

# THE EFFECT OF DISTANCE IN *ESP* TESTS

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**ABSTRACT:** This is a review of the work done on the problem of the possible effect of distance on *ESP*. Although in some instances scores declined with distance, there were others in which there was no decline. In certain Duke distance tests, especially, was the latter true. New evidence is presented from experiments in which distance was an incidental condition. This supports the hypothesis that distance is not restrictive in its influence on *ESP*. In a series conducted at Tarkio College, subjects calling an unbroken pack at distances up to 1,400 miles showed no reliably different scoring rate at any distance. In a series conducted between Duke University and San Diego, California, the group at San Diego made higher scores than other subjects at points nearer Duke.

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GIVEN a natural phenomenon or process of unknown character, one of the first questions asked is: What is its relation to space? What effect, if any, does distance have upon it? A satisfactory answer to this question goes far to clarify the relation which the unknown phenomenon bears to the already known one.

In the history of the investigation of extra-sensory perception, this question has frequently been asked. In the non-experimental studies, confined to the collection and classification of instances of reported personal experiences appearing to involve extra-sensory perception, the investigators observed the apparent independence of distance in the anecdotal material collected. That is, a dream (for example) coincident with an event that was presumably unknown to the dreamer was observed to be as likely to indicate correct knowledge of the event at a great distance as at a short one.

In the earlier experimental studies of the process of extra-sensory perception the reports touching on the question of the effects of distance have indicated that there *is* no appreciable effect. Some of this earlier work, now fifty years old, is difficult to evaluate precisely, particularly the experiments in hypnotization and hypnotic tests conducted with distance between agent and subject. But the standing of the experimenters is noteworthy, and the agreement of the results is general. Ac-

cordingly, the experiments cannot be justifiably disregarded on any ground of which I am aware.

One of the earliest of these experiments was that of Professor William Barrett, a physicist, who reported in 1876 that he had been able to produce reliable responses in a hypnotized subject at distances of hundreds of yards, presumably by an extra-sensory means of thought-transference.<sup>1</sup>

Among the French physicians and university professors who were actively experimenting with hypnosis during the last quarter of the century, there were several who reported success in reliably inducing mental states at distances (measurable in miles) that prohibited any possible sensory perception. Prominent among these names are those of Pierre Janet, Richet, Gibert, Hericourt, Dufay, and Dusart. And others too were involved as witnesses. Frederic Myers of England collaborated with Janet in a series of 20 trials at hypnotization at a distance, with 80% success. Myers concluded this was evidence of extra-sensory thought-transference, for which he proposed the name "telepathy." Janet has not committed himself to any explanation. The distances in these tests varied from a third of a mile to several miles.<sup>2</sup>

A number of other reports appearing in the *Proceedings* of the Society for Psychical Research of London might be listed as favoring the view that distance is not inhibitory to thought-transference, but in some of these cases it is not easy to judge the value. The Miles-Ramsden and Wales-Somers reports come in this class. A study, however, by Usher and Burt introduced the quantitatively measurable method of using playing cards. In 60 trials with distances of 120 to 960 miles, there were four complete successes (where one hit in 52 is expected on the average), and 14 were right in value (with one in 13 expected). They had better success with agent (or sender) and percipient in the same room; namely, nine complete successes in 36. Although the number of trials is small for the purposes of conclusion, such as it is, the results (14 right in value) are statistically reliable.

The trans-Atlantic series of tests in telepathy between Paris and New York, conducted by Warcollier and Gardner Murphy in the early 1920's, was regarded by the experimenters as promising but inconclusive. Two radio broadcast experiments in extra-sensory perception were conducted during the same decade, one by Murphy and Gault from Chicago, and another by Woolley and Lodge from London. No

<sup>1</sup> *Proceedings of the Society for Psychical Research*, 1882, I, 241-242.

<sup>2</sup> See review of this work in Frank Podmore, *Apparitions and Thought-Transference* (London and New York: 1915.)

conclusive results favorable to extra-sensory perception have been reported from these, to my knowledge. The London report<sup>3</sup> is negative. Likewise negative was the sequel series of tests at a distance conducted by Soal following the broadcast test.

It would not be correct to say that distance as a condition in an ESP experiment was under test in all the instances of the last paragraphs. Distance was merely one of a number of other conditions, any of which might have been responsible for the low results. For example, the following conditions might have interfered: (1) Lack of personal acquaintance between agents and percipients; (2) the mass approach, using many subjects at once and thus lowering the individual interest; (3) absence of specific acquaintance on the part of the percipients with the exact location of the agents; (4) no preliminary confidence-building, lack of which might have made the long-distance test seem overwhelmingly difficult or impossible to the subjects.

