Anspacher wrote before his death. Mrs. Anspacher does not, however, claim that this is a proof of survival. She writes, "I do not think the evidence obtained from these poems is adequate to justify a conclusion as to survival of personality after death, or of the possibility of communication between the living and the dead. Nevertheless, I believe that for those who have faith in this concept the poems will bring comfort and reassurance." And so the decision is left to the reader.

What other explanation is there for this Enigma? True, it was a poet's hand that rested on the pointer. He prefers to remain anonymous but for one thing his own poetry, we are told, does not read like these verses, and a hoax perpetrated on a friend for four years is unthinkable.

It should, however, be pointed out that if the poet friend was also a friend of the deceased Dr. Anspacher and familiar with his literary work, there would be nothing very unusual in the ouija board productions. Living poets have not infrequently written in the styles of their colleagues. The rapidity with which the poems came proves nothing. It is known, for example, that some of the best poems of the late Sara Teasdale emerged into her conscious mind complete at odd moments, in a flash so to speak, while she was dressing for dinner or engaged in some other unimportant matter, and that she rarely changed a word.

The book is another refutation of the popular dogma that "nothing but rubbish ever comes by the ouija board." For these verses, however explained, are of high quality, and the poetry-lover will enjoy them regardless of the mystery of their source.

WILLIAM O. STEVENS

Correspondence

To the Editor of the JOURNAL:

In the January 1953 number of this JOURNAL, you published a letter from Dr. Jule Eisenbud. In it Dr. Eisenbud criticizes Dr. Gardner Murphy's article, "The Natural, the Mystical, and the Paranormal" (this JOURNAL, October 1952).

I am writing to you because I feel that Dr. Eisenbud has consciously or unconsciously misread Dr. Murphy's paper. Careful reading of the footnotes as well as the text indicates that Dr. Murphy is laying stress upon the fact that love is but one of the possible motivational factors in the paranormal experience, and he states unambiguously that it is the only one with which he wants to deal in the paper under consideration. Dr. Eisenbud in emphasizing hate as one of the dimensions of the psi experience is justified in pointing out the seeming resistance of psychologists and parapsychologists who tend "to neglect the so-called seamy side of man's vital strivings. . . ." This does not mean, however, that Dr. Murphy has been biased in his discussion of love as motivation for human communication and contact. The footnote to the title of Dr. Murphy's article says specifically, "The present lecture is concerned simply with the role of love in developing and maintaining such personal interrelationships."

It is curious that neither Dr. Murphy nor Dr. Eisenbud referred to my paper, "The Psychodynamics of Spontaneous Psi Experiences" (this JOURNAL, January, 1952). Quite in keeping with what I suspect is the underlying thesis of both Dr. Murphy and Dr. Eisenbud, I pointed out that the need to make contact arises if the objects of love and loving or the objects of hate and hating are inaccessible.

I think it is important that the communications of Dr. Murphy and Dr. Eisenbud be seen as indicators in a trend toward greater consideration of the human personality in the study of the psi experience. At this moment, the parameters of any hypothesis concerning the motivational factors entering into the psi experience can only be grossly defined. We should be heartened that some heed is being given to motivational factors, regardless of what is ultimately revealed. From my point of view, it is of historical consequence that polemic discussion arises from an attempt to deal not with the mathematical or evidential goodness of the psychical experience but with the purposes to which human beings put such experiences.

It would be most unfortunate if Dr. Eisenbud's forceful but some-

what distorted statement of Dr. Murphy's objective makes other people who might wish to become involved in this, for me, more valuable aspect of psychical research shy away from it. I am convinced that useful results in psychical research will be attained only if we redirect our basic attention to the human beings who have psi experiences. The questions, Who? and Why? are equally as important as, and certainly more fruitful than the question, What?

EMANUEL K. SCHWARTZ

Obituary — Mr. G. N. M. Tyrrell

We deeply regret to record the death of Mr. G. N. M. Tyrrell, President of the Society for Psychical Research (London) in 1945. Mr. Tyrrell was widely known to the members of this Society through his articles in our JOURNAL and particularly for his brilliant survey, *Science and Psychical Phenomena,* published in this country by Harper's in 1938. Another major work of Mr. Tyrrell's is his Myers Memorial Lecture, *Apparitions* (S.P.R. 1942), described by Dr. Gardner Murphy as "an amazingly close-thought, brilliant, integrated, all-around consideration of the problem of apparitions."[1] A third outstanding contribution, easily available in this country, is Mr. Tyrrell's *The Personality of Man* (Pelican Books, 1947), in which the author sets out, in non-technical terms, to explain what psychical research means, what it has achieved, and why it has been almost universally ignored by the scientific world. For Mr. Tyrrell psychical research is "not spiritualism nor is it superstition." It is the scientific study of human personality beyond the threshold of consciousness.

Mr. Tyrrell's insistence that the quantitative approach only touches the fringe of paranormal phenomena and reveals little about the nature of the process is known to all readers of his published work during the last decade. Regardless of whether present investigators agree with him or not, Mr. Tyrrell's contributions, both experimental and theoretical, will remain landmarks in the history of psychical research.

L. W. A.

---

[1] Gardner Murphy, "The Importance of Spontaneous Cases," this JOURNAL, p. 98.

HISTORY OF THE SOCIETY

The First American Society for Psychical Research was formed in 1885, in consequence of a visit by Sir W. F. Barrett to this country, and Prof. Simon Newcomb became its President. In 1887 the Society invited a man of signal ability, Richard Hodgson, A.M., LL.D., sometime Lecturer in the University of Cambridge, to become its Executive Secretary, and he accepted.

This organization later became a branch of the English Society under the very able guidance of Dr. Hodgson until his death in 1905. The American Society for Psychical Research was then re-established with James H. Hyslop, Ph.D., formerly Professor of Logic and Ethics in Columbia University, as its Secretary and Director.

THE ENDOWMENT

The American Society for Psychical Research, Inc., was originally incorporated under the Laws of New York in 1904 under the name of American Institute for Scientific Research, for the purpose of carrying on and endowing investigation in the fields of psychical research and psychotherapeutics. It is supported by contributions from its members and a small endowment fund. The income of the Society pays only for the publications and office expenses, but does not enable the Society to carry on its scientific investigations. A much greater fund is required before this work can be carried forward with the initiative and energy which its importance deserves.

The endowment funds are dedicated strictly to the uses set forth in the deed of gift and are under control of the Board of Trustees, the character and qualifications of whom are safeguarded, as with other scientific institutions.

Moneys and property dedicated by will or gift to the purposes of the American Society for Psychical Research, Inc., whether to the uses of psychical research or psychotherapeutics, are earnestly solicited. The form which such dedication should take when made by will is indicated in the following:

"I give, devise and bequeath to the American Society for Psychical Research, Inc., a corporation organized under the laws of the State of New York, the sum of ..... dollars (or if the bequest is real estate, or other specific items of property, these should be sufficiently described for identification), in trust for the corporate purposes of said Society."

THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

VOLUME XLVII OCTOBER • 1953 NUMBER 4

CONTENTS

THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, Inc.
880 FIFTH AVENUE • • • NEW YORK 21, N. Y.
Single Copy, $1.50 Published Quarterly

THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH, INC.

OFFICERS

GEORGE H. HYSLOP, M.D. ..... *President*
PROF. GARDNER MURPHY ..... *First Vice-President*
MRS. LAWRENCE JACOB ..... *Second Vice-President*
MR. EDWARD LATHAM ..... *Treasurer*
MRS. EDWARD W. ALLISON ..... *Secretary and Assistant Treasurer*

BOARD OF TRUSTEES

Mrs. Edward W. Allison	(Jan. 1955)	Miss Margaret Naumburg	(Jan. 1955)
Prof. C. J. Ducasse	(Jan. 1954)	Mr. Cyril J. Redmond	(Jan. 1955)
George H. Hyslop, M.D.	(Jan. 1956)	Prof. J. B. Rhine	(Jan. 1954)
Mrs. Lawrence Jacob	(Jan. 1956)	William O. Stevens, Ph.D.	(Jan. 1955)
Mr. Gerald L. Kaufman	(Jan. 1954)		
Edward J. Kempf, M.D.	(Jan. 1954)	Montague Ullman, M.D.	(Jan. 1956)
Mr. Edward Latham	(Jan. 1954)	Mrs. John J. Whitehead	(Jan. 1956)
Prof. Gardner Murphy	(Jan. 1956)	J. L. Woodruff, Ph.D.	(Jan. 1955)

CHAIRMEN OF COMMITTEES

Research, Prof. Gardner Murphy
Publications, Mrs. E. W. Allison
Finance, Mr. Edward Latham
Lectures, Mr. William Oliver Stevens

Research Associate, Laura Abbott Dale
Executive Secretary, Mrs. Mitchell Kennerley

PURPOSE AND SCOPE OF THE SOCIETY

1. The investigation of claims of telepathy, clairvoyance, veridical hallucinations and dreams, psychometry, precognition, dowsing, and other forms of supernormal cognition; of claims of supernormal physical phenomena, such as raps, telekinesis, materialization, levitation, fire-immunity, poltergeists; the study of automatic writing, trance speech, hypnotism, alterations of personality, and other subconscious processes: in short, all types of the phenomena called psychic, mediumistic, supernormal, parapsychological and metapsychic, together with the bordering subjects.

2. The collection, classification, study and publication of reports dealing with the above phenomena. Readers are asked to report incidents and cases. Names must be given, but on request will be treated as confidential.

3. The maintenance of a library on psychical research and related subjects. Contributions of books and periodical files will be welcomed.

4. Cooperating in the above tasks with qualified individuals and groups who will report their work to the Society.

MEMBERSHIP IN THE SOCIETY

Members, who receive the Proceedings and the Journal, pay an annual fee of $10. (One may become a Life Member or endow a Memorial Membership on payment of $200.) *Fellows*, who receive all publications of the Society and are afforded special library privileges pay an annual fee of $25. (Life Fellowship, $500.) *Patrons and Founders:* For those who wish to make a still larger contribution to the Society's work, these classes are open at $1000 and $5000, respectively.

It is to be remembered that membership in a scientific society means more than merely a subscription to its publications. The work must be carried on largely through the income from membership fees. Therefore members, old and new, are urged to make their membership class as high as they feel they can. *If a comparatively small proportion of the present members went one class higher, the money available for research would be more than doubled.*

THE JOURNAL of the American Society for Psychical Research is published quarterly by the American Society for Psychical Research, Inc., 880 Fifth Avenue, New York 21, N. Y. "Entered as second-class matter July 15, 1941, at the post office at New York, N. Y., under the Act of March 3, 1879."

THE JOURNAL OF THE AMERICAN SOCIETY FOR PSYCHICAL RESEARCH

Responsibility for the contents of any article appearing in the JOURNAL rests entirely with the contributor and not with the A.S.P.R.

VOLUME XLVII OCTOBER • 1953 Number 4

CONTENTS

The Exploration of ESP and Human Personality[1]

J. FRASER NICOL AND BETTY M. HUMPHREY

We have indications of something complex and obscure in the structure of human personality, of something transcending sensory experience in the reserves of human faculty.

FREDERIC W. H. MYERS

Thus wrote the distinguished author of *Human Personality* more than half a century ago. In the intervening years our whole conception of human personality in psychical research has undergone extensive modification, a change due to the intensive analysis of personality carried out and studied by experimental psychologists. Close on twenty years ago the results of those psychological discoveries began to be applied to the problems of psychical research, and at this date more than thirty papers have been written on the relationships existing between personality characteristics and extrasensory perception.

[1] The collection of the data of this report was carried out when we were associated with the Parapsychology Laboratory, Duke University, and was in part supported by the Rockefeller Foundation. The extensive program of analysis and study of these data was made possible by a grant from the American Society for Psychical Research. For their interest and encouragement we are especially grateful to Mrs. E. W. Allison, Dr. Gardner Murphy, Dr. George H. Hyslop, and Mrs. L. A. Dale.

Previous investigations have been primarily concerned with intensive study of limited aspects of personality. One of the most striking facts about such work is that it rarely meets with failure, an impressive commentary on the contrast between it and the general run of failure in simple card-guessing experiments.

The purpose of the research reported in this paper was to extend the investigation over a wider range of personality assessment than had hitherto been employed. In this first stage of what was planned as a prolonged series of researches, we proposed to explore the field by studying the ESP scores of 50 subjects and those subjects' scores on some dozen or more factors of personality. From this exploration we hoped to get information that would lead our steps into the most promising lines of advance for future and more intensive research.

Personality has been investigated by a variety of methods. Some of these have been successfully applied to the problems of psychical research. In projective tests the subject is presented with unstructured material such as incomplete sentences, unfinished pictures, or inkblots which he has to interpret or complete. It has been found that with such material the subject reads into it the feelings and experiences of his own personality. The Rorschach Ink Blot Test has been used by Schmeidler to discriminate between well-adjusted and poorly-adjusted percipients in ESP tests (12), and her work has been remarkably revealing. Humphrey has used the Elkisch drawing technique to separate expansive from compressive subjects in ESP experiments (7). Projective methods are extremely valuable for the intensive study of the relationship of ESP to certain aspects of personality. One disadvantage is the amount of time required to administer and evaluate the best projective tests. Moreover, most projective techniques are in an uncertain status with regard to standardization and validation, and do not yield numerical values for easy comparison with ESP scores. In the present inquiry, therefore, we have concentrated on the simpler "paper-and-pencil" questionnaires for personality assessment.

The questionnaire method which we adopted has been successfully used by psychologists in the educational, commercial, military, and clinical fields for a long period of years. It has also proved an effective method of studying the personality relationships of ESP, as is shown by the work of Stuart, Burke Smith, and Humphrey. In this technique the subject is presented with printed lists of questions dealing with common experiences, which if truthfully answered, will describe his "adjustments to his environment." In some cases a single

questionnaire will cover half a dozen or more factors of personality. The questions are haphazardly arranged, and the answers are afterwards sorted out into the different personality factors by the experimenters.

The limitation of the method rests of course on the the fact that the subject is required to give his own account of himself. An objective view of oneself is difficult to attain, but it is a reassuring feature of some of the newer personality questionnaires that the questions are so phrased that little more is required from the subject than straightforward sincerity.

We believe that the measures obtained in the present research may be accepted as reasonably trustworthy for three reasons: (1) all subjects were volunteers, (2) they were assured that their answers would be confidential, and (3) they were told that complete candor was necessary to obtain valid correlations with ESP.

