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TELEPATHY AND OTHER UNTESTABLE HYPOTHESES

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ABSTRACT: The hypothesis of telepathy as a mind-to-mind transference of thought from one person to another has not, even after a century of effort, been found to be verifiable. Unlike the other subtypes of psi ability (clairvoyance, precognition, and psychokinesis), it has not been possible to design a definitive experimental test of telepathy. A review is given here of the history of the main attempts to solve this problem and the evident failure to do so. Attention is directed to the reason for this unprofitable outcome, and the suggestion is made that telepathy be indefinitely shelved until, if ever, a conclusive test design is discovered.

A number of other hypotheses that are currently investigated are similarly quite untestable by any known design that could lead to conclusive results. The other problems discussed here are: spirit projection (out-of-the-body experiences), spirit communication of various types, and retroactive psi (such as retrocognition or "psychometry" and retroactive PK). The author's aim is to get parapsychology out of its long and wasted preoccupation with unsolvable questions without necessarily dismissing them with finality.

For almost a century both scientific and lay interest in the idea of telepathy (or extrasensory thought-transference) has been, in some countries at least, more widespread than in any other type of psi or parapsychic ability. The idea that one person can, in some extrasensorial way, become aware of another person's thought is generally accepted as fact by most of those giving any credence to the findings of parapsychology. Among the many spontaneous parapsychic happenings in everyday life that are reported, the cases considered to be telepathic in nature are among the most familiar.

Some research workers in parapsychology, however, are in doubt

as to whether the effects usually attributed to telepathy—either in the experimental situation or in spontaneous experiences—can be reliably concluded to be due to this hypothetical subtype of psi ability. While these research workers would not reject a general parapsychic explanation of such results, they would question whether the effects can be said to be telepathic, as that term is used. After nearly a century of inquiry about telepathy, even though such inquiries have been scattered, it is extraordinarily curious that this question still presents so sharp a challenge. On this account and because of the very important implications of the concept of telepathy, it is time to review what we can find on the nature of this difficulty.

There is another reason, too, for this review, or rather for its timing. For some years I have been giving special attention to finding ways by which the quality and conditions of the slow-moving field of psi research can be reinforced and its general scientific acceptability upgraded and expedited. This I have often mentioned before, sometimes in the context of telepathy. What I say in this review, however, also has a broadly sweeping application to a series of other, more or less major, issues in parapsychology quite as well as to the problem of telepathy itself. As may be seen, a common circumstance is involved here: all the problems to be considered are without exception logically untestable by an experiment that could give an unambiguous result. This discussion, then, is part of an attempt to see in the example of telepathy a range of problems about which parapsychologists have had a long period of uncertainty. But I will proceed with telepathy first, since this is the best and most familiar example of the group it represents here. Naturally, I am not unaware of the severe challenge this step gives to some of the most dedicated workers in or around the field as a whole; but in the interest of progress it is unavoidable, I think, that it be made. I will return to this aspect after the discussion of telepathy.

THE MEANING OF TELEPATHY

As a first step, let us look into the original definition of the term “telepathy.” When Frederic W. H. Myers introduced the term in the *Proceedings of the S.P.R.* (Barrett, Massey, Moses, Podmore, Gurney, & Myers, 1882) he also presented along with it the term “tel-

aesthesia” (meaning the same as the French word “clairvoyance”), intending these two terms “to cover all cases of impression received at a distance without the normal operation of the recognized sense organs [p: 147].” But he added, “No true demarcation, in fact, can as yet be made” Twenty-one years later, however, in *Human Personality* (Myers, 1903) he wrote, “It has become possible, I think, to discriminate between these two words somewhat more sharply than when I first suggested them in 1882. Telepathy may still be defined as ‘the communication of impressions of any kind from one mind to another independently of the recognized channels of sense’ [p. xxii].” This mind-to-mind exchange was the definition that became general for telepathy, and is to be found in the major works on the subject (such as those of S. G. Soal and R. Warcollier, among others).

Myers, however, in Vol. II of *Human Personality* (1903, pp. 195-96), pointed also to the possibility of the direct action of one person’s thought upon the brain of another, the percipient. This would be a type of psychokinesis, but that term had not then been introduced into the language of parapsychology. However, Thouless and Wiesner (1948) recognized this possibility as one of the ways in which thought might be transferred from one person to another extrasensorially, and considered the experimental work on psychokinesis (PK), already reported by that date, as furnishing an experimental foundation for such a possibility of direct action of mind on matter, in this case the brain.