What is required for a study of distance effects is, of course, a comparative series, with the non-distant control series preferably first and as close to the distance series in time as possible. Therefore the failure of the distance series just reviewed may not be held as of weight against those like the Usher and Burt study and others to be described, where the tests were comparative.

The most conclusive series of tests of extra-sensory perception at a distance published up to the time of its appearance in print was that reported in *Mental Radio*,<sup>4</sup> by Upton Sinclair. The tests were made with the author's wife as percipient, and for the distance series a brother-in-law of the percipient acted as agent. The distance was twenty-five to thirty miles; the subject matter of the tests consisted of freely chosen objects drawn on paper by the agent and "concentrated upon" by him at the appointed time, at which the percipient was attempting to draw the object. The seven trials made were recognizably successful. This is a small number, and success is partly a matter of personal judgment; but while there may be something lacking for entire conclusiveness in the experiment, there can be little dispute as to the success shown in these trials. The distance results were among the most successful of the entire series.

In a monograph entitled *Extra-Sensory Perception*,<sup>5</sup> I reported in 1934 experiments made to distinguish the extra-sensory perception of objects, commonly called clairvoyance, from that of subjective states in

<sup>3</sup> *Proc. S. P. R.*, 1928, XXXVIII, 1-9. For Soal's Report see *Proc. S. P. R.*, 1932, XL, 165-362.

<sup>4</sup> New York: 1930.

<sup>5</sup> Boston: 1934; London: 1935.

another person, known as telepathy. In both experimental series (telepathic and clairvoyant) there were some tests attempted with distance as a condition, distance that varied from a few feet to a matter of miles. The condition of spatial separation of subject and object (or agent) served the additional purpose of further reducing the likelihood of sensory cues (in all distance tests, at least one wall separated the percipient from the agent or cards), and was often used with this feature in mind. In an article published later<sup>6</sup> I reported also the results of interposing short distances in tests for extra-sensory perception, both telepathic and clairvoyant, with a professional medium. A brief resumé of these experiments is needed for a judgment of the status of the problem of distance effects in ESP tests.

The first series of distance tests for ESP is the Pearce-Stuart series, in which Mr. C. E. Stuart was the experimenter. This was an attempt to measure the effect of distance on three different techniques (DT, BT, and PT<sup>7</sup>) used in the tests at that time. Without going into the comparison of the different techniques, which was not especially fruitful, I will mention only the gross comparisons at the different distances.

In 2,400 trials made with percipient and cards (or agent in PT) in the same room, the average was 6.7 hits per 25. At a distance of 8 to 12 feet, with one wall between, in 1,925 trials the average hits per 25 were only 5.65; while at 28 to 30 feet and two walls between, 1,075 trials averaged as low as 5.24 per 25. This looks like a marked decline with distance, even though not a proportional one. In spite of the fact that the 3,000 trials made with the two different distances averaged 5.5 hits per 25, which gives a critical ratio of 2.7 and is significant, there was so large a drop in scoring with the introduction of the distance condition that it would appear that this condition was in some way responsible.

A similar effect was obtained in the Cooper-Ownbey series, with Miss Sara Ownbey as observer, this time with PT technique. In 1,800 trials with both agent and percipient in the same room, the average was 9.2 hits per 25; whereas with the two in adjoining rooms and about ten feet apart, the score average for 300 trials dropped to 5.8.

It would seem here, as with the Pearce-Stuart series, that distance is an inhibiting condition for extra-sensory perception, but there is a subtle but logical alternative hypothesis to consider; namely, that perhaps the effect was an indirect one. The subject may have been affected

<sup>6</sup> *Character and Personality*, 1934, III, 91-111.

<sup>7</sup> See glossary, p. 000.

by his doubts, let us say, of his ability to work at a distance. Fear of distance, rather than distance itself, might have been responsible. Only further tests could determine this.

With the Bailey-Ownbey series the results were quite different. With agent and percipient in the same room, using the PT technique, the 275 trials averaged 11.4 hits per 25; about ten feet apart, in adjoining rooms, the 450 trials dropped to an average of 9.7 hits per 25. But 28 to 30 feet apart, and each in the second room away from the other, the 150 trials rose to an average of 12.0 hits per 25, or slightly above the normal.