Three main questionnaires were used: one devised by Guilford, testing five factors of personality; one by Guilford and Martin testing five further factors; and one by Cattell which embraces sixteen personality factors. Both Guilford's and Guilford and Martin's inventories have been used in psychological research for some years and their validity and reliability are known. Cattell's Sixteen Personality Factor Questionnaire is new and is undergoing further standardization. Nevertheless, since it purports to cover such a wide range of characteristics, we thought it worth a trial.

For the ESP side of this study, we confined our interest to clairvoyance tests because they are simpler to administer and allow closer association of experimenters and subjects. Two types of clairvoyance test were alternated for each subject: (1) "Unknown" tests, or the standard ESP test, where the subject is informed of his success or failure only at the end of each test, and (2) "Known" tests, in which the subject is shown the actual target card after each guess, therefore allowing him immediate knowledge of his success or failure on each trial. Subjects' scores on both types of ESP test were afterwards correlated with their scores on various personality factors in order to judge which of these factors were important in the functioning of ESP.

As it turned out, the research yielded more interesting and varied results than we had expected. We shall concentrate in this report on the relation of the personality scores to the two ESP tests and to their total; other aspects of the research will be described in a later report.

The Plan of the Experiment

Technical Details

ESP Test. Each subject called 16 packs of ESP cards, each pack containing 25 cards. The 16 packs were used in two different types of clairvoyance test:[2]

(1) "Unknown" runs, the usual ESP test procedure in which the subject called all 25 cards before being told of his success or failure.

(2) "Known" runs, a procedure in which the subject was shown each target card as soon as he had called it; thus he knew immediately after each guess whether he was right or wrong.

Unknown runs were alternated with Known runs through the 16 packs for each subject. Odd-numbered subjects began their tests with an Unknown run, followed by a Known run, and so on through the session. The reverse procedure was used for even-numbered subjects, the session beginning with a Known run for them.

The authors, as experimenters, were present at every session. One recorded the subject's choices while the other handled the cards behind a screen. For half of the subjects the session began with JFN handling the cards for eight packs, while BMH recorded for the subject. After eight packs, the experimenters changed places, BMH holding the cards and JFN recording the subject's calls. For the other half of the subjects, BMH handled the cards for the first eight runs, and JFN took over this role for the last eight runs.

Before the experiment began, the order of procedures was worked out in such a way that Unknown and Known runs came at the beginning of the session an equal number of times, and JFN and BMH handled the cards for each half of the session an equal number of times. In effect then, four different arrangements of the procedures were followed in this order:

(1) JFN handled cards first 8 runs; BMH handled them second 8 runs; order of runs: Unknown, Known, Unknown, Known, etc.

(2) BMH handled cards first 8 runs; JFN handled them second 8 runs; order of runs: Known, Unknown, Known, Unknown, etc.

---

[2] We have described these experiments as a test of clairvoyance because the experimenter did not look at the cards during a run. The experimenter handling the cards, however, *might* have derived knowledge of the symbols by use of the sense of touch or by unconsciously reading the impressions of the symbols that can sometimes be dimly discerned on the backs of such cards under suitable lighting conditions. Neither experimenter was ever aware of such experience, but if unconscious knowledge cannot altogether be ruled out it would evidently be more apt to describe the experiments by some wider term as "general extrasensory perception." With this qualification in mind, we shall continue to use, for convenience, the term "clairvoyance."

(3) BMH handled cards first 8 runs; JFN handled them second 8 runs; order of runs: Unknown, Known, Unknown, Known, etc.

(4) JFN handled cards first 8 runs; BMH handled them second 8 runs; order of runs: Known, Unknown, Known, Unknown, etc.

Since in some runs the subjects were to see the cards after each trial, the packs had to be made up in such a way that the subjects could not infer the order of the cards after seeing a part of the pack. Complete randomization of the entire series of cards (14,400) meets this situation successfully. The cards were randomized from Kendall and Smith's tables of random numbers (8). The random numbers in the tables were translated into ESP symbols according to a set code and the symbols were written on ESP record sheets. Symbols sufficient for 200 packs were recorded at a time, and a duplicate copy of the symbol orders was also made. Packs of cards were then made up to match the symbol lists. The sheets containing the carbon copy of the symbol order were cut up into slips so that a slip showing the order for each pack could be attached to the pack. Each pack of cards and the record of its order were placed in a card box and the boxes numbered consecutively for use in the experiment. The original list of the card orders was retained by a colleague who was not connected with the experiment.

The first batch of 200 packs was made up entirely by a colleague, but the task was so laborious and time consuming for one person that a different plan was followed for subsequent batches of cards: BMH and JFN translated the random numbers into ESP symbols and made up the packs to match the symbol lists. A colleague then took the packs and the two copies of the card order, assigned random numbers (from Kendall and Smith's tables) to the 200 packs and so rearranged them that in a test BMH and JFN would not know what pack they were using until they came to the checking of the scores. The assistant placed the cards in boxes, attached one copy of the card order to each pack, and retained the original card orders. In all, 800 packs of cards were made up, but only 576 were used in this experiment. The original lists of card orders are still in the possession of a colleague.[3]

When a batch of 200 packs was prepared, the cards were locked in a desk drawer in JFN's office, a room not used in testing the subjects. Just prior to the ESP test the 16 packs to be used were transferred to a locked drawer in BMH's desk in the experimental room. At no time did a subject have access to the prepared cards. Each pack was used only once.

[3] With full knowledge of the exacting task to which we subjected those who aided us in preparing the cards, we wish to thank Miss Elizabeth McMahan, Mrs. Esther Foster, and Miss Louise F. Nicol for their help.

The Experimental Room. All tests were carried out in BMH's office, a room approximately 20 feet long and 13 feet wide. The subject sat in a large low easychair at one end of the room. To his right was a small table upon which were displayed one of each of the five ESP symbols (circle, cross, square, star, waves) as a reminder to the subject of his possible choices. Nearby, with his back to the subject sat the experimenter who recorded the subject's calls (E1). (The positions of the subject, S, and the two experimenters, E1 and E2, are shown in the rough diagram of the experimental room, Figure 1.) Directly in front of the subject and approximately ten feet away,

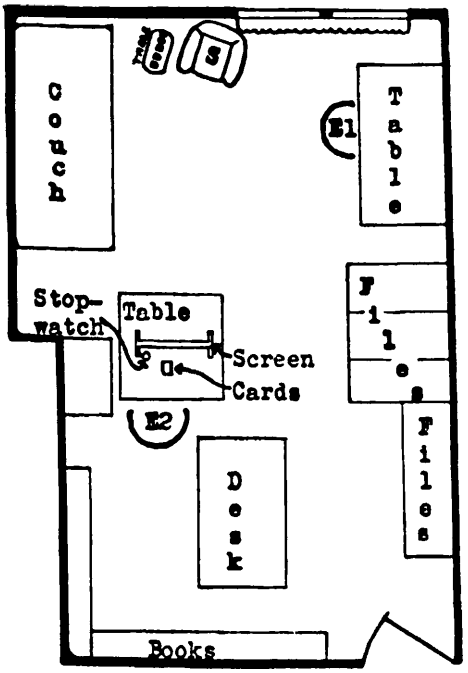

FIG. 1. Rough sketch of experimental room. Approximate dimensions: 20' x 13'. "S" indicates position of subject, with table at his right displaying a sample of each of the five ESP symbols. "E1" and "E2" are the positions of the two experimenters.

the other experimenter (E2) held the cards behind a screen placed upright on the table in front of the experimenter. The deck was held face down close to the table; on each trial, the experimenter removed the target card from the pack without looking at it and held it a little

apart face down until the subject made his call. Then the card was placed in a separate pile and the next card made ready for the subject.

The wooden screen was 24 inches long and 18 inches high, and near its center was a cut-out section about 4½ inches square. On the Known runs, as soon as the subject's call had been made and recorded, the experimenter behind the screen held the target card up in the "window" so that the subject could see whether he was right or not. On Unknown runs the experimenter merely placed each card in a separate pile after it was called. From the subject's position in the low easychair, it was impossible to see the cards unless one was held up at the screen opening. At all other times the experimenter held the pack face down near the table and close to the base of the screen. At no time did the experimenter look at the card before the subject called it.

The Subjects. Thirty-six subjects took part in the experiment[4]; 12 were men and 24 were women. With one exception, they may be classified as young adults ranging in age from 18 to 30 (the one exception was a Duke undergraduate aged 53). Twenty-five were students, mostly from Duke University. The rest were young people from the local area. All were volunteers who responded to requests for subjects.[5] They knew in advance that the purpose of the experiment was to study relationships between ESP scores and various personality ratings. They were asked to come for one session only, of approximately one and a half hours' duration, and none of them was paid for participating. Twenty-five of the subjects were completely unknown to both experimenters prior to the test session; with the remaining 11 subjects, one or both experimenters had varying degrees of acquaintance ranging from having met them once to having known them well for several years.

Description of an Experimental Session

We shall describe here the full procedure followed in an experimental session, asking the reader to remember that for some subjects the order of the Unknown and Known runs was the opposite to that given here and that for some subjects also the roles of the two experimenters were reversed.

Before the testing began the experimenters usually discussed with the subject matters of general interest. Then the general purpose of

---

[4] Fifty subjects were called for in the original plan of the experiment, but the time available made it impossible for us to secure more than 36.

[5] We wish to thank especially those who assisted us in recruiting subjects: Dr. Wally Reichenberg-Hackett, Miss Laurel Glass, Dr. Jack Kapchan, and Miss Beatrice Boericke.

the experiment was explained again to the subject (that it was a study of the relation of ESP and personality test levels); and he was asked to fill in a shortened form of Cason's Test of Annoyances (to be described later) while the experimenters set the stage for the ESP tests.

During the five or so minutes it took to complete the annoyance questionnaire, JFN went to his office to obtain the 16 packs of cards (in their boxes). BMH stayed with the subject, answering any questions and arranging the record sheets. On JFN's return the boxes of cards were placed in the desk drawer immediately behind the chair of the experimenter who was to handle the cards.

The experimenters described in detail and demonstrated for the subject exactly how the tests were to be made. He was told that on some packs he would not know his score until all 25 cards had been called, and that on other packs he would see the actual target card as soon as he said what he thought it was.

With regard to the latter case, we drew for the subject's benefit an analogy with learning theory. In the moments before he utters his call a subject may (and often does) have an assortment of impressions, thoughts, and feelings running through his "mind." He calls. Quickly afterwards he sees from the card at the window whether his call was right or wrong. Can he *learn* how to guess correctly by comparing the preceding mental events with the actual result, and thus as it were learn how to distinguish between favorable preceding events and unfavorable ones? If so he will gain an advantage for his ESP in the Known runs, and he may be able to carry the benefits to the Unknown runs also.

The subject was told also that the cards had been prepared from random numbers tables and that the number of times each symbol appeared varied in a chance way from pack to pack so that it was useless to try to infer by logical processes anything about the composition of any of the packs.

In addition to trying to call the symbol on the target card, the subject was also asked to say *which* of his calls he felt were right. It was mentioned to him that on some trials he might have an impression of "correctness," or a feeling that the call just made was "better" than others, or even a feeling that this call was "different" from the others. On such occasions he was to follow his call immediately with the word "check": thus, "star, check." The recording experimenter then put a check mark next to that call on the record sheet. (See Figure 2.) On Known runs, the subject would know immediately afterwards whether he had been right or wrong in his feeling of success; on Unknown runs he would not know until the routine check-

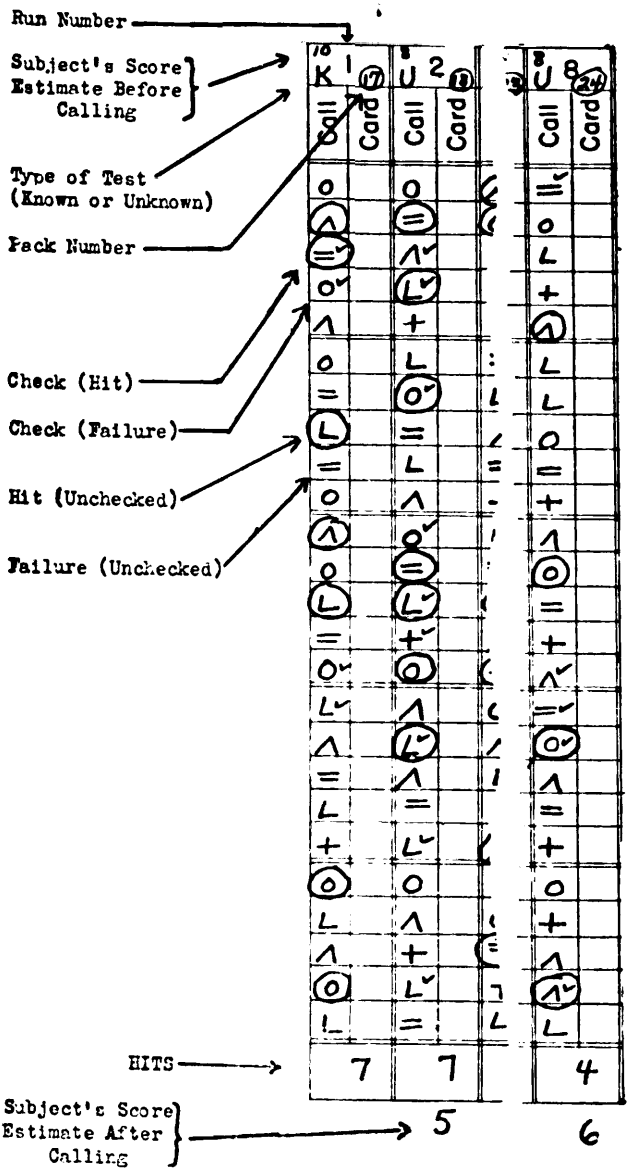

FIG. 2. Copy of part of a record sheet. The target cards were separately listed. The uneven break between Runs 2 and 8 indicates that for the sake of brevity Runs 3 to 7 are omitted.

up at the end of the run whether his impressions of correctness coincided with hits. He was instructed to try to learn to identify any special feeling accompanying right calls. Subjects were urged to call *between 5 and 10 checks* per run. Some subjects were reluctant to do this, many apparently feeling embarrassment when their "checks" did not match the hits, and the experimenters frequently had to use friendly persuasion to get some subjects to say "check" at all.

(The evaluation of the "checks" and of the relation of personality scores to success on checking will be the subject of another report and will not be dealt with further in this paper.)

After the experimenters were satisfied that the subject understood the procedure, the subject was seated in the easychair and the experimenters took their places. The experimenter handling the cards sat down behind the screen and removed the first pack of cards from the desk drawer. He took it out of its box, laid aside the folded card order slip without opening it, and held the pack face down until the test actually started.