But Thouless and Wiesner also went on in the same article to suggest still another possible explanation of what was called telepathy, one that was based mainly on recent research in card-guessing tests for clairvoyance. The percipient might, they argued, become clairvoyantly aware of the state of the brain (or other organs) of the agent or sender when the latter was reported to be thinking of the target idea to be transmitted. These authors did, of course, consider the original Myers hypothesis of telepathy (the direct mind-to-mind transfer of thought) but commented that “there seems no reason to postulate such a process since we can regard telepathy more simply” (i.e., by way of the other two hypotheses—clairvoyance and PK—as just explained). Still more recently Thouless

(1972) took a stronger stand against the mind-to-mind type of transference: "I should of course agree that no experiment proves the reality of mind-to-mind transmission. It seems to me to be a metaphysical and not a scientific proposition [p. 243]."

TELEPATHY AND SPIRIT SURVIVAL

So far, this review has to do only with how the word "telepathy" is to be defined. Myers, who was primarily interested in the question of postmortem survival of personality (PMS), saw in the frequent human experiences of what appeared to be thought transference indications of a possible mode of communication that could function between the living and the dead. He was assuming that a brain was not necessary for the discarnate telepathic communicator. Either the mind-to-mind concept, which was his view of telepathy, or his mind-to-brain alternative (which today we would think of as PK) would meet Myers' need for a possible explanation of communication between a discarnate mind and a living brain.

However, by the time Thouless and Wiesner wrote in 1948, the PMS problem had run into a great deal more difficulty than it had encountered in Myers' mind, although he had anticipated some of it with remarkable clarity. Various research workers in parapsychology realized that messages which mediums represented as coming from spirit sources could have been unconsciously received (by means of the medium's extrasensory abilities) from living persons or from other mundane records, both sources also available to the medium's ESP. This alternative explanation does not rule out the possibility of PMS, but proof would require experimental tests that are not designable from the scientific knowledge of today.

The significant point here is that Myers, in his acceptance of PMS, had what was for him a conclusively established finding that in turn needed telepathy as a principle of communication. The concept of communication with discarnate spirits did logically require telepathy as a means of direct mental interchange, or else (as per Thouless and Wiesner) a combination of clairvoyance and psychokinesis. Which one of these alternatives was the actual means of exchange was not a question in Myers' day; and as we have seen, Thouless was ready by 1972 to dismiss the original mind-to-mind idea of

telepathy as not a scientific problem, one that could not be solved. But then (unlike Myers in his time) Thouless did not consider PMS to be scientifically established; so he did not face the same intellectual necessity Myers must have had to consider (i.e., in accepting PMS he assumed a world of incorporeal human beings supposedly able to communicate with each other as well as with the living). Today, however, Thouless is willing to let the term "telepathy" apply to the clairvoyance–psychokinesis (or general psi) basis of exchange between persons.

On the other hand, some of us think this definition would only confuse the issue. It would amount to applying the name "telepathy" to phenomena that could well be the result of other subtypes of psi, while the Myers concept of telepathic exchange would be dropped from further scientific consideration as an unnecessary hypothesis.

THE SEARCH FOR A DEFINITIVE TEST

Before attempting a firm decision on the way telepathy should be defined let us review the main steps in the experimental researches that have been conducted under the name of telepathy. It is interesting to see the degree to which the local cultural interests of the time (such as the attention given to the PMS issue) influenced the conception of the problem, the methods of testing, and the interpretation of the results. For example, the early experiments in Britain dealing with extrasensory abilities were almost exclusively tests of thought-transference (called telepathy, of course, when that term was introduced). Professor William Barrett and Frederic Myers, who were among the outstanding leaders in British psychical research of the late nineteenth century, were also actively interested in the PMS question. Other early contributors to telepathy research, such as Eleanor Sidgwick and Professor Oliver Lodge, were hardly less concerned.