Likewise, the Zirkle-Ownbey series yielded results showing no decline with distance. With both agent and percipient in the same room, the 950 trials yielded 14.0 hits per 25; at the next stage, with ten feet between, the 750 trials gave 14.6 per 25; and at the distance of 28 to 30 feet, the 250 trials averaged 16 hits per 25. Here again, as with the Bailey-Ownbey work, there was a slight increase of score average with distance.

The tests for the last two series mentioned followed the PT technique, which allowed for telepathy only, and excluded clairvoyant perception. But in the Garrett series both types of extra-sensory perception were tested, and in both types the distance trials gave a higher average than did the normal or close-up series. For the telepathic tests the normal average in 875 trials, consisting of only those on the same days as the distance runs, was 8.3; while in 1,075 trials at a distance between agent and percipient of 15 to 30 feet, the average was 9.0 hits per 25. In the clairvoyance tests there was an average of only 5.2 hits per 25 for the 3,750 trials with cards and percipient in the same room, but in the 3,725 distance tests the average was 5.8. The distance of 15 to 30 feet, then, was evidently not a hindrance in any case for this subject under the conditions. As with the two preceding cases, there was actually a slight favoring of the distance condition in score averages.

Passing on to an account of the greater distances introduced, we find again not a complete agreement in the results. For example, Zirkle, who did so well at close range, even improving up to 30 feet in distance from the agent, when separated from the same agent by 165 miles had no appreciable deviation from chance average.

On the other hand, Pearce, who got nearly chance results at short distances of from 8 to 30 feet, got fairly high ones at 100 to 250 yards in clairvoyant tests. Cooper, too, failed at distances of 8 to 30 feet, and later at a distance of two miles (in work which I am not including

because I am not personally able to vouch for it, though I know nothing wrong with the conditions) he too did splendidly when his mother was able to act as agent. It is well to keep in mind that the initial failures (or near failures) of Pearce and Cooper may have been due to their having been pioneers; confidence could not have been so high at the outset as it was later, after some success by others. This is a possible explanation.

The Pearce-Pratt series has been given in full detail elsewhere,<sup>8</sup> but deserves a summary here. This work was done entirely with the clairvoyant phase of extra-sensory perception and relied upon synchronized watches for keeping track of the order in the tests. Mr. J. G. Pratt handled the cards in one building, while the percipient in another, 100 to 250 yards away, made calls as to what the cards were as each was individually isolated and removed for later checking.

In the total 1,850 tests made with the subject 100 and 250 yards distant from the cards, an average of 7.4 was obtained; but this was less than the average of 8.2 which he got in the 900 trials made in the same room during the same period. A drop from 8.3 to 7.4, however, is not great. But, more to the point, an analysis of the distance series shows that the first 300 trials at 100 yards gave an average of 9.9 per 25; and all 750 trials made at that distance yield 8.7 hits per 25 trials, a figure above the control average.

It is true, the distance series at 250 yards fell to 6.7 hits per 25. But an examination of the scores shows that Pearce was quite as high on certain days at this greater distance as he was at 100 yards, or at one yard. For example, he scored 10 or better 13 times in 44 runs, usually having markedly high days and very low ones. The first day the scores were 12 and 10; the next, 6 and 4; the third, 10 and 10; the fourth, 2 and 6. For some reason, he was very unstable and swung from one to the other extreme. For instance, he made zero three times in this series; for him this was totally unprecedented, and it is very unlikely by chance. The distribution of scores is bimodal, with modes at 10 and 4 hits per 25. Hence it is difficult to regard the effect as due to distance. With the increased score average at 100 yards and this peculiar distribution, it would appear that distance does not, up to the limits tried, inhibit high scoring in the tests for extra-sensory perception. The unstable scoring at 250 yards rather suggests psychological disturbances.

Of the previously reported tests of distance effects in ESP, there

<sup>8</sup> J. B. Rhine, "Some selected experiments in extra-sensory perception," *Journal of Abnormal and Social Psychology*, 1936, XXXI, 216-228. (Also *Journal of Parapsychology*, 1937, I, 70-80.)

remains only the short Turner-Ownbey series of telepathy tests, with over 250 miles' separation between Miss Ownbey, the agent, and Miss Turner. The normal series averaged in 275 trials 7.7 hits per 25, while the long distance series gave an average of 10.1 hits per 25 in the 200 trials made. Only 25 trials per day were made, with three and five-minute intervals, with the use of synchronized watches to keep the order of the calls. After eight days the series was stopped, the scores having been 19, 16, 16, 7, 7, 8, 6, 2.<sup>9</sup> The first three days' scores were the highest ever obtained by the subject, and as a succession were very unusual by anyone. It could scarcely be concluded by those who accept these results that distance is a limiting condition in ESP.