The experimenter who was to record the subject's calls filled in the details of the session (date, subject number, pack number, etc.) on his sheet, and then, just before the run began, he asked the subject to give an estimate of the number of hits he expected to make in that pack. This number was recorded at the top of the column.

Let us say that the first run for this subject was an Unknown one. When he was ready, the subject began calling and proceeded at his own rate of speed. E2 held each card face down (without looking at it) while the subject called it. Just as the subject made his first call, E2 started a stop watch so that the exact time consumed in calling the pack could be recorded. (The subjects were never told that they were being timed and to the best of our knowledge none of them knew the stopwatch was going throughout each run.)

As soon as the subject made a call, the experimenter placed the card down on the table behind the screen, and held the next card in readiness for the call. The run proceeded in this manner until all 25 cards were called. The subject knew that as soon as he had made a call, the next card would be in position so that it was not necessary for E2 to give any signal. As soon as the last card was called, E2 stopped the watch and recorded the time indicated.

The first experimenter then asked the subject to give another estimate of the number of hits he thought he had made in the run. Experience shows that a subject's mood may change during the course of the run and we wished to see whether his estimate before or after the run was more accurate or revealing. This second estimate was obtained only on Unknown runs since of course in the Known runs,

the subjects were already aware of the number of their hits. (The material dealing with score estimates has not yet been evaluated, and will be mentioned in a later report if it proves interesting.)

The subject was then handed a card bearing nine typed words in this order: elated, lucky, enthusiastic, contented, uneasy, annoyed, worried, discouraged, pessimistic. From these words the subject chose the one that most closely described his feeling as he was calling the pack and he wrote this down on a separate sheet of paper. He could, if he wished, qualify the word or add any comment he desired.

The slip of paper showing the target order was next placed beside the record of the subject's calls. With the subject watching, the first experimenter ringed the correct calls and recorded the total at the end of the column. The result was then checked by the second experimenter. Some discussion of the score naturally followed and it was compared with the subject's two estimates of his score. In general the experimenters tried to be genuinely encouraging without showing excessive enthusiasm when high scores occurred. We felt that blowing fanfares over a good score tend to put the subject under strain during subsequent runs and may be detrimental to continued good scoring. When the scores were low we tried to call attention to some favorable aspect of the run, such as hits on checked trials or closeness of one of the score estimates to actual score.

The experimenters resumed their places and prepared for the next run, which in the present example would be a Known one. Again the subject gave his score estimate. When he made his first call, the stopwatch was started. After a brief hesitation in case the subject wanted to say "check" after his call, the second experimenter held up the card in the screen opening. The card was held up only a second or two and then placed back on the table; and the second card was held slightly apart from the pack awaiting the subject's next call.

At the end of the Known runs, no second estimate of the score was given, of course, but the subject was asked as usual to choose a word from the list of nine describing his feeling during the run. These data were collected after the Known runs merely for possible psychological interest; the fact that the subject knew his score makes them of dubious value as indicators of favorable or unfavorable moods for ESP.

The procedure may sound complex, but in practice the score estimates and the choosing of one of the nine words were accomplished in less time than it takes to tell about them. The subjects kept the word-list and their sheet of paper nearby and usually wrote down the word after each run without even being reminded. It was our impression that the various activities other than the simple card-calling kept

the session interesting and prevented a feeling of monotony from creeping in.

After eight runs had been completed (four Unknown runs alternated with four Known runs), the experimenters traded places and a new record sheet was used.

The experiment then continued as before until all 16 runs were completed. Throughout all the tests both experimenters kept notes of the subject's spontaneous remarks, expressions of preferences for the two kinds of tests or for certain symbols, etc. A session usually lasted an hour and a half, although a few subjects took much longer.

At the end of the session the subject was asked to sign his name on each of the sheets bearing his call record. He was given three personality questionnaires (described later) to take along and fill in at home and return by mail. Three subjects filled in the questionnaires before the ESP session, however, and three filled in a part of the questionnaires while waiting for their ESP test. All the rest filled them in afterwards.[6] None of the questionnaires was scored until the entire research was completed.

The Personality Questionnaires

In addition to the shortened form of Cason's Test of Annoyances (1), each subject filled in three longer questionnaires:

(1) J. P. Guilford's "An Inventory of Factors STDCR," a questionnaire yielding five scores for that area of personality generally referred to as introversion-extraversion (4).

(2) The Guilford-Martin "Inventory of Factors GAMIN," a questionnaire giving scores on five measures of temperament (5).

(3) R. B. Cattell's "Sixteen Personality Factor Questionnaire" (also known as "The 16 P.F. Test"), Form A, a questionnaire aiming "*to leave out no important aspect of the total personality* . . ." (3).

In all, these three questionnaires provide scores on 26 personality factors; however, they are not all equally accurate or reliable. From the Cattell test, a new and relatively untried instrument, we arbitrarily eliminated seven factors which were low in reliability (split-half reliability under .70).

Thus we were left with a total of 20 personality test scores: 9 from Cattell's test, 5 from Guilford-Martin's, 5 from Guilford's, and 1 from Cason's Annoyance Test.

---

[6] Five subjects did not return their questionnaires. One subject, aged 53, did not fall into our age group of "young adults" and was therefore omitted in our personality study since the questionnaires were standardized on young adult and college populations.

Scores from all 20 measures of personality were studied in relation to the Known and Unknown run scores and to the total ESP scores of our subjects in order to see if high or low ratings on the personality factors were associated with the various levels of ESP scoring. The 20 factors are not all independent of one another, and indeed some of the Cattell scales attempt to measure the same aspects of personality as do the other tests. Nevertheless, we shall report all of these factors in our study, noting to what extent the various measures confirm one another.

In the description of the 20 personality factors to follow,[7] we shall mention only briefly those that appeared to be unrelated to our subjects' ESP scores. Those factors that proved of special interest in relation to ESP will be illustrated with examples of the relevant questions from the inventories.

For the Guilford and the Guilford-Martin questionnaires, each question is answered by marking "Yes" or "No," with an answer of "?" available for those cases when a subject is unable to decide between the other alternatives. For the Cattell inventory some questions are answered by marking "Yes," "In Between," or "No"; others involve a choice and are marked "(a)," "Uncertain," or "(b)." A few questions involve circling one of three words provided.

In all three inventories the questions are not grouped for each factor but are mingled with each other throughout the test; they do not appear in the order we shall use in our examples below.

The Guilford Inventory of Factors STDCR

The five factors of personality rated in this inventory deal with different aspects of what is generally called introversion-extraversion. The first three factors actually represent three different kinds of introversion-extraversion, while the last two, according to Guilford, are mainly concerned with emotional aspects of personality. For each factor the subject is given a score between 0 and 10, the higher score generally indicating the more "socially desirable" characteristic. "Socially desirable" is not of course a scientific phrase, but rather an ethical judgment and we use it here only for its convenient brevity.

(1) Factor S, *Social Introversion-Extraversion.*—A person who receives a low score on this factor is characterized by shyness, seclusiveness, and a tendency to withdraw from social contacts. A person with a high score on Factor S is sociable—he tends to seek social contacts and enjoy the company of others.

[7] The description of the inventories and the factors they measure are drawn largely from the manuals for each questionnaire.

(2) Factor T, *Thinking Introversion-Extraversion.*—A low score on this factor means that a person is inclined to meditative or reflective thinking, philosophizing, analyzing himself and others. A high-scoring person on Factor T is the opposite. Since this aspect of personality appears to bear some relation to ESP, we will add a few examples of the type of questions the subjects are asked to answer (the answer in parentheses indicates extraversion, the opposite answer would indicate introversion):

Are you inclined to analyze the motives of others? (*No*)

Are you more interested in athletics than in intellectual things? (*Yes*)

Are your feelings rather easily hurt? (*No*)

(3) Factor D, *Depression.*—A high score on this scale indicates that a person is cheerful and optimistic, while a low score points to a gloomy and pessimistic disposition, with feelings of guilt and unworthiness.

Examples (answers indicate freedom from depression):

Do you often have the "blues"? (*No*)

Have you often lost sleep over your worries? (*No*)

Can you usually keep cheerful in spite of troubles? (*Yes*)

(4) Factor C, *Cycloid Disposition.*—High scores on this factor are obtained from people endowed with evenness of disposition, and uniform and stable moods; the person with a low score generally has strong emotional fluctuations (hence the description "cycloid"), a tendency to flightiness and emotional instability.

Examples (answers indicate lack of a cycloid disposition):

Do you become angry very quickly and also recover very quickly? (*No*)

Are you usually in good spirits? (*Yes*)

Do you like to change from one type of work to another frequently? (*No*)

(5) Factor R, *Rhathymia.*—A lively impulsive person with a happy-go-lucky, carefree disposition will have a high score on Factor R; a low score indicates a person who is inhibited, overcontrolled, conscientious, and serious-minded.

Examples (answers indicate happy-go-lucky disposition):

Can you usually let yourself go and have a hilariously good time at a gay party? (*Yes*)

Do you ever take your work as if it were a matter of life or death? (*No*)

Do you like to play pranks upon others? (*Yes*)

The Guilford-Martin Inventory of Factors GAMIN (Abridged Edition)

The five scores from this questionnaire indicate "dynamic and aggressive characteristics as well as self-confidence and self-assurance." For each factor the subject receives a score between 0 and 10.

(1) Factor G, *General Activity.*—A high score indicates a tendency to like and to engage in overt action. A low score indicates a disinclination for motor activity.

(2) Factor A, *Ascendance-Submission.*—A high score indicates social leadership as opposed to submissiveness or social passiveness.

(3) Factor M, *Masculinity-Femininity.*—Masculinity of "emotional and temperamental make-up" is indicated by a high score on this scale; a low score indicates femininity. Since men tend to have high scores and women low scores on Factor M, we were not able to apply the correlation analysis to these data. Instead, the ESP scores for the separate groups of men and women subjects were studied in relation to the average M-score of each group.

(4) Factor I, *Self-Confidence.*—A high score indicates self-confidence and a lack of inferiority feelings. A person with a low score on Factor I tends to undervaluate himself and to experience feelings of inadequacy and inferiority.

Examples (answers indicate self-confidence):

Are you easily discouraged when things become difficult? (*No*)

Do you have one or more hobbies or skills at which you are outstanding? (*Yes*)

Do you resent being "kidded" about your peculiarities? (*No*)

Do you always feel that you can accomplish the things you want to do? (*Yes*)

(5) Factor N, *Nervousness.*—A person with a high score on Factor N tends to be calm, unruffled, and relaxed. The person with a low score tends to be jumpy and jittery, is easily distracted, irritated, and annoyed.

Examples (answers indicate freedom from nervousness):

Do long continued noises "get on your nerves"? (*No*)

Do you think you use up more energy than the average person in getting things done? (*No*)

Can you usually sit still without fidgeting? (*Yes*)

Cattell's Sixteen Personality Factor Questionnaire (Form A)

Founded on factor analytic research, this inventory attempts to provide scores for many primary personality factors. A new personality questionnaire, the 16 P.F. Test is still in the process of development and further standardization. Nevertheless we felt it worth while to study the scores on nine of the personality factors in relation to our ESP data. (The nine factors used have reliability coefficients of .70 and above. We recognize the fact that scales with reliabilities of less than .85 are rather unsatisfactory, but we felt that they may be useful in a rough preliminary exploration for suggesting areas of personality worthy of more intensive study.) For each factor the subject receives a score between 1 and 10.

(1) Factor A, *Cyclothymia versus Schizothymia*.[8]—A high scoring person is good-natured, easy-going, cooperative, attentive to people, adaptable, trustful, and warm-hearted. The person with a very low score tends to be spiteful, critical, obstructive, aloof, rigid, suspicious, and cold. (Split-half reliability .84.)

(2) Factor B, *General Intelligence*.—This scale consists of a short list of questions of the type commonly found in intelligence tests. Cattell remarks, "this is the factor of general intelligence . . . as it outcrops in the realm of personality. It is a little surprising that intelligence affects so much of the personality, including the character-like qualities of will and conscientiousness . . ." (2, p. 59). Intelligent persons tend to be conscientious, persevering, intellectual, and cultured; those with low intelligence scores tend to be somewhat unscrupulous, quitting, and boorish. (Split-half reliability .70.)

(3) Factor C, *Emotional Stability versus General Neuroticism*.—The person with a high score on Factor C tends to be emotionally mature and stable, calm, realistic about life, and placid. The person with a low score is described as being "easily annoyed by things and people, dissatisfied with the world situation, his family, the restrictions of life and his own health." He is changeable, emotional, lacking in frustration tolerance, evasive, worrying, and neurotically fatigued. (Split-half reliability .71.)

Examples (answers indicate emotional stability):

Do you find that you have to avoid exciting situations because they fatigue you too much? (*No*)

[8] Throughout Cattell's publications, the factors are identified primarily by letters, the names assigned to the letters by Cattell sometimes being revised as research yields increased insight into the meaning of the factors. The names represent an attempt to assign a general term descriptive of the various items that were found to be associated statistically as a factor.

Do you generally have enough energy at times when you need it most? (*Yes*)

Is your health variable, forcing you frequently to alter your plans? (*No*)

(4) Factor E, *Dominance versus Submission.*—The high score indicates a person who is assertive, independent-minded, attention getting, and solemn. The person with a low score is submissive, dependent, expressive, and easily upset. (Split-half reliability .82.)

(5) Factor F, *Surgency versus Desurgency.*—The person with a high score on Factor F tends to be talkative, cheerful, placid, frank, quick, and alert; the low score indicates a person who is silent, introspective, depressed, anxious, incommunicative, slow, and languid. (Split-half reliability .85.)

(6) Factor H, *Adventurous Cyclothymia versus Withdrawn Schizothymia.*—The high score on this factor is found in people who are sociable, adventurous, frivolous and have strong artistic or sentimental interests and an abundance of emotional response. The low-scoring person on Factor H tends to be shy, retiring, cautious, conscientious, cool, and aloof. (Split-half reliability .74.)

(7) Factor M, *Bohemian Unconcernedness versus Conventional Practicality.*—High scores on this test are made by those who are eccentric, unconventional, sensitively imaginative, undependable, with a placid exterior but showing an occasional hysterical outburst. The low-scoring person is conventional, practical, logical, conscientious, given to keeping his head in emergencies. (Split-half reliability .72.)