On the French side of the Channel, however, where interest in parapsychology was comparably great at that stage, the major emphasis and attention were given to the ability which Myers called "telaesthesia" (and which was also called "clairvoyance," "lucidity," and "cryptaesthesia," among other terms) rather than to telepathy. But at the same time, much less respect and favor were shown for

the PMS question among French intellectuals than was expressed in England. Professor Charles Richet (1923) and other French experimenters who contributed to the evidence for ESP did so almost entirely by way of clairvoyance tests. America, on the other hand, had a close cultural relationship to Britain; accordingly the combination of interest in telepathy and in mediumship that occupied the early British psychical researchers prevailed in the U.S. up until 1927

However, at the beginning of the experiments at Duke University, the research workers had the advantage of observing the national cultural differences between Britain and France in their approach to parapsychology. But they also had in mind the different precautionary requirements of the two problems. In contrast to the simplicity of the tests for clairvoyance, telepathy test procedures were obviously complex. The mere fact of having to deal with the control of two subjects (agent and percipient) instead of one, as in clairvoyance, was a considerable obstacle to the desired safeguarding of experimental procedures.

Furthermore, the somewhat unguarded way in which telepathy tests had for a half-century been conducted in various countries allowed equal opportunity for the subject to use clairvoyance instead of (or along with) telepathy. This uncertain background required a completely new approach in any case. It was necessary to test for telepathy without keeping any objective record identified with the mental target of which the agent or sender was thinking. Such a physical record would be accessible to the subject's clairvoyant ESP. It was, at the time, somewhat startling to realize that actually no test for telepathy which excluded clairvoyance had yet been reported! It is true that telepathy seemed the more plausible hypothesis of the two in the cultural setting of the time. On their part, however, French psychical researchers had no comparable problem; they could more easily conduct clairvoyance tests without at the same time exposing the subject to possible telepathic exchange, and they generally did so. (That is, in card-guessing tests of clairvoyance the experimenter did not know the target card until later.)

The first concern at the Duke Laboratory was to set up the best possible controls against sensory functions, and accordingly clair-

voyance tests were given preference over those for telepathy. However, the attempt was also made to test the telepathy hypothesis under conditions that excluded clairvoyance as a counterexplanation.

In the first Duke report, *Extra-Sensory Perception* (Rhine, 1934), the results of the card-guessing tests of clairvoyance mainly offered evidence from more and better controlled tests of that subtype of psi capacity. However, progress was reported also on the “pure telepathy” tests (as they were called) which for the first time provided a situation in which there was no objective record of the sender’s knowledge or thought of the target symbol. This thought was to be “guessed” by the percipient subject *before it was recorded by the agent*. A different method had to be devised so as to permit the recording and the checking of results (and also to allow independent checking, which was considered an essential safeguard). This recording was most effectively safeguarded with the use of a set of numbered cards coded in advance to represent the sender’s thought-symbols which the percipient subject would attempt to guess. Thus a step forward was made toward a “pure telepathy” test, and from the results of these tests it appeared that the scoring rate was as high *without* the use of accompanying target cards as it had been with them (i.e., in the older “telepathy” tests).

But this advance in method was only a temporary gain. By the time *Extra-Sensory Perception* was published, the experimental program had advanced into the testing of precognition and psychokinesis. Thereupon it became necessary to reconsider again the conditions necessary for a test of pure telepathy (i.e., a test controlled to exclude other types of psi). The precognition results offered a new counterhypothesis to telepathy in these experiments. They showed that one subject (H.P.) who had done well in the clairvoyance tests was also able to predict significantly the order of cards in a pack *as it would be after the pack was reshuffled*. Accordingly, this precognitive ability could presumably be used by the subject in a pure telepathy test to foresee the target record as it would be after being decoded. Obviously, then, if any recording of the telepathy targets was ever to be made, the control against precognition would not be effective. The subject in the telepathy test could use precognition, even when clairvoyance was ruled out by the new test procedure. Accordingly, another method was needed for a pure telepathy

test, a method in which there was never to be a detailed objective record; only the end results in the form of total trials and successes would be recorded. The target series were forever to remain in the category of existing only in the sender's subjective thought processes.

And yet it was necessary that this memory be independently checked by the double-blind procedure introduced and used in major researches at the Laboratory from 1933 onward. Elizabeth A. McMahan and Betty M. Humphrey, along with other staff members of the Laboratory, worked out a design for a pure telepathy test of this type, and later S. G. Soal developed still another method on comparable lines. Both the American and British workers reported significant results (McMahan, 1946; Soal & Bateman, 1954, pp. 247-66).