These series of tests just reviewed represent the data upon which a conclusion was reached in the report of 1934 that ESP was not limited by space as is sensory perception. There were only a few other short series that gave approximately chance results. Four runs of PT at a still greater distance (over 300 miles) by Miss Turner and Miss Ownbey gave only chance average, 5.0 per 25. Five runs at card-calling at 300 miles averaged 6 hits per 25 until interrupted. Cooper with Miss Ownbey averaged 4.4 for 7 runs at 7 miles, and Zirkle 5.5 per 25 in 10 runs at 165 miles.

The failures do not, I think, affect the argument. If *in any one series* the distance tests hold up reliably to the same extra-chance level as the normal ones, this suffices to eliminate space considerations from ESP functioning. Such series were obtained in four short distance tests at 8 to 30 feet, and in two long distance groups at from 100 yards to 250 miles.

#### FURTHER EXPERIMENTS

There have been no further experiments designed purely and primarily to investigate the effect of distance on ESP. It was felt that the cumulative effect of the results of past investigations was adequate to show that distance was not a limiting condition in ESP tests. Other urgent exploratory problems lay ahead, and the question of distance was no longer a primary issue. Such tests involving distance as were made afterward were conducted with spatial separation as a secondary aspect. In none of these, therefore, are there comparative or control series made under close-up conditions (i.e., comparable except for distance).

<sup>9</sup>The safeguards and alternative hypotheses of these series are treated elsewhere: Rhine, *op. cit.* Those who question the safety of stopping a series when extra-chance scoring ceases would have to argue that because a gambling slot-machine gave a good yield one time it would be likely to do so on the next. Warner has dealt with this run-of-luck theory in "The Rôle of Luck in ESP Data," *J. Parapsychol.*, 1937, I, 84-92.

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In the experiments to be reported, the actual primary objectives of the tests will not be described here, since to do this would involve prohibitive detail and digression. They will be reported later with the main bearing in view. Here will be reported only what is essential to the evaluation of the bearing of distance on success in ESP tests.

There have been conducted, since the last distance work was reported, a total of 102,075 trials that have had distance as a condition. As in the earlier work, there will be no selection of the data in publication. All tests made will be included.

Although a few of these trials were made at distances to be measured in feet, the great majority were made at distances ranging from 70 to 3,000 miles. It is these comparative distances that throw light on the problem of the effect of distance on ESP scores. Unfortunately, the different distances did not obtain for tests with the same subjects. The subjects were different for each distance. Only the relatively large number of cases, therefore, prevent the results at different distances from being ascribable to possible individual differences.

The total of 101,450 trials have an average of 5.105 hits per 25 and a positive deviation of 430 from the mean. This is 3.4 times the standard deviation of the mean. Moreover, the extra-chance character of the series is supported by other treatments of the results. If the frequency of occurrence of the various scores is evaluated by the chi-square method,<sup>10</sup> it yields (with sub-series combined by Fisher's chi-square technique) the probability of .00234 that the results are due to chance. By the sign test modification<sup>11</sup> of the chi-square method, the probability of chance causation is still lower. It is .00014; that is, the odds are about 7000 to one that the results are not due to chance.

The main portion of the 4,083 runs was made with the GESP method, with an agent looking at the ESP cards and thus providing two possible stimuli for the percipient; i.e., both the card and the mental image of it. Second in number were the runs made with the pack untouched throughout the run; i.e., with DT. The few exceptions will be accounted for below in the detailed presentation of the different sub-series.

Under the circumstances, the alternative hypothesis of sensory cues is not applicable. Barring chance, improper selection of results, sensory cues, and an inadequate method of evaluation, it is difficult to find an

<sup>10</sup> See R. A. Fisher, *Statistical Methods for Research Workers*, 3rd Ed. (London: Oliver & Bond, 1934).

<sup>11</sup> J. A. Greenwood and C. E. Stuart, "Mathematical Techniques used in ESP Research," *J. Parapsychol.*, 1937, I, p. 217 ff.

explanatory hypothesis for these results, except to say that, since some perceptual response is indicated under conditions in which the senses are not capable of operating, extra-sensorial perception is apparently occurring. This tentative, non-committal position is taken as the minimal conclusion that can describe the results obtained.

Entirely apart, then, from their bearing on the distance problem, the results of this series add still further support to the establishment of the occurrence of ESP.