(8) Factor O, *Worrying Suspiciousness versus Calm Trustfulness.*—A high-scoring person is inclined to be worrying, anxious, suspicious, and brooding; the low-scoring person tends to be placid and trustful. (Cattell mentions that this *may* not be a stable characteristic of the personality but may reflect a temporary condition of worry and depression.) (Split-half reliability .88.)

Examples (answers indicate worrying suspiciousness):

Do you often crave cheerful, sympathetic company "to cheer you up"? (*Yes*)

Have you ever had a sudden sense of dread and of vague danger for no ascertainable reason? (*Yes*)

When you go to bed do you tend to lie awake a long time before going to sleep? (*Yes*)

(9) Factor Q_4, *Nervous Tension.*—A high score indicates that a person is tense, excited, restless, fretful, and impatient; a low score

indicates just the opposite—a person who is relaxed and free from tenseness. (Split-half reliability .76.)

Examples (answers indicate tenseness):

Do certain small things "get on your nerves" unbearably, though you realize them to be trivial? (Yes)

Do you frequently get in a state of turmoil when thinking over the day's happenings? (Yes)

Do you, when compelled to remain inactive, begin to "doodle," draw things on a scrap of paper, or busy your fingers with some such activity? (Yes)

Cason's Test of Annoyances

In the original form of this test there are 217 statements describing things or situations that are annoying to a large number of people. Since our time was limited, we selected for our study 38 of Cason's statements which we thought might be particularly relevant to our subjects as revealing the types of things in the experimental situation or in the behavior of the experimenters that might be irritating to some subjects.

The subject was asked to mark each statement with a grade of 3, 2, 1, or 0 to indicate whether the thing or situation described was "extremely annoying," "moderately annoying," "slightly annoying," or "not annoying," respectively. A grade of "X" was provided for those statements describing situations which the subject had never experienced.

Some of the statements were:

( ) *A person being a poor loser at a game.*

( ) *A person asking me unnecessary questions.*

( ) *To hear a person talking during a moving picture.*

( ) *To see an untidy room.*

The test is scored by adding all the grades of 3, 2, and 1 which the subject gives for the various annoyances. The total of these grades constitutes the subject's score[9] and indicates the degree of his "irritability" in relation to the other subjects in the group. The annoyance scores for our subjects ranged from 26 to 83, and the average score was 45.75. Subjects with scores of 46 and above, then, were more "irritable" in comparison with those whose scores were 45 and below.

[9] Ordinarily the annoyance score would be computed by adding all grades of 3, 2, and 1 given by the subject, and dividing this figure by the number of statements marked with a score other than "X." Since very few "X's" were given by our group, we found it simpler to use as our scores only the addition of the numerical grades.

General ESP Results

Our 36 subjects called a total of 576 packs of ESP cards. The number of hits obtained in all was only 29 in excess of the number expected by chance and is without statistical significance. (See Table 1.) For the Unknown runs the subjects made 19 fewer hits than expected by chance, and in the Known runs they exceeded chance expectation by 48 hits. The difference between the two types of runs is not significant. The subjects obtained more hits on the second of their two record pages, and they also made more hits when JFN was holding the cards, but none of these differences are large enough to be significant.

Taken as a whole, then, the pooled results show no evidence of ESP. When the subjects are classified according to their personality characteristics, however, we shall find a different picture.

TABLE 1
General ESP Results

PAGE 1						
Experimenter with Cards	*Unknown*		*Known*		*Total*	
	Runs	*Dev.*	*Runs*	*Dev.*	*Runs*	*Dev.*
BMH	72	— 3	72	+ 7	144	+ 4
JFN	72	— 7	72	+ 5	144	— 2
Total	144	—10	144	+12	288	+ 2
PAGE 2						
Experimenter with Cards	*Unknown*		*Known*		*Total*	
	Runs	*Dev.*	*Runs*	*Dev.*	*Runs*	*Dev.*
BMH	72	—38	72	+15	144	—23
JFN	72	+29	72	+21	144	+50
Total	144	— 9	144	+36	288	+27
BOTH PAGES POOLED						
Experimenter with Cards	*Unknown*		*Known*		*Total*	
	Runs	*Dev.*	*Runs*	*Dev.*	*Runs*	*Dev.*
BMH	144	—41	144	+22	288	—19
JFN	144	+22	144	+26	288	+48
Total	288	—19	288	+48	576	+29

Personality Factors and ESP

The general findings on the personality aspects of the work are given in Table 2. Briefly stated, this table shows that correlation coefficients were calculated for 19 measures of personality in relation to extrasensory perception scores: (1) for the Unknown scores,

(2) for the Known scores, and (3) for total scores. Of the 57 coefficients thus calculated 16 are statistically significant, either at the .05 or the .01 level. Not all of these results are independent, but even so we found ourselves confronted with a variety of attractive results in excess of our best expectations.

TABLE 2

Correlations of Personality Test Scores and ESP Scores

Personality Factors	*Unknown ESP Score*	*Known ESP Score*	*Total ESP Score*	*Factor I Self-Confidence*
GUILFORD-MARTIN INVENTORY:				
Factor G, General Activity Level	+.23	—.23	.00	
Factor A, Ascendance	—.05	—.02	—.04	
Factor I, Self-Confidence	+.44*	+.36*	+.55**	——
Factor N, Freedom from Nervousness	+.06	+.52**	+.40*	+.62**
GUILFORD'S INVENTORY:				
Factor S, Social Extraversion	+.21	+.29	+.34	+.54**
Factor T, Thinking Extraversion	+.37*	+.10	+.33	+.37*
Factor D, Freedom from Depression	+.16	+.37*	+.37*	+.71**
Factor R, Rhathymia	+.43*	—.05	+.26	+.42*
Factor C, Lack of Cycloid Disposition	—.05	+.38*	+.23	+.57**
CATTELL'S 16 P.F. TEST:				
Factor A, Cyclothymia	—.05	+.19	+.09	
Factor B, Intelligence	+.29	—.06	+.16	
Factor C, Emotional Stability	+.56**	+.13	+.47**	+.30
Factor E, Dominance	+.27	—.06	+.15	
Factor F, Surgency	+.13	—.02	+.08	
Factor H, Adventurous Cyclothymia	+.19	—.05	—.09	
Factor M, Bohemian Unconcernedness	—.11	—.08	—.13	
Factor O, Worrying Suspiciousness	—.34	—.29	—.44*	—.68**
Factor Q_4, Nervousness	—.20	—.42*	—.43*	—.56**
CASON'S TEST:				
Annoyance	—.03	—.36*	—.27	

The number of subjects N = 30 for all correlations except those for Annoyance where N = 36. One asterisk following a coefficient indicates that it is significant at the 5% level; two asterisks indicate significance at the 1% level or below. Factor M, Masculinity-Femininity, in Guilford-Martin's Inventory is omitted from this table because the method of scoring this factor makes correlation inappropriate.

From the work of our subjects there is evidence that extrasensory perception is related to at least eight factors of personality. The most striking of these is Guilford-Martin's Factor I, *Self-Confidence*, which is highly correlated with the total ESP scores ($r = +.55$; P =

.0015), but the following are also significantly linked with one or other of the two types of ESP test or with both tests jointly:

Thinking extraversion
Freedom from depression
Rhathymia (happy-go-lucky disposition)
Lack of cycloid disposition
Freedom from nervous tension (two separate measures)
Emotional stability
Calm trustfulness
Low irritability level (not, however, a factor in the technical sense)

A cautionary note to be struck here is that seven of the eight items on the above list are themselves significantly correlated with the outstanding factor of self-confidence. Fortunately, it by no means follows that the seven items contribute nothing to the personality picture of ESP. Insofar as we are concerned with *the place and function of ESP in human personality* it seems very probable that all those factors are ESP determinants, subject only to the qualification that the largest determinant is *self-confidence*. The solution of this part of the problem must ultimately be attacked by complex psychological and statistical procedures. These would in themselves be a large undertaking and will not be dealt with in this paper.

Insofar as we are concerned to find *predictive measures* for ESP, the question is quite different, for here the interrelationship of the factors is of crucial importance. Before touching upon this issue we shall first consider some of the more striking factors in isolation. The most impressive of these is Guilford-Martin's Factor I, Self-Confidence.

Self-Confidence

Figure 3 shows how subjects' total scores are related to the self-confidence scores. The relationship is highly significant and the straight line in the figure gives the most exact simple description of the scoring trends in relation to the subjects' self-confidence levels. This line expresses graphically the tendency of subjects with high confidence scores to score positively in the ESP tests and of subjects with low confidence scores to obtain fewer successes in ESP. The positive relationship between confidence and ESP is shown by the correlation coefficient of .55, which would be expected by chance only once in approximately 660 experiments of this size.

The line on the graph was determined by the standard analysis of regression which yielded a regression coefficient of 1.88. This number means that for each increase of 1 point in self-confidence score the ESP score may be expected to rise 1.88 points. From these

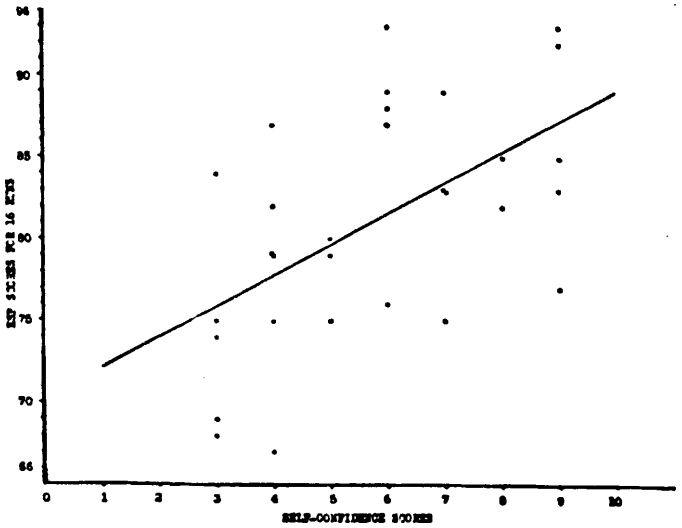

FIG. 3. Relation of total ESP scores to self-confidence (Guilford and Martin's Factor D). In general high and low ESP scores are obtained from subjects with high and low confidence scores, respectively. The straight regression line, determined statistically, gives a general description of the scoring trends. It is true for confidence scores ranging from 3 to 9.

figures we are able to construct an equation for the purpose of predicting subjects' ESP scores on the basis of our knowledge of their self-confidence scores. The equation is:

$$Y = a + b(x - \bar{x})$$

Y stands for the ESP score to be predicted from the equation. The a stands for the average ESP score; for our subjects this was 81.10 (for a total of 16 runs). The b in the equation is the regression coefficient which we found was 1.88. The x refers to the subject's self-confidence score, while the $\bar{x}$ is the average confidence score for our 30 subjects, namely, 5.77. Thus, with these figures from our study inserted, the equation becomes:

$$Y = 81.10 + 1.88(x - 5.77)$$

Observing an equation of this form one may ask some quite specific question like this: "A subject's confidence score is 3; what is his expected ESP score?"

The answer is:

$$Y = 81.10 + 1.88(3 - 5.77)$$
$$Y = 75.9$$

The graph in Figure 3 shows that five persons had 3 as their confidence score. Their ESP scores were: 68, 69, 74, 75, 84. Four of these five scores are below "chance" as predicted. Two of the scores are close to the "predicted" value of 75.9, as can be seen also from the graph. Three of the scores, however, are far from the line. An inspection of the graph will show that some other scores are also dispersed some distance from the line; that is, their ESP scores are not close to what one would predict from a prior knowledge of their degree of self-confidence. Nevertheless, results that come close to predicted values from a single psychological consideration, as here, are naturally a source of satisfaction, especially when such a result would occur only once in 660 times if chance alone were at work. Paradoxically, however, we are less interested in the success of the measure (in the places where it does succeed) than in its *failure* (where it fails, as fail it does). The reasons for this reflection will be given later.

The high correlation found to exist between self-confidence and *Unknown* scores may be of practical interest to other investigators using a standard ESP test like that which we have called "Unknown." The correlation coefficient r is $+.44$ which has a probability close to .01. In the *Known* test, which is something of a novelty in psychical research, the correlation is appreciably smaller: $r = +.36$; $P = .05$. On the evidence available the self-confidence measure seems more effective in the Unknown kind of test than in the Known.

That the increase of ESP scores with increase of self-confidence is not an artefact ascribable to the heavy influence of one or two subjects is demonstrated in the table below. The average self-confidence score was 5.77. Using this figure, we have divided the subjects into two groups: Self-confident and unself-confident. Total ESP scores are divided into those who scored above expectation and those who scored at or below.

ESP Deviation

	+	0, —	Total	
Self-confident Subjects	13	3	16	(81% positive)
Unself-confident Subjects	3	11	14	(79% negative)
Total	16	14	30	

The table shows that 81% of the self-confident subjects scored above chance expectation and 79% of the less confident subjects scored below the mean. The table was evaluated by the exact method which provided $P = .0015$, leaving negligible doubt as to the generality of the effect among the subjects.

When the inquiry into self-confidence is pushed a stage further, some interesting findings arise from its relationship with position effects. It will be recalled that a different experimenter held the cards for each half of the session, and the data for each half were recorded on separate record sheets. Thus each session is divisible into two parts, and each part contains four pairs of runs, one Known and one Unknown run per pair. The ESP scores for the four positions thus arising in the combined halves of the session are shown for the confident and unconfident subjects in Table 3. The total scores for the four pairs of positions obtained when the two data sheets are pooled are plotted in Figure 4 for the confident and unconfident subjects separately. The points of interest shown in the graph are:

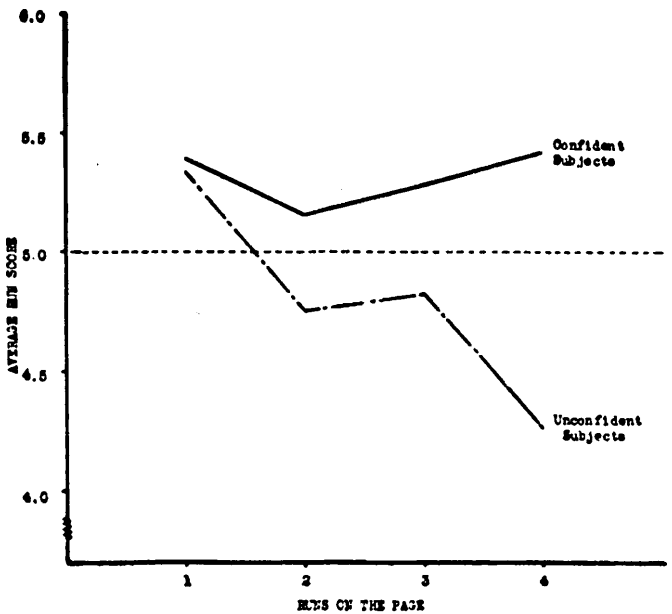

FIG. 4. Position effects of confident and unconfident subjects. The positions represent the sum of the two half-sessions, each position in each half consisting of one Known and one Unknown run for each subject.