This more advanced test of pure telepathy was considered to be another forward step in sustaining interest in the question of telepathy. The experimental difficulties involved, however, were rather formidable, and the experiment required exceptional motivation. This special motivation owed much of its stimulus to the international reactions that developed in the mid-forties and aroused a strong (though friendly) competitive interest between the research workers in the United Kingdom and the U.S. As a first step, the U.K. colleagues had challenged the clairvoyance findings reported at Duke, claiming that the hypothesis of precognitive telepathy could explain them. The American claims of an experimental distinction between the pure telepathy results and those credited to pure clairvoyance were under some question. The effect of these exchanges (Rhine, 1945, 1946) was to improve the test design for both subtypes of psi.

NO SATISFACTORY TEST

But while the other subtypes of psi were increasingly clarified by experiment, the status of the telepathy hypothesis still remained inconclusive. Soon thereafter, in 1948, as I have indicated, Thouless and Wiesner published their analysis of the alternatives to the Myers hypothesis of a direct mental exchange in telepathy. They proposed the two alternative psi hypotheses to explain the results of telepathy studies, either of which appears adequate to account for present find-

ings. These will have to be excluded to establish telepathy, as I have long been indicating. In fact, in 1950 in my Myers Memorial Lecture in London (Rhine, 1950), I ended a summary of the work on telepathy by saying, "We have nothing on the record that we can, without hesitation and ambiguity, call evidence of telepathy. [p. 20]" (or mind-to-mind exchange). And so far as I know, even today there is nothing that alters that summary. Accordingly the problem of mind-to-mind telepathy is about where it was in 1950, awaiting the possibility of a stage in the future at which it may, if there is sufficient reason, be reconsidered.

Dr. Thouless has, as I have noted, suggested that we define telepathy as the ESP of the mental state or activity of another person, the condition being that the agent or sender would have no external target to identify the thought to be transmitted. As already indicated, it has seemed to me that this is not a clear enough definition to serve a useful purpose. It simply means GESP, or GP (general psi). Consider the case, let us say, of a sender thinking of a cavity in his tooth; the tooth could just as well be the target for clairvoyance as if it were a card in the sender's hand. The telepathy category for such internal targets, or thoughts about them, would seem to be as indecisive as it has been for external ones.

Why, then, should we cling to the mere name if the original telepathy hypothesis no longer serves the purpose for which Myers invented it, especially since even after this long period of time, no secure evidential support for that hypothesis has been found? Even though it cannot be dismissed as an impossible idea, the hypothesis that the mind can, in extrasensorial communication with another mind, act independently of other subtypes of psi, remains only an interesting speculation, one that cannot be confirmed by any known method.

To Myers, of course, it was a very different matter. Such exchange was for him a logical consequence of his acceptance of the case for spirit survival, and it would in turn be at least highly relevant to the PMS hypothesis if telepathy itself were ever to be independently verified. Today, however, the question, like that of PMS itself, belongs on the list of unsolvable issues in parapsychology, issues inactivated because, like many great questions in other sciences, they are simply not yet conceivably answerable by reliable methods.

CONSEQUENCES OF SHELIVING TELEPATHY

What effect will this removal of the telepathy problem or the concept of mind-to-mind exchange from the active list have on the rest of the field? One reassuring answer can, I think, be given without hesitation; namely, that it will mean no loss of any of the rightful (and already validated) territory of parapsychology. No well observed data and no confirmed conclusions drawn from such data will have to be sacrificed if the active pursuit of telepathy is suspended. For the most part the same records, whether of case material or of test results, can be retained and valued, and even the word "telepathy" can be kept in use with quotes added. A telepathy test will of course be understood to mean a GESP or GP test, and there the question should be left for the present.

This decision about telepathy in no way disqualifies the evidence that psi ability of some type does function *between persons* (e.g., the acceptable evidence of GESP, including the so-called "pure telepathy" tests). All this work is as good as ever in its support of the case for psi. It is simply not acceptable as proof that mind-to-mind telepathy occurs; but for that matter, interest in isolated subtypes of psi has considerably declined and the concept of the unity of psi has become more acceptable. It now appears that telepathy, if it should be found to occur, would be only one of the phenomena of the unitary psi process, not the independent function it was once thought to be.