#### DISTANCE COMPARISONS

##### *Tarkio Series.*

In 26,125 trials conducted during the summer of 1937 by Mr. James MacFarland of Tarkio College, the comparison of score averages in relation to various distances indicates again that distance is not a limiting condition.

The tests were made with the DT technique, the cards being kept intact in packs by the experimenter throughout the test period and removed only when checking up. The subjects filled out five columns of a record sheet, one for each pack in the experimenter's desk, at any time they wished on a given day, and sent the sheet to the experimenter to be checked. Double checking was carried out, and the general sponsorship of Dr. R. W. George, Head of the Department of Psychology, was exercised over this series. The cards were well shuffled and kept under careful observation by the experimenter.

The results are given by zones in Table I, with averages per 25 for easy comparison. Note that the fifth zone yielded an average higher than the fourth and the third higher than the second. This could hardly occur if that distance were a hindrance to ESP. Otherwise, these results could only be accounted for by large individual differences sufficient to overcome the supposed distance effect and happening to be distributed so as to do so. That this might have been the case is possible, but not very likely.

##### *Duke Series.*

This series was suggested by Dr. X, a well known psychiatrist of San Diego, California, who had in preliminary tests discovered a number of high-scoring subjects in ESP tests among her friends and acquaintances. The records of these first experiments were not kept by Dr. X, but a later series, made after the distance tests, averaged 6.9 hits per 25 for 5 subjects in a total of 3,500 trials, with a critical ratio of 11.2. These tests were made by the DT method, the records were

TABLE I  
SCORE AVERAGES AT VARIOUS DISTANCES, TARRIG SERIES.

| Zone       | Distance in miles | Number of Subjects | Total Trials | Total Deviation   | Average Hits Per 25 |
|------------|-------------------|--------------------|--------------|-------------------|---------------------|
| 1.....     | 0— 50             | 16                 | 12,125       | 382 ± 44          | 5.58                |
| 2.....     | 50— 100           | 2                  | 2,750        | 47 ± 21           | 5.43                |
| 3.....     | 100— 300          | 7                  | 6,625        | 170 ± 33          | 5.64                |
| 4.....     | 300— 600          | 2                  | 2,125        | 17 ± 19           | 5.19                |
| 5.....     | 600—1,400         | 3                  | 2,500        | 30 ± 20           | 5.30                |
| Total..... | 0—1,400           | 30                 | 26,125       | 546 ± 66 (CR=8.3) | 5.52                |

double-checked, and Dr. X was the experimenter as well as one of the successful subjects.

It was arranged as a result of the suggestion of Dr. X that a series of tests using the GESP method be conducted with the cards and agent at Duke University and the subjects at San Diego, and that after a time, in a second sub-series, the order be reversed. A third sub-series was carried out, with a return to the first arrangement; namely, the cards and agent at Duke. These three sub-series are thrown together to get larger numbers for comparison.

At the same time that the Duke-San Diego series was under way, there were others invited to participate from other localities and at other distances from Durham. These afford the material for comparison in relation to distance. The results of all the series up to a certain point will be thrown together without omissions, for purposes of comparison. At that point results which had been definitely positive took a turn toward negative deviation which was maintained until the end. Thus from the beginning on November 13, 1935, to March 13, 1936, the 23,825 trials were not only positive in the deviation of hits from the mean, but were significantly so, giving a critical ratio of 2.8. After March 12, during the five more weeks that the experiment was continued, a total of 34,450 trials was made; but the results averaged either chance expectation or slightly below it throughout this period.

There is, of course, no point in including these latter data in our efforts to compare scores made at various distances. (They were, however, included in the total given above, 102,075.) If average scores are not above chance, there is nothing to say. Hence the plan to base this comparison on only that section of the experiment in which positive scoring occurred, and so to take all scores from the start on November 13th up to March 12th. In this section we find the following results, presented in Table II.

TABLE II  
SCORE AVERAGES AT DIFFERENT DISTANCES, DUKE SERIES.

| Zone       | Distance in miles | Total Trials | Total Deviation | Average hits per 25 |
|------------|-------------------|--------------|-----------------|---------------------|
| 1.....     | 0— 500            | 2,750        | + 32            | 5.29                |
| 2.....     | 500—1,000         | 7,300        | + 58            | 5.20                |
| 3.....     | 1,000—2,000       | 700          | - 2             | 4.93                |
| 4.....     | 2,000—3,000       | 13,175       | + 85            | 5.16                |
| Total..... | 0—3,000           | 23,925       | +173            | 5.15                |

The strongest point that could with safety be made from this data bearing on the question of distance effects is that the difference between the results of Zone 4 and Zone 2 is too slight to represent a decline with distance. There is a difference of nearly 2,000 miles in distance between these two zones, and so the score difference of .04 is insignificant and quite out of proportion to the distance involved. The same is true of the difference between Zones 1 and 2.