1. Self-confident percipients score above the chance level for every position.
2. The saucer-form of the self-confident subjects' curve is more apparent than real: the scores do not vary significantly from a straight horizontal line. The confident subjects score ***consistently high.***
3. The unconfident people begin by exercising ESP almost as successfully as the confident ones.
4. Their success is short-lived and their fall in scores at run positions 2, 3, and 4 is heavy. (The apparent slight rise at position 3 is statistically insignificant.) The descent is virtually continuous: unconfident subjects *consistently decline* in their scores. The straight line representing the fall of the scores has an F ratio of 8.87, which with 1 and 220 degrees of freedom has a probability of .003.[10]

TABLE 3

Position Effects in Relation to Self-Confidence

CONFIDENT SUBJECTS

	Runs on the Page									
	1		2		3		4		Total	
	Runs	Dev.	Runs	Dev.	Runs	Dev.	Runs	Dev.	Runs	Dev.
Page 1	32	+ 2	32	— 1	32	+10	32	+ 2	128	+13
Page 2	32	+23	32	+11	32	+ 8	32	+25	128	+67
Total	64	+25	64	+10	64	+18	64	+27	256	+80

UNCONFIDENT SUBJECTS

	Runs on the Page									
	1		2		3		4		Total	
	Runs	Dev.	Runs	Dev.	Runs	Dev.	Total		Runs	Dev.
Page 1	28	+ 4	28	+ 7	28	—12	28	—13	112	—14
Page 2	28	+15	28	—21	28	+ 2	28	—29	112	—33
Total	56	+19	56	—14	56	—10	56	- 42	224	—47

[10] The downward slope of the successive run scores of these subjects was tested by fitting a first order orthogonal polynomial.

The result, being an F ratio, has two sets of degrees of freedom, the residual variance (3.290) accounting for 220, as indicated above, and the linear regression variance (28.608) having of course the usual one degree of freedom. For the method of computation, reference may be made to: G. W. Snedecor's *Statistical Methods*, 4th Ed. (Ames, Iowa: The Iowa State College Press, 1946), Chapters 11 and 15; or to K. A. Brownlee's *Industrial Experimentation*, 3rd Ed. (London: His Majesty's Stationery Office, 1948), Chapter 9, **Section (i).**

5. Though a rigorous proof is not yet available, inspection suggests that in the late stages of each half of the session, the unconfident subjects were actually missing the target cards more often than would be expected by chance. It is as if some subconscious Imp of the Perverse were saying: "I know the card now in the experimenter's hand is a cross, but I will call it a circle."

Emotional Stability

This factor (Cattell's Factor C) is significantly correlated with the total ESP scores ($r = +.47$; $P = .01$). The relationship is displayed in Figure 5. The data are satisfactorily represented by a straight line, which is shown in the figure. This line has the following regression equation, in which the letters bear the same meaning as before except that x now means emotional stability score, $\bar{x}$ is the average such score for the 30 subjects, and b, the regression coefficient, in this case is 1.36.

$$Y = a + b(x - \bar{x})$$
$$Y = 81.10 + 1.36(x - 6.90)$$

It is clear that in general the more stable a subject's emotions the higher is his ESP score, and conversely persons who tend to be

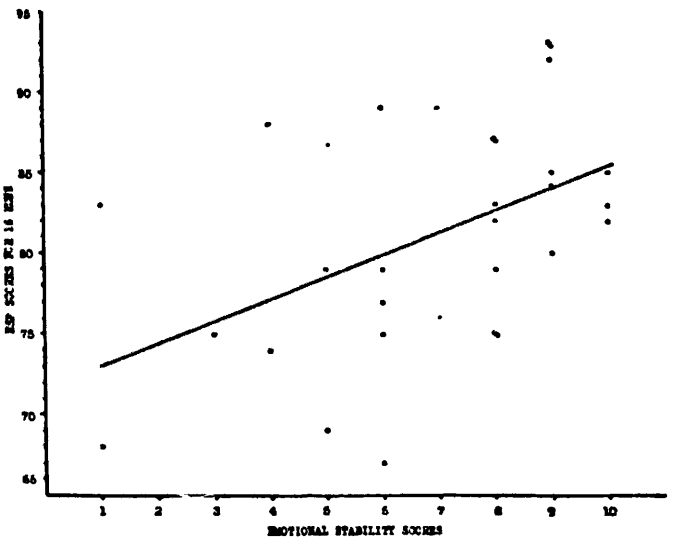

FIG. 5. Relation of ESP to emotional stability (Cattell's Factor C). In general high and low ESP scores are obtained from subjects with high and low emotional stability scores, respectively. The straight regression line, determined statistically, gives a general description of the scoring trends.

emotionally unstable[11] make the smallest ESP scores. As in the case of self-confidence, this statement tells only part of the truth. If degrees of emotional stability were the sole determinant of ESP, then the dots on the diagram would be strung along the line like beads, or be very close to the line. A glance at the figure shows that while some of the points are close to the line, others are far removed from it. It is those latter "outriders" (what may be called *failures* that do not comply with expectation) that are of the greatest interest in this type of research.

Examining the scores of the five subjects briefly noted in the previous section, where they were all expected by the self-confidence measure to have a score of approximately 76, we can see now what the same subjects' scores would be when "predicted" by the emotional stability measure:

Actual Scores:	68	69	74	75	84
Scores Predicted by Emotional Stability:	73	79	77	80	84

The predicted scores have been computed to the nearest whole number. One score (84) is in precise agreement with prediction; the others are all at or below chance as predicted. This is satisfactory so far as it goes, but it will be noted that while the general agreement is good, the detailed comparisons are less satisfactory.

The generality of the effect, however, is confirmed by the table below in which it is shown that 72% of the emotionally stable subjects scored above chance expectation and 75% of the emotionally "unstable" subjects scored below the expected chance score (none scored at the chance level). Computation by the exact method yields a probability of .014.

ESP Deviation

	+	0, —	Total	
Emotionally Stable Subjects	13	5	18	(72% positive)
"Unstable" Subjects	3	9	12	(75% negative)
Total	16	14	30	

[11] Our subjects averaged 6.90 on emotional stability as compared with the average of 5.5 for Cattell's standard group. For ease of reference we shall refer to the subjects below our mean as being emotionally "unstable," but it should be remembered that this is a relative term and that a more correct designation would be "less stable."

So much for the influence of emotional stability on *total* ESP score. When we examine the matter a little closer, there is a surprising result. Separating Known from Unknown tests, we find that the correlation of emotional stability with Unknown scores is highly significant, but with Known scores, insignificant. (Unknown $r = +.56$; $P = .0015$, which is highly significant. Known $r = +.13$; $P > .20$, which is quite insignificant.) This means that emotional stability is related to the standard ESP test but not to the other test.

The cause of this differential effect of the two tests is shown in the table below:

	Average Run Score	
	Unknown	*Known*
Stable Subjects	5.22	5.27
"Unstable" Subjects	4.69	4.93

Broadly speaking, stable subjects do equally well on both tests, but "unstable" subjects are much poorer in the Unknown situation than in the Known. Thus it is the downward trend of the "unstable" subjects' scores in the Unknown situation that produces the general high correlation. In Known tests "unstable" subjects score close to chance (*as if* no ESP were functioning at all), but in the Unknown tests their scores fall rather heavily. The cause of this is anyone's guess. With only a mild play on words we may wonder whether instability is associated with "fear of the (ESP) Unknown."

Nervousness

Other aspects are only a little less interesting than the two that have just been discussed. One of these is Guilford and Martin's Factor N, Nervousness, in which persons who are free from nervous feelings receive high N-scores and those who are nervous and tense receive low N-scores. This personality factor correlates with total ESP scores ($r = +.40$), and is significant. A strong distinction must be drawn here between the effect of nervousness on subjects in raising or lowering their ESP scores in the two contrasted ESP situations—the Unknown and Known tests. In the standard ESP test (Unknown) the factor of nervousness appears to have no effect on the subjects' scores. A subject's score on this personality test gives no clue to his likely score in the Unknown ESP situation. (See Table 2.) On the Known ESP test, however, the effect of degrees of nervousness comes out strongly. The correlation coefficient is +.52, which is significant with a probability of .0027. In this situation our percipients saw the result of each call immediately after they had made it, and to a few of our subjects this experience

appeared to be unnerving. It was as if this test was a challenge which those gifted with the proverbial nerves of steel (if an unscientific expression may be permitted) survived, and those who were not so gifted went under. What is more surprising is that the unnervous subjects scored significantly better in the Known situation than in the Unknown. The difference is represented by a χ^2 of 4.52, $P = .033$. Nervous subjects actually scored almost as well on their Known runs as on their Unknown runs, the difference being quite negligible. It follows therefore that the significant correlation between Factor N and Known ESP scores is due not to nervous subjects being adversely affected by the Known situation but to the unnervous subjects being benefited by it. Those latter percipients are presumably of the type whose calmness of disposition enables them to draw out their strongest powers when they are met with a challenging situation. If this finding should be confirmed, it would be open to discussion whether a difficult ESP situation may not be a promising means of obtaining high scores from the right type of subject.

Cattell's Factor Q_4 professes to measure the same elements as Guilford-Martin's N, namely, Nervousness, and it is reassuring to report that our research provided similar results from the two tests, thereby suggesting that the Cattell and Guilford-Martin measures confirm each other. (Because of the method of scoring a negative correlation in Cattell is equivalent to a positive correlation in Guilford-Martin.) For both tests, correlation with total ESP is significant, with Known ESP significant, and with Unknown ESP insignificant.

Depression

Freedom from Depression (Guilford's D), which measures degrees of the optimistic and pessimistic outlooks on life, is linked to success and failure in Known ESP, the optimists having the better of matters. The factor, however, seems to have small relationship with Unknown ESP.

Cycloid Temperament

Cycloid temperament (Guilford's C) shows a similar effect—correlation with Known, almost no correlation with Unknown. With both Freedom from Depression and Lack of Cycloid Disposition, the significant correlation for Known tests is due mainly to the tendency for the cheerful people endowed with an even disposition to increase their scores above the chance level. The contrasts between the effects of the two ESP tests have already been shown more strikingly by the measure of nervousness (Guilford-Martin's N, above). We made a special examination of the interrelationships of

these factors, Nervousness, Depression, Cycloid Disposition (as personality functions, disregarding ESP), and found them highly interrelated, the *r*'s varying from .75 to .89. Thus, at least for our subjects, the three scales are measuring virtually the same aspect of personality and the results from the three should not be considered as independent. A description of our results in relation to nervousness, for example, covers the other two factors also.

Thinking Introversion-Extraversion

When the Thinking Introversion-Extraversion scale (Guilford's T) was applied to Known ESP tests there was little difference between subjects. In other words, Guilford's T does not distinguish levels of ESP in the Known situation. The correlation is positive but small ($r = +.10$), in favor of extraverts.

When, however, the subjects do not learn the results of their guesses until the end of the run (Unknown ESP), the personality test does differentiate between levels of ESP ($r = +.37$; $P<.05$). The more extraverted a percipient the higher is his score; the more introverted, the lower his score.[12]

In the Known test there is little difference between the thinking extraverts and introverts. If they are divided into two groups at their mean T-score (4.46), we have for the Known trials:

	Runs	Dev.
Extraverts	128	+12
Introverts	112	+20

The difference is negligible. But for the Unknown trials, we have

	Runs	Dev.
Extraverts	128	+26
Introverts	112	—25

A slight improvement by the extraverts is accompanied by a heavy fall for the introverts. The reason is difficult to determine at this exploratory stage of the work, but it may be that introverts are less disturbed psychologically when they know the result of a call immediately after it is made than when they are obliged to wait until the end of the run before knowing the result of their calls.

As has been said earlier, the thinking introvert is given to meditative or reflective thinking, philosophizing, and analyzing himself and

[12] In general very high scores on Factor T (extreme extraversion) are not considered desirable for mental health. However, the maximum possible score is 10 and none of our subjects exceeded 7. The lowest score was 2 (one subject), so that altogether our team of subjects did not exemplify the extreme limits.

others. Literature affords many examples, like Raskolnikov in *Crime and Punishment,* and the Prince in *Hamlet.* In their extreme form they "think too much." Assuming for the moment the validity of the significant correlation over the general population, one might imagine introverts to resemble the Prince in their analytical meditations. "A square or not a square, that is the question." The qualifications, the hesitations, the buts and the ifs.

> "And thus the native hue of resolution
> Is sicklied o'er with the pale cast of thought,
> And enterprises of great pith and moment
> With this regard their currents turn awry
> And lose the name of action."

Whether too much reflection causes the currents of successful paranormal cognition to be turned awry, it is impossible to say in the present stage of our ignorance, but the point may be worth remembering in future researches.

Rhathymia

Rhathymia (Guilford's R), which varies from happy-go-luckiness at one end of the scale to severe inhibition at the other, is shown to have little relation to the Known clairvoyance tests but to be significantly correlated with the standard Unknown tests. (Unknown $r = +.43$; $P = .015$). A close examination of the correlated data (such as we have applied to all the correlations) shows, however, that the effect is due mainly to the "weight" of three of the four subjects at the highest point of the R-scale. The average scores of the four subjects were 4.63, 5.75, 6.13, and 6.50 (for 8 runs each), and their R-scores were 9 in each case. When these four are omitted, the significance of the correlation disappears. That the correlation is not general through the 30 subjects is evident from the fact that the proportion of high ESP scores from happy-go-lucky percipients is almost the same as from inhibited percipients. In the accompanying

	Unknown ESP Deviation		
	+	0, —	Total
"Happy-go-lucky"	5	6	11
"Inhibited"	9	10	19
Total	14	16	30

table the mean R-score (5.40) is taken as the dividing line between "happy-go-lucky" and "inhibited."

This is one of those tables whose distribution is so close to chance as almost to beg to be left uncalculated. The investigators themselves experience a certain lack of the happy-go-lucky feeling in the face of an unwelcome result of this sort. For the present Rhathymia had better be placed in cold storage.

Worrying Suspiciousness

The spirit of worrying suspiciousness (Cattell's Factor O), which, as it descends the scale, ends in the opposed state of calm trustfulness, is found to be negatively correlated with total ESP scores ($r = -.44$; $P = .012$.) A high mark on this personality scale implies an "undesirable" quality, a low mark a "desirable" quality. Since the low-marked "desirable" quality is associated with high ESP, the sign of the correlation coefficient is minus. The separate correlations with Unknown trials ($r = -.34$) and Known trials ($r = -.29$) are large enough to be interesting but are short of statistical significance.

Annoyance

Cason's Test of Annoyances provides a rough estimate of a person's irritability level—that is, whether he is more or less annoyed by certain situations or things than are others in his group. Since this test was given during the experimental session, annoyance scores are available for all 36 subjects. The correlation with the total ESP scores is not significant. Known ESP scores are negatively correlated with annoyance, subjects who were not easily annoyed giving higher scores on the Known test than subjects who were "irritable" ($r = -.36$; $N = 36$; $P = .01$). At first glance this seems understandable: one might expect that the more irritable subjects would become annoyed by the Known tests, generally a "strain-producing" situation, and that their ESP scores might suffer according to the degree of annoyance they felt. Inspection of the data shows that this speculation falls short of the mark. The "irritable" subjects went only slightly below chance on the Known test (average run score, 4.91). The "unirritable" subjects soared to greater heights on the Known test than on the Unknown. Whereas they averaged 5.01 hits per run on the Unknown, they rose to an average of 5.37 hits per run in the Known tests, giving a deviation that is significant at the 2% level.

When the subjects are divided according to whether their Known ESP scores were above or not above chance expectation, we obtain the following distribution:

	Known ESP Deviation +	0, —	Total
"Irritable" Subjects	6	10	16
"Unirritable" Subjects	13	7	20
Total	19	17	36

The difference between "irritable" and "unirritable" subjects in relation to their ESP success is not significant (by the exact method $P = .095$). Though both outcomes had better be regarded as inconclusive, there is a strong suggestion that Cason's Annoyance Test does distinguish between high and low scores in Known ESP tests.

Other Personality Factors

A number of the personality factors proved unpromising as tools for future research. These need be considered only briefly.

Guilford's Factor S, Social Introversion-Extraversion, was positively correlated with both types of ESP tests, but the coefficients did not reach significance. The correlation of Factor S with total ESP scores is, however, too large to be ignored ($r = +.34$). The associated probability is around .06.

The two separate measures of ascendance or dominance (Guilford-Martin's Factor A and Cattell's Factor E) gave insignificant correlations with both types of ESP tests and with their total.

General Activity Level (Guilford-Martin's G) provides no association with total ESP, but rather curiously there is a mild (though insignificant) relationship with both Unknown and Known tests, though *in opposite directions*. This suggests that high general activity is related to high scores in the Unknown situation, but with low scores in the more exacting Known situation. However, the correlations are too small to permit conclusions to be drawn.

Both of Cattell's measures of different aspects of cyclothymia (Factors A and H) are nowhere significantly correlated with ESP. Neither does his Factor M, Bohemian Unconcernedness versus Conventional Practicality, appear to be related to our subjects' ESP data.

Perhaps the most surprising failure is the lack of any association between the ESP scores and Cattell's Factor F, Surgency. Cattell remarks that this is one of the "best defined traits in the realm of

personality," and is strongly related to extraversion-introversion. In view of our correlation of Unknown scores with Guilford's Thinking Introversion-Extraversion and of Humphrey's previous correlation of ESP and Bernreuter's introversion-extraversion scores (6), we might have expected Cattell's Surgency to show more of a relationship with ESP in our study; but none of the correlations is large enough to be of any interest.

Intelligence (Cattell's Factor B) is of no interest to total and Known ESP scores. The correlationship with Unknown ESP is faintly hopeful, and if improved in later research would offer some confirmation that intelligence is positively related to ESP success. One possible reason for the failure of this intelligence measure to show a higher correlation is that our range of intelligence scores was very small. Only 4 subjects had scores below 6 on this scale (where scores may theoretically range from 1 to 10); thus our group may be considered higher in intelligence than the average group of college age.

The relationship between our ESP scores and the factor of Masculinity versus Femininity (Guilford-Martin's M) remains uncertain. Because women are expected to have low scores, and men high scores on this scale, we did not apply the usual correlation method. We divided the subjects according to sex, and each group was rated for degrees of masculinity-femininity as shown by the Guilford-Martin scale. Using the average masculinity-femininity score of our men subjects as the dividing point, we compared the ESP scores of those men above the group average with the ESP scores of the men below the average. The same procedure was followed with the women subjects, their average M-score serving as the separation point. A high M-score for both men and women indicates "masculinity of emotional and temperamental make-up." The table below shows the results. In general it looked as though "masculine" subjects of *either* sex were likely to obtain the larger ESP scores, but the differences are not significant. It is plain that any effective use of the masculinity-femininity scale would require a larger sample of subjects than was available here.

We also considered the possible relation of masculinity-femininity ratings with ESP scores obtained with the two different experimenters handling the cards. These results are shown in the same table. Here again the results are not significant, although there appears a slight tendency for women subjects to score higher in ESP when the male experimenter was handling the cards and for men subjects to give higher ESP scores with the female experimenter holding the cards.

TABLE 4

ESP Scores in Relation to Masculinity-Femininity

MEN SUBJECTS (N = 10)						
Masculinity Score (Mean = 7.3)	Experimenter with Cards JFN Runs	Dev.	BMH Runs	Dev.	Total Runs	Dev.
Above Mean	40	— 1	40	+10	80	+ 9
Below Mean	40	— 9	40	+ 2	80	— 7
Total	80	—10	80	+12	160	+ 2
WOMEN SUBJECTS (N = 20)						
Masculinity Score (Mean = 4.1)	Experimenter with Cards JFN Runs	Dev.	BMH Runs	Dev.	Total Runs	Dev.
Above Mean	48	+21	48	+ 7	96	+28
Below Mean	112	+29	112	—26	224	+ 3
Total	160	+50	160	—19	320	+31

It will be noted that our most encouraging correlations came from the tests of Guilford and Guilford-Martin rather than from those of Cattell. This is quite satisfactory from the experimenters' point of view, since it is known that the Guilford and Guilford-Martin tests are more reliable than the present form of Cattell's questionnaire.

Combined Effect of Confidence and Emotional Stability

We come now to the main purpose of this research to which all the previous dissertation has been leading. Almost all work in the last fifteen years has been designed to find the relationship between single personality factors and extrasensory perception. The present investigation, as has been stated, was intended to explore a much wider area of personality with a view to finding two or more factors of personality which taken in conjunction would provide a more exact measure of the relationship between personality and ESP than any one factor taken alone.

If the reader will refer again to Figure 3 and the remarks bearing upon it, he will observe that our main interest was not in the success of the confidence-ESP relationship (which is obvious from its highly significant value), but in the degree of its failure demonstrated by the fact that some of the plotted points lie neither on the regression line nor near it, as would be the case if self-confidence were a *perfectly* correlated measure of ESP. Evidently some other personality factor or factors are causing a considerable dispersion of the plotted points.

What are those other, disturbing factors?

The business of the research was to discover the causes of the unexplained variation shown in our results, as pictorially revealed in the graphs; to measure the weight or importance to be attached to each cause, and then to build all such findings into a general picture of the inter-working of ESP and human personality.

This portion of the research was purely exploratory. We had available measurements from a large number of personality factors, but with so small a sample—30 subjects—it would be entirely out of the question to try to fit the ESP scores to any large number of these variables simultaneously. For the present stage of the study we limited our search to finding a pair of variables which would more accurately determine the ESP scores than either single variable taken alone. One of these variables must inevitably be the spectacularly successful self-confidence, Guilford-Martin's Factor I. The second factor must be one that was only moderately correlated with self-confidence. Emotional stability, Cattell's Factor C, recommended itself for this duty as a glance at Table 2 will show. Its correlation with self-confidence was only moderate ($r = +.30$), but it is highly correlated with total ESP score ($r = +.47$).

In order to measure the association of ESP scores with two personality variables, we used the technique known as multiple correlation.[13] This procedure resembles that for simple correlation except that here we compare ESP scores with two personality scores at once instead of with only one. It is important to note that the multiple correlation formula *eliminates the correlation of the two personality variables with each other,* and hence provides a measure of the *independent effects* of the two personality factors on the ESP scores.

Studying the ESP scores in relation to both self-confidence and emotional stability, we found the multiple correlation coefficient R (analogous to the simple correlation coefficient r). In our case we have

$$R = .6538$$

To find the anti-chance probability of the multiple correlation, it is convenient to use the analysis of variance technique for the related measure of multiple regression, which is presented below:

---

[13] A comparatively simple account is given in J. P. Guilford's *Psychometric Methods* (New York: McGraw-Hill, 1936). Where we have preferred analysis of variance descriptions, we have followed R. A. Fisher, *Statistical Methods for Research Workers* (8th Ed., Edinburgh: Oliver and Boyd, 1941), and M. G. Kendall, *The Advanced Theory of Statistics,* Vols. 1, 2 (London: Griffin, 1945, 1946).

Analysis of Variance in Multiple Regression

Source of Variation		Degrees of Freedom	Mean Square	F	P
Multiple Regression,	$R^2S(y - \bar{y})^2$	2	313.93	10.08	.0006
Residual,	$(1 - R^2)\ S(y - \bar{y})^2$	27	31.14		
Total	$S(y - \bar{y})^2$	29			

With a probability of 6 in 10,000, the regression is highly significant.

In doing the analysis for multiple correlation, we also obtained two new regression coefficients similar to those mentioned earlier for self-confidence and emotional stability separately. The new coefficients take into account, however, the interrelationship between the two personality factors. The regression coefficient for self-confidence and ESP when emotional stability is held constant is 1.54. And the coefficient for ESP and emotional stability when self-confidence is held constant is .97. From these two coefficients we can determine the relative importance of the two personality factors for ESP. The total of the two coefficients is 2.51 (the total effect of rise or fall of ESP scores accounted for by both personality factors together). The regression coefficient for self-confidence provides 61% of the total (1.54/2.51). For emotional stability the regression coefficient is 39% of the total. This result is what one would expect in view of the closer relationship of clairvoyance to self-confidence than to emotional stability (as shown by the simple correlations in Table 2).[14]

With these new regression coefficients we may now construct an equation for predicting a subject's ESP score when we know both his self-confidence and emotional stability scores:

$$Y = 81.10 + 1.54(x_1 - 5.77) + .97(x_e - 6.90)$$

The figures in this equation have been encountered before. The average ESP score (for 16 runs) is 81.10, the average self-confidence score is 5.77, and the average emotional stability score is 6.90. The figures 1.54 and .97 are the new regression coefficients just mentioned. So, to get a prediction of a subject's ESP score, we simply substitute his confidence score for x_1 in the equation, and insert his emotional stability score in place of x_e. For example, if a subject's scores were 4 for confidence and 8 for emotional stability, we would have:

[14] The test of significance for the two coefficients separately:

	b	S. D.	D. F.	*t*	P
Confidence	1.5436	.5249	27	2.94	.009
Emotional Stability	.9729	.4456	27	2.18	.04

$$Y = 81.10 + 1.54(4 - 5.77) + .97(8 - 6.90)$$
$$= 81.10 - 2.73 + 1.07$$
$$= 79.4$$

In the sections on self-confidence and emotional stability, comparisons were made between the scores "predicted" by those measures and the scores actually obtained. *In general* the predicted scores agreed with those observed, but *in detail* some individual predicted scores departed markedly from those observed. The following table uses the scores of the same five subjects and is intended only as an illustration of how the joint use of two personality measures gives a more accurate prediction of scores than either of them used separately.

Subject	Actual Score	Deviation of Actual Score from Predicted Score: Using Confidence Alone	Using Emot'l Stability Alone	Using Both in Combination
A	84	+ 8	0	+ 5
B	68	— 8	— 5	— 3
C	74	— 2	— 3	0
D	69	— 7	—10	— 6
E	75	— 1	— 5	— 1
Sum of Deviations |x|		26	23	15

The use of the two measures together—even when their intercorrelation is removed—gives a better account of the experimental results than either measure used separately. The reason presumably is that the subjects' self-confidence and emotional stability *both* exert an influence on their ESP scores.[15]

Multiple regression (or correlation) is the most efficient method of dealing with the interaction of a network of psychological influences. In a rough and ready way, however, the outcome can be summarized by considering the ESP scores of the subjects when they are separated into various groups according to whether they are above or below the group mean for each personality category as in the table below:

Description of Subjects	Runs	Dev	Average Score	Description of Subjects	Runs	Dev.	Average Score	χ^2 (Diff.)	P
Confident	256	+80	5.31	Unconfident	224	—47	4.79	8.15	.0045
Stable	288	+70	5.24	"Unstable"	192	—37	4.81	5.47	.019
Confident *and* Stable	192	+63	5.33	Unconfident *and* "Unstable"	128	—54	4.58	10.79	.001

[15] We have not attempted to show graphically the relation of ESP to both confidence and emotional stability. Instead of a straight line such as appeared in previous graphs, there would now be a plane in 3-dimensional space.

Here we can see that that group of subjects who are both confident and stable give higher ESP averages than those given by either the stable or the confident groups. Similarly, those subjects who are both unconfident and "unstable" give a lower ESP average than that of either the unconfident or "unstable" groups.

Three additional multiple correlations were computed:

ESP Total with Self-Confidence and Social Extraversion
ESP Total with Self-Confidence and Thinking Extraversion
ESP Total with Self-Confidence and Annoyance

They were of some interest but none of them proved better than self-confidence alone, and none approached the excellent predictive qualities of self-confidence working in conjunction with emotional stability. All multivariate analyses of this nature involve very laborious calculations, and we believe that such work would be justified only by larger researches than the preliminary one reported here.

The original design of the experiment included a search of the analyzed data for the best pair of predictive measures suitable for multiple regression analyses. Which pair of personality measures would prove to have the greatest predictive power was not and could not, of course, be foretold in advance of the experiment. All other statistical tests reported in this paper were, however, incorporated in the original design of the experiment in the form of hypotheses. We have resisted the temptation to indulge in elaborate squeezing of the data to produce "results" not foreseen in advance of the experiment.

Conclusions and Prospects

The purpose of the investigation was the purely exploratory one of searching a large field of personality in relation to the functioning of extrasensory perception. The results show not one or two correlations with ESP, but something like a handful of them. The results, so far as the measures are concerned, are verbally summarized in the following table. The descriptions apply to percipients whose ESP scores were high. Opposite (or antonymous) descriptions can be applied to relatively low-scoring subjects.