The fact is, the best scores, on the whole, made during the Duke series were made by the San Diego group of subjects, although this group was located at the greatest distance from Duke. In this Duke-California work there were three special conditions under test which will be reported in a later paper. In these distance was only incidental. But in the best of these conditions the San Diego group averaged 5.54, which is better than the comparable average secured by any group in any closer zone.

While, then, this Duke "broadcast" series was relatively low in scoring level, it is entirely in line with the other evidence on the distance question, showing, that in so far as it has been tested distance is not in itself a limiting condition to ESP.

#### *Other Series.*

There were some series of tests included in the total figures given at the beginning of this section which have no very conclusive bearing on this problem of distance and so need not be discussed in detail. They gave, on the whole, either chance or sub-chance scores. They will be reported in detail in later articles covering the specific problems concerned.

#### DISCUSSION

The many difficulties of this field of research have made it impossible as yet to get an exact and elaborate study of the question of whether distance affects ESP scoring, but the evidence that it does not influence it is nevertheless considerable.

The case would be much more doubtful if there were any good evidence pointing in the opposite direction. If any suggestion of inverse correlation with distance had been found, the situation would be different. Such instances as we have of failure under distance conditions seem to be due to factors other than distance, such as loss of confidence. This is shown by the fact that, in most instances, the same subject later is able to succeed under conditions of distance sometimes greater than that with which he failed at first. In any case, failure by one subject and success by another under similar distance conditions indicates that the failure could not have been due to the spatial conditions. If distance does limit, even one real exception could not occur. But the evidence offers a number of such exceptions.

While, therefore, the nice demonstration that is to be desired on this problem is still wanting, the question itself is apparently answered effectively. The demonstrations best meeting the requirements are the Pearce-Pratt and the Turner-Ownbey series. But the evidence from these is considerably strengthened by the results of the shorter distance series and of the Tarkio and Duke series, in which distance was only an incidental condition.

If distance has no limiting influence upon *ESP*, the logical bearing of this spatial freedom is extremely far-reaching. It is so far-reaching that every alternative must be examined before it is decided that distance is not a possible limiting factor.

Is it possible that the distances tried in the tests herein reported were all too short? They would not be too short to test the energies we know. In all mechanical effects such as might conceivably be involved in transmitting symbols from cards, the distances of 100 and 250 yards in the Pearce-Pratt series is entirely adequate. 250 miles for the Turner-Ownbey series is enough more to add good measure.

Competent physicists appear to agree that nothing known at present in our spectrum of electromagnetic energies, nor outside of it, is applicable to the results of the *ESP* tests. Some of these maintain, however, that the phenomena should not hastily be relegated to the realm of the extra-physical, since physics may expand and since there must be some physical basis for a perception of an object. This apparently reasonable position is doubtless where the problem must be left until further results throw better light on the *ESP* process. Finding no mechanical explanation (as mechanics is today) need not necessarily exclude a physical explanation by a physics which may yet develop.

The problem of a physical theory of *ESP* is focussed more sharply

upon the next logical step in the experimentation itself. If distance in space is not a limiting condition in ESP tests, what about remoteness in time? In this space-time world, wherein any measurable objective event is necessarily both spatial *and* temporal at once, if anything could escape space it might be expected to be free from time as well. If an ESP subject can in some way transcend spatial barriers, might he not be able likewise to transcend temporal limits?

The summary of distance work in ESP presented in this paper is made to preface a series of reports on research which has been made into the problem of precognitive or previsionary ESP, which will follow.

#### SUMMARY

This report is a review of experiments made to ascertain the effect of distance on success in ESP tests. The work already reported seems to show that distance does not limit ESP as it does sensory perception. Particularly those Duke experiments known as the Pearce-Pratt and the Turner-Ownbey series demonstrate this by reason of the control series needed for comparison. In a total of 101,450 trials in which distance was a condition and which gave as a whole a significant deviation, there was shown in the two series in which there were score averages at different distances that there was no proportionate falling off of average with distance, such as a mechanical analogy would require. In fact, it would appear that no falling off whatever directly occurs with spatial separation.