Unknown	*Known*	*Total*
Self-confident	Self-confident	Self-confident
Thinking extravert		
Happy-go-lucky (?)		
	Not depressed	Not depressed
	Not cycloid	
	Not nervous	Not nervous
	Not easily annoyed	
Emotionally stable		Emotionally stable
Calm trustful		Calm trustful

Some of the personality variables are themselves intercorrelated, and it is evident that much work remains to be done in future research to separate what may be called the independent effects of the variables from the dependent or related effects.

The results now reported draw attention to what has been repeatedly observed in personality-ESP research. That is that even though the total score is insignificant, there may be extensive evidence of ESP in operation. This leads to the conclusion that mere absence of high or low total scores does not permit the conclusion that ESP is not functioning. So far as present and past personality-ESP researches go, the evidence points to the likelihood that ESP is *always* present in such tests. Further it is most likely present in *any* ESP test, but unaided card-guessing will not reveal it. We learn by experience, yet it is a disagreeable reflection that the millions of card-calling records accumulating dust on the shelves of psychical research organizations may contain important evidence of ESP in action—if only we knew how to unravel it.

Special consideration is given here to the quality of self-confidence, which has often been noticed as a possibly crucial factor in psychical experiments. Thus Soal and Goldney's subject, Mr. B. S., possessed "unlimited confidence in his power to guess the symbols on cards." When he presented himself to the experimenter he said he "had not come to be tested, but to 'demonstrate' to us the reality of telepathy" (13). Whether B. S.'s confidence in card-guessing extended to the daily affairs of life (as with our best subjects) we do not know, but evidence from other personality-ESP researches suggests that it is a characteristic of even moderately successful percipients. Sometimes, however, the self-confidence factor is described by other names. Thus the measures known as extraversion-introversion contain a large amount of what Guilford and Martin call self-confidence. Gardner Murphy has remarked, "As measured, then, extroversion may prove to consist primarily of the *capacity to retain self-confidence* despite social onslaughts upon it . . ." (9, p. 603).

It may be recalled that in her extraversion-ESP studies (6) Humphrey found that extraverts in terms of the Bernreuter inventory did well at ESP, while the introverts gave low ESP scores. In his studies of the Bernreuter inventory, Flanagan reported that many of those questions dealing with extraversion form part of another factor which he labelled "self-confidence versus self-consciousness."

The question arises, therefore, whether the self-confidence results reported here do not in fact confirm previous findings. If that is so, then self-confidence (known by this or any other name) may form the foundation of repeatable experimentation in quantitative psychical research.

Conditions of Repeatability

If repeatability in experimentation is, as we tentatively suggest, well founded, what are the terms of successful repetition? Several suggestions can be made in addition to the use of a reliable measure of self-confidence or extraversion. The requirement to which we wish to call special attention is that short experimental sessions with few ESP runs are of little use. This point is sharply brought out when it is seen how much our results were improved by the use of a rather large number of runs in the session. The following table shows the growing magnitude of the ESP-confidence correlation after each group of four runs:

4 runs: $r = -.10$
8 runs: $r = +.22$
12 runs: $r = +.42$
16 runs: $r = +.55$

If we had restricted the sessions to four runs per subject, the correlation would have been almost nonexistent, indeed slightly negative; and even after eight runs there would have been no serious evidence of the relationship between confidence and clairvoyance. It is not until about the twelfth run that the relationship becomes clear, and at the end of the sixteenth run (with which the session closed), the correlation is highly significant. As has been noticed in other researches, the lesson appears to be that short sessions are unavailing, and that quite long sessions of, say, sixteen runs are required in work of this nature.

Similar results were reported by Humphrey in her study of ESP and introversion-extraversion. Each of the subjects in that research called twenty packs of ESP cards. Analysis showed that if they had called only four runs, no difference at all between ESP scores of introverts and extraverts would have been found. Even after ten runs for each subject the introversion-extraversion difference was not large enough to be significant.

Another possible condition of successful repetition is that the subjects should be tested singly. From previous work it appears that experiments conducted with a whole *group* of persons at one time either produce null ESP results in relation to personality measures, or the groups must be very large before any degree of significance is likely to emerge. In other words, group experimentation is less sensitive than individual experimentation.

One other point deserves special notice. It has sometimes been asserted that in this kind of research personality does not determine the *quantity* of ESP but distinguishes only between subjects who

score above and below chance expectation (10, p. 154; 11, p. 112). The results here presented do not agree with this notion. Every one of the personality variables that have attained significance in this research has been related to ESP as a *quantity*.

The premature conclusion that personality is related only to the "sign factor" (that is, plus or minus deviations in relation to chance expectation) may be due to a lack of understanding of the limitations of the methods used in most previous personality research. Most investigations have compared ESP scores of subjects divided into two groups: expansive-compressive, sheep-goat, midrange-extreme, well adjusted-poorly adjusted, secure-insecure. With only two crude classes, it is not surprising to find one group with positive ESP scores and one with negative ESP scores. If we had a *perfect* correlation between ESP and some other measure, and if we arbitrarily sliced that distribution in half, we might well expect the upper half to have high ESP scores and the lower half to have low ESP scores. More refined methods of classifying subjects (than the two-category method) reveal a relation of personality to *amount* of ESP. The present research has shown this by the use of the regression statistic with personality tests having a range of 10 or 11 scores.

Regression is the step-by-step measurement of a variable *quantity*. There are cases in the present work in which the regression is highly significant, but it would be reckless to proceed to the conclusion that any negative ("minus") deviations involved at one end of the regression are independently significant.[16] There is a more or less orderly progression from a low number of hits to a large number of hits in ESP along with increased levels of self-confidence, for instance. If we had used the crude method of a simple dichotomy, we would have observed that positive ESP scores were made by self-confident subjects and that negative ESP scores were obtained by unconfident subjects. The orderly relation of amount of ESP success and levels of confidence could not have been detected by the cruder methods.

Influence of the Experimenters

A problem which we have scarcely touched upon in the main part of this paper is a very old one—*the influence of the experimenters on the percipients*, and therefore upon the experimental results. This is a whole field of investigation in itself with which we hope to deal in later research. In the meantime some tentative evidence may be offered. It is convenient to refer again to the self-confidence matter. Here, as the accompanying graphs in Figure 6 show, striking differ-

[16] One would have to apply a special method for evaluating the "extreme deviate."

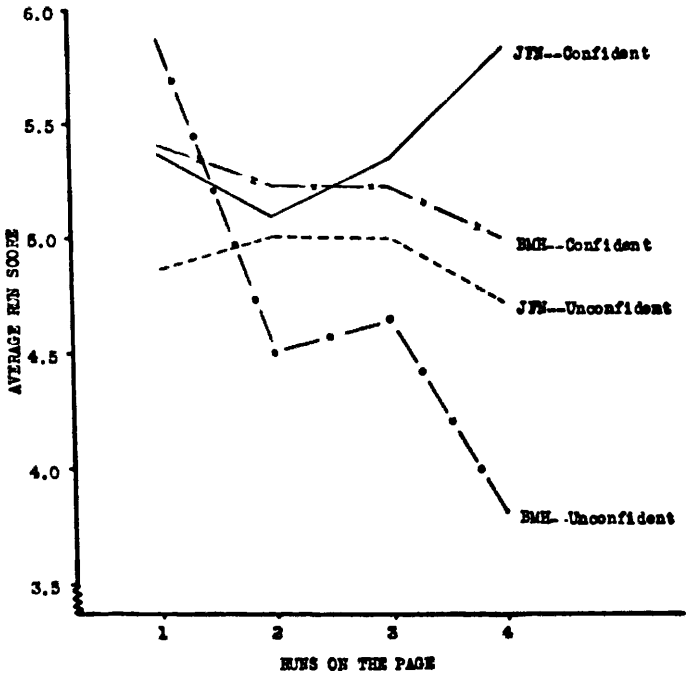

FIG. 6. The subject-experimenter relation as shown by position effects for confident and unconfident subjects. The positions are the same as those described in the legend of Figure 4. See text.

ences were found between the results obtained by the two experimenters. Dividing our subjects, as before, into confident and unconfident, we see that with BMH holding the cards when the confident subjects were calling, their scores were above the mean (except in the fourth run of the set when they were exactly at the mean). The slight decline through the set is quite insignificant and must be reckoned a chance effect. With the *same* confident subjects, and with JFN holding the cards, the scores take the form of a U-curve, which achieves its highest success in the last stage of the set. However, the curve is only questionably significant, the probability being rather greater than .05.

A similar remark applies to the score positions when JFN was holding the cards for the unconfident subjects. The inverted U-curve is pictorially attractive and statistically trivial. No such remarks apply to the case when BMH was card-holder for the same uncon-

fident subjects. They began remarkably well with the splendid average of 5.86, but their glory ended there, and their fall was as rapid as it was astonishing, ending up with an average in the last stage of 3.79 hits per run. The precipitate decline is satisfactorily represented by a straight line (the apparent slight recovery at stage 3 is negligible and statistically insignificant), with a variance ratio, F, of 15.15 and a probability of .0001, that is, a result that would occur by chance only once in 10,000 such tests.

The explanation of this decline is difficult to find. Let us contemplate the situation in the experimental room. BMH is sitting behind the screen and lifting off one card after another from the pack, never seeing their faces. The subjects under consideration are those who were afterwards found to be of the "unconfident" category. The subject of the moment can get glimpses of BMH through the tiny "window" in the screen, and it seems safe to suppose that the subject's thoughts will be in BMH's direction. On the subject's left is JFN, much closer than his colleague. He has his back turned or half-turned to the subject and his sole duty is to record the subject's spoken calls. At the end of each run JFN pushes his chair a few feet from the table to sit beside the subject and compare the calls with the target list (obtained from BMH). BMH is busy for a little, recording the calling-time from the stopwatch, putting the last used pack out of the way, and obtaining a new one from the nearby drawer for the next run. This done, she comes over and checks her colleague's count of the score. In brief, during the period (half the session) when BMH is "card-holder," the subject's direct contacts are more with JFN than with her. We believe it would be imprudent at the present time to ascribe the steep fall in scores with unconfident subjects to the influence of BMH merely because she controlled the cards. It is just as possible in our view that the influence causing the damaging effect on the unconfident subjects' scores came from JFN because of his closer association with the subjects. We do not know.

The table below gives strong support to the hypothesis that there is some interaction between card-holder and subject (or it may be between recorder and subject). In each of the six cases the average score in the column headed JFN is higher than that in the BMH column, whether subjects have the "desirable" personality qualities or the "undesirable" ones. But it will be noted that for both card-holders those with the "desirable" attributes get the better scores.

We conclude that the whole experimental situation, here as in other branches of research, is in urgent need of intense and thorough investigation.

Description of Subjects	JFN Average Score	BMH Average Score
Confident	5.41	5.21
Unconfident	4.88	4.70
Difference	.53	.51
Stable	5.38	5.10
"Unstable"	4.84	4.77
Difference	.54	.33
Not Nervous	5.46	5.00
Nervous	4.99	4.94
Difference	.47	.06

With regard to the combination of personality factors as determinants of ESP scoring levels, this should be considered as only a beginning, and all that remains to be done is to point to the advantages which we believe the method offers. The joint use of two, and even three, variables has been shown in some earlier researches, but in such cases the statistical methods have been rather crude and correspondingly inefficient. As a rule they have tended to rely on simple dichotomies. Such methods are helpful in the earliest stages of research, but, alone, they are a statistical dead-end. For the ESP side there are only two levels, above chance expectation and at or below it, and there are only two levels (roughly + and —) for the personality factor. In the actual data described in this report there were 26 ESP levels (that is, the range of observed scores) and generally 7 to 10 levels for the personality factors. The analysis of all such levels and of the network of interactions between component variables does what simple cutting of the data into two groups cannot be expected to do — that is, the refined analysis gives us information about the sort of thing that is going on between the psychic factor of the percipient (or whatever name it may be called) and the cooperative or antagonistic factors in the percipient's personality.

The virtue of the multiple regression analysis is that it isolates the various elements in the card-caller's personality as they contribute to his success or failure in ESP. Here we have used only two personality elements; more could have been applied to have obtained a more complete reconciliation with percipients' scores. Theoretically, the only limit to the number of factors is the number of subjects and the increasing statistical labor as each element of personality is added to our scheme of things and to our understanding of the problem. There is no reason why such analyses should not include personality influences arising from experimenters and agents as well.

That is *analysis*. There is also the *synthesis*. For having broken down the relations of personality to psi, we have then to reconstruct the scheme of things and find, as precisely as may be, where and how the psychic factor fits into what Dr. Mace has called "the structure of the mind." Almost needless to remark, little can be usefully said on this aspect of the matter at the present time. All that need be done is to point to it as an eventual aim. In some respects such a problem is psychological, in a considerable degree it is philosophical, but primarily it is a problem for psychical research. From the research viewpoint it begins to appear as a practical possibility that personality may be susceptible of a re-synthesis so as to include a psychic factor in its structure, and thereby to give a more faithful picture of the whole.

Practical progress must be a stage-by-stage affair, since successive advances must depend upon previous findings, and it seems prudent to observe, at the close of this paper, that the findings of psychical experiments are never quite what was bargained for. In psychical research we must always expect the unexpected.

REFERENCES

1. Cason, H., "An Annoyance Test and Some Research Problems," *Journal of Abnormal and Social Psychology*, Vol. 25, 1930-1931, pp. 224-238.
2. Cattell, R. B., *Personality: A Systematic Theoretical and Factual Study*, McGraw-Hill, New York, 1950.
3. ———, *The Sixteen Personality Factor Questionnaire*, Institute for Personality and Ability Testing, Champaign, Illinois, 1950.
4. Guilford, J. P., *Inventory of Factors STDCR*, Sheridan Supply Co., Beverly Hills, California, 1940.
5. ———, and Martin, H. G., *Inventory of Factors GAMIN* (Abridged Edition), Sheridan Supply Co., Beverly Hills, California, 1943.
6. Humphrey, B. M., "Introversion-Extraversion Ratings in Relation to Scores in ESP Tests," *Journal of Parapsychology*, Vol. 15, 1951, pp. 252-262.
7. ———, "Success in ESP as Related to Form of Response Drawings: I. Clairvoyance Experiments," *Journal of Parapsychology*, Vol. 10, 1946, pp. 78-106.
8. Kendall, M. G., and Smith, B. B., "Random Sampling Numbers," *Tracts for Computers* No. XXIV, Cambridge University Press, London, 1939.
9. Murphy, G., *Personality: A Biosocial Approach to Origins and Structure*, Harpers, New York, 1947.
10. Rhine, J. B., "The Outlook in Parapsychology," *Journal of Parapsychology*, Vol. 15, 1951, pp. 151-163.
11. ———, "The Problem of Psi-Missing," *Journal of Parapsychology*, Vol. 16, 1952, pp. 90-129.
12. Schmeidler, G. R., "Rorschach Variables in Relation to ESP Scores," JOURNAL A.S.P.R., Vol. 41, 1947, pp. 35-64.
13. Soal, S. G., "Fresh Light on Card-Guessing—Some New Effects," *Proc. S.P.R.*, Vol. 46, 1940, pp. 152-198.

Summary Report to the First International Conference of Parapsychological Studies[1]

The first International Conference of Parapsychological Studies met at the University of Utrecht, Netherlands, from July 30th to August 5th, 1953. Sixty-three members, drawn from fourteen nationalities, and comprised largely of physicists, chemists, biologists, psychologists, sociologists, physicians, engineers, and mathematicians, met to consider problems which arise in the investigation of types of purported communication between individuals which are not explicable in terms of any known form of contact through the sense organs, and types of contact between individuals and their physical environments which are not explicable in terms of contemporary physics and biology-processes designated generically as psi-gamma (paranormal cognition) and psi-kappa (paranormal action upon bodies not in physical contact with the individual). Such processes are often entitled "telepathy," "clairvoyance," "psychokinesis," etc.

After preliminary sessions delimiting the field of inquiry, four working groups were established: the first dealing with quantitative experimental studies of the various classes of paranormal activity, including studies of the physical and physiological aspects of paranormal phenomena; the second with interpretation of material gathered in the practice of psychiatry; the third with qualitative and spontaneous (not experimentally controlled) phenomena; and the fourth with the psychological study of those persons who appear to display a relatively large amount of paranormal sensitivity ("special sensitives"). Fifty-seven papers were presented in all.

Attention was given to the establishment and maintenance of scientific standards, the development of appropriate experimental and quantitative methods, the devices for discovering specially sensitive individuals, and the most profitable ways in which to combine and extend the concepts and methods of the various sciences in an attempt to understand more fully the relations between the living

[1] For more than 70 years an investigation has proceeded for the purpose of discovering whether there are any mental states or faculties other than those generally accepted. This research has engaged the interest of many scientists of the highest distinction. To facilitate international consultation in this field international Congresses open to the general public were held at Copenhagen (1921), Warsaw (1923), Paris (1927), Athens (1930), and Oslo (1935). After the second World War it was obviously desirable to renew these consultations but the development of new lines of research made it advisable to proceed with a somewhat different scope. Invitations were issued for the Conference at Utrecht only to active workers. The generosity of the Parapsychology Foundation made it possible to organize the Conference on a scale that could not previously have been attempted.

organism and the environment. The various scientific groups, assisted by men working in the philosophy of science, discussed the possibility of developing a theory sufficiently comprehensive to give some sort of order to the variety of phenomena described.

While most of the problems have been investigated for many years by individual scientists and by societies for psychical research, the spread of interest among scientists has been notable in recent years; and a primary activity of the Conference, beyond the authentication of various classes of facts, was the effort to develop a scientific program to deal with all types of unknown relations between individual and environment, whether at present classifiable or not.

There was, for example, marked interest in the problems of unexplained or "unorthodox" healing (recoveries from disease transcending the present concepts of psychosomatic medicine); and a medical committee was established and empowered to take the first steps towards the organization of a Research Center for the investigation and interpretation of such phenomena.

While most of the research workers in the field of parapsychology are known to one another through the technical journals, the opportunity to meet for a week under University auspices with the financial support of the Parapsychology Foundation of New York marked an important forward step in understanding across the barriers of nationality, language, and professional specialization.

The Conference established a Secretariat and a Publication Center at the University of Utrecht, and a series of Committees charged with arranging subsequent meetings of specialized groups; e.g., the physicists and engineers among the groups to meet with other physical scientists to share the experimental problems presented at the meeting, the psychiatrists to meet with other psychiatrists, etc.

The members of the Conference included R. A. McConnell of the Biophysics Laboratory of the University of Pittsburgh; Hornell Hart, Professor of Sociology at Duke University representing Dr. Rhine's laboratory; Gardner Murphy, Director of Research at the Menninger Foundation, Topeka, Kansas; H. H. Price, Professor of Philosophy, Oxford University; Gabriel Marcel, of the Académie des Sciences Morales et Politiques; Hans Schaefer, Professor of Physiology, Heidelberg University; and S. G. Soal, Professor of Mathematics at the University of London.

GARDNER MURPHY, Chairman

Review

TOUT L'OCCULTISME DEVOILE. By Robert Tocquet. Pp. 327 with 24 illustrations. Amiot-Dumont, Paris, 1952. 999 fr.

Notwithstanding its somewhat pretentious title, this book is interesting, documented, and well worth reading. M. Tocquet, who is professor of chemistry at the École Lavoisier in Paris, and is the author of some half-dozen books on chemistry and other natural sciences, is also a member of the editorial committee of the *Institut Métapsychique International*, and published earlier a book dealing with the physical phenomena of metapsychics.

The present work is devoted for the most part to description of the great variety of tricks, some ingenious and some crude, by which fakirs, and pseudo-mediums on the stage and in the séance room, simulate the several kinds of paranormal phenomena. The book does, however, mention various instances of phenomena which the author regards as genuinely paranormal. He declares, even if perhaps a little too sweepingly, that "to be in position to detect fraud, whether in physical or psychological phenomena, it is *indispensable* that the psychical researcher be a conjurer," and this not simply in the sense of having read books of conjuring, but in the sense of being himself a practical conjurer (pp. 228-9). In a footnote, the author adds that since, even when one is warned in advance, it is nearly impossible to detect the trick of a conjurer operating in full light, it is still more difficult in the darkness of séances.

It is true, of course, that *some* forms of deception are easier in the dark, but the fact is that, for sleight of hand tricks, the conjurer needs light, so that he may direct the spectator's *visual* attention away from the action which effects the trick. One is reminded in this connection of Mulholland's erroneous statement that it has been "proved" that sounds cannot be located in the dark. The fact is that the *auditory* locating of a sound depends on the slightly different sensation it causes in the two ears, owing to the different position from which each hears the sound. Thus, what is true is only that ventriloquism, for instance, which depends on *visual* clues to deceive the spectator as to the place from which voice comes, is impracticable in the dark.

M. Tocquet's own conclusions concerning the spuriousness of some of the classical cases are not all equally convincing. Some of them appear to be little more than surmises. He pointedly remarks, however, that since paranormal phenomena—especially the physical ones —are not reproducible at will, it follows that all purportedly paranormal occurrences *that occur punctually as scheduled* are necessarily

faked (p. 18n.); as for example, the fully materialized phantoms to be seen regularly every Sunday in Paris at the séances of a group which the author tactfully designates only as "The Parisian Spiritist Group."

An intriguing hypothesis which M. Tocquet advances—and which, if correct, would make the more precarious some of his surmises as to the spuriousness of certain of the recorded phenomena—is that the simulation again and again of a given type of paranormal phenomenon by an avowed stage conjurer has sometimes, though rarely and unpredictably, resulted, much to the conjurer's own surprise, in genuinely paranormal occurrence of the phenomenon. The author mentions in support statements to this effect made by the conjurers David Devant and Dizien, and others reported to have been made by Howard Thurston, Cumberland, and even Houdini. He might have cited also the detailed account of such an experience in the career of the illusionist, The Great Roland, which the latter gave to Frederick Marion, who relates it in his book, *In My Mind's Eye*, (pp. 78-81). Roland, after having been tied in a cabinet by volunteers from the audience, always managed to free one hand, with which he wrote on a slate, rang a bell, and fired a pistol. But one day the man who tied him happened to be a sailor, who knew knots, so that Roland could not free his hand. Yet, to his great astonishment, the slate was written on, the bell rung, and the pistol fired!

M. Tocquet believes that the hypothesis this would illustrate is valid for instance in the case of the famous Eva C. He gives edifying details concerning her early trickeries in the villa Carmen of General and Mrs. Noel; but he holds there is solid evidence that, in the latter part of her career, she produced spontaneously some genuinely paranormal phenomena (pp. 16, 17).

In connection with the collecting of reports of spontaneous phenomena, the author properly reminds us that some persons, simply for the pleasure of hoaxing, will make up a story out of whole cloth, and publish it. Also that some sincere persons, moved unawares by strong desire to have their own belief accepted, will embroider on a real but normal occurrence, altering, adding to or subtracting from the account of it here and there, and thus make it seem truly paranormal (p. 60). M. Tocquet might have added that sincere but equally pious skeptics often do exactly the same thing in the case of an apparently genuine paranormal occurrence, to get their own *a priori* disbelief accepted.

An interesting and valuable feature of the book consists of the biographical sketches which occupy the last hundred pages of the book. They concern 26 more or less famous mediums, pseudo-

mediums, and fakirs; 21 of the better known conjurers; and 24 noted psychical researchers and students of hypnosis.

Much need remains, however, for full length, detailed and thoroughly documented biographies of the more celebrated mediums, that would include accounts of the investigations to which they were subjected, names and identities of the participants therein, the results thereof, etc.

C. J. DUCASSE

Brown University

Correspondence

To the Editor of the JOURNAL:

I found Dr. R. A. McConnell's comments in the April JOURNAL regarding our IBM experiments[1] both generous and stimulating. There are, however, several specific points in reference to these comments that I should like to make:

In *The Reach of the Mind* Dr. Rhine states, "More than anything else, success in securing a measurable demonstration of the capacities [of psi] depends on the presence of favorable attitudes in the subjects, and the provision of helpful test conditions" (p. 138). It would seem that nearly every major worker in the field shares this opinion as witnessed by the fact that their work has been largely designed to identify these factors.

Dr. McConnell questions our justification in writing off 15 of the 21 machine errors found in the Appendix data. We did so because these sheets were not hand-checked at first in the fashion we ourselves had prescribed. These errors were on the sheets of two subjects who had not blacked in their papers properly. These Appendix sheets were first checked by an inexperienced person, and he failed to recognize the problem. He should not have checked the sheets in the first place, but the blame for this oversight lies with me, and the procedure as outlined should not be indicted. The main data of the paper were checked by the proper personnel, and the accuracy there is indicative of that which is to be expected. As for the 1 per cent error which Dr. McConnell suggests is not uncommonly found, I should point out that an error of even this magnitude in the machine would still give perfect accuracy within the small range we use. For example, if there is a 1 per cent error in the registration by the scoring needle of say a chance score of 30, the needle would

[1] S David Kahn, "Studies in Extrasensory Perception: Experiments Utilizing an Electronic Scoring Device," *Proc.* A.S.P.R., Vol. XXV, 1952, pp. 1-48.

deviate only within a range of plus or minus .3. This would still be registered as 30, however, instead of 29 or 31. Furthermore, we empirically discovered that a 1 per cent error simply did not occur when the machine was used carefully by our methods.

If asked to justify our rather top-heavy experiments, I would say that in part they were done with the hope that those adamantine men who do not *like* the concept of a human scorer, might *like* our methods. I personally do not believe our technique can surpass the accuracy with cards offered by specific workers at Duke. But this is because I know these people, and recognize their individual dependability. Some critics do not, however, and apparently would prefer to keep it that way. Thus to them I offer an alternative which is theoretically a methodological improvement, or possibly to some a methodological necessity. One can thereby check the validity of a challenged measuring device by a second device, which is well accepted, where error is both predictable and constant, and which is, above all, independent. Certainly this concept is universal and fundamental in the purest of sciences, physics. I am not so optimistic as really to believe that the theoretical nicety of this procedure, or any other, will win the cold war parapsychology is waging for acceptance; at best it may serve as another flutter of leaflets that brings a few more stragglers to our side.

In conclusion, I should like to say that I agree with Dr. McConnell in believing that clinical insights are among the most potent tools the investigator has at his disposal. But if their function is misunderstood, and they are allowed to parade as established facts, then they can become the most treacherous. In the *Proceedings* I was only questioning whether more confidence was being placed in the critical importance of attitudes than was presently justified by the experimental work which has since been carried on to verify these original clinical insights. The more of these insights the better, but let us treat them as strangers, although always with the proper deference, until they establish their right to a permanent place in our thinking.

S DAVID KAHN

Harvard Medical School
Boston, Massachusetts

Book Notice

PSYCHICS AND COMMON SENSE. By William Oliver Stevens. Pp. 256. E. P. Dutton & Co., New York, 1953. $3.50.

This recently published book by a Trustee of the Society will be reviewed in the next issue of the JOURNAL. It is an Introduction to the study of psychic phenomena.

HISTORY OF THE SOCIETY

The First American Society for Psychical Research was formed in 1885, in consequence of a visit by Sir W. F. Barrett to this country, and Prof. Simon Newcomb became its President. In 1887 the Society invited a man of signal ability, Richard Hodgson, A.M., LL.D., sometime Lecturer in the University of Cambridge, to become its Executive Secretary, and he accepted.

This organization later became a branch of the English Society under the very able guidance of Dr. Hodgson until his death in 1905. The American Society for Psychical Research was then re-established with James H. Hyslop, Ph.D., formerly Professor of Logic and Ethics in Columbia University, as its Secretary and Director.

THE ENDOWMENT

The American Society for Psychical Research, Inc., was originally incorporated under the Laws of New York in 1904 under the name of American Institute for Scientific Research, for the purpose of carrying on and endowing investigation in the fields of psychical research and psychotherapeutics. It is supported by contributions from its members and a small endowment fund. The income of the Society pays only for the publications and office expenses, but does not enable the Society to carry on its scientific investigations. A much greater fund is required before this work can be carried forward with the initiative and energy which its importance deserves.

The endowment funds are dedicated strictly to the uses set forth in the deed of gift and are under control of the Board of Trustees, the character and qualifications of whom are safeguarded, as with other scientific institutions.

Moneys and property dedicated by will or gift to the purposes of the American Society for Psychical Research, Inc., whether to the uses of psychical research or psychotherapeutics, are earnestly solicited. The form which such dedication should take when made by will is indicated in the following:

"I give, devise and bequeath to the American Society for Psychical Research, Inc., a corporation organized under the laws of the State of New York, the sum of ..... dollars (or if the bequest is real estate, or other specific items of property, these should be sufficiently described for identification), in trust for the corporate purposes of said Society."

Index to Volume XLVII

Index of Subjects

Index of Names