Perhaps the most immediate advantage in shelving the telepathy problem will lie in the clarified scientific policy it will exemplify in the logic of psi research. The firming-up of the psi test design in this way should help parapsychology to make better sense to the scientific mind at large. It recognizes that we cannot adhere faithfully to sound methods and hard logic and still continue to be over-tolerant of preferred but untestable hypotheses which have been carried along indiscriminately from a period now long outgrown.

The most serious consequence at present of having to set the telepathy problem aside is that this removes from active consideration an idea that favors the PMS hypothesis. Telepathy between the minds of the living left less of a gap for such transfer of thought between living and discarnate minds. But this does not alter the facts, although it may help to keep the question alive.

OTHER UNSOLVABLE PROBLEMS IN PARAPSYCHOLOGY

As I stated earlier, quite a list could be made up of research problems in parapsychology for which, as in the case of telepathy, no intelligently designable test is available now. These all ought to be cleared away, I think, and their ambiguous nature labelled for what it is. This is necessary in order to give priority to the problems of the field that *can* effectively be undertaken today. No matter what other inviting values a problem may have, feasibility of solution is obviously a primary essential.

Telepathy, PMS, and Mental Projection

As a basis for discussion of this matter I will begin with a comparison of the problems of telepathy and PMS, mainly because their relation has already been briefly discussed. Also, they are still among the most popular topics of parapsychology research; for example, in a recently published critique of the field by the McGill University psychologist Dr. D. O. Hebb (1974), these two hypotheses received first emphasis and Dr. Hebb stated that he remains unconvinced on them both.

I do not know Dr. Hebb's difficulty; but, as already indicated, I myself find this basic weakness: in both these cases the evidence supporting the hypothesis being tested applies equally well to one of the counterhypotheses. With both telepathy and PMS the test results leave two possible (and reasonable) hypotheses; this has been said for more than a quarter of a century and there has been no serious challenge to this view. What I now add is a more imperative point—that this pursuit of unclear and indecisive research problems is not only inefficient, but it is also not the way to give parapsychology a respected image among fellow-scientists. Unfortunately, these two claims are only selected examples from a numerous classification. Let us look briefly at a few other types of debatable problems belonging to this category of the unsolvable.

As the third illustration of these confusing problems, I will mention the so-called out-of-the-body experience. This is the old but currently popular idea of mental (or spirit) projection by a living person to another location outside his own body, an idea essentially similar in ambiguity to those of telepathy and PMS. In fact, the very same difficulty arises when we ask: How can it ever be proved that

the subject who claims to have projected himself mentally out of his own body and traveled to some other physical location has not simply *imagined* that he has traveled there? The only meaningful evidence offered us consists of claims of psi effects supposed to have been produced by the traveling mind; but the interpretation is always ambiguous. On the one hand, it may be pure imagination with ESP and PK simply operating (as they well may) at a distance; on the other, if the mind can and does “travel,” it still depends on psi ability to give the evidence that is reported. How could a clear distinction be drawn to show that some personal agency did travel in space to the new location and that it was *there* that it exercised whatever psi ability was registered? That is the question to be answered, and no one has yet offered a definitive design for a way of obtaining an answer.

In all these cases there is an unrecognized assumption. In this one it is that we do not yet know that a mind *needs* to (or even can) travel to another physical location in order to exercise a psi effect there. The individual’s parapsychic system may have no space-time-matter limitations—certainly none has been acceptably demonstrated. Accordingly, for the present at least, it is impossible to make a conclusive distinction between the hypothetical assumption of “projection” and the *imaginary* experience of mental travel.

Let us look for a moment at these three mentalistic hypotheses (telepathy, PMS, and mental projection) together, since they are essentially in the same category of inconclusiveness of test design; that is, there is always, so far as we know at present, an equally logical alternative hypothesis. The great question involved in all three of them is whether the mind can act independently of the body (brain), as these questions assume, and (1) make direct contact with a sender’s mind (telepathy); (2) leave its body and travel in space (projection), or (3) interact mentally with a discarnate personality (PMS). For adequate proof, the mind would have to do something empirically observable that could be clearly distinguished from the known types of psi ability attributable to the subject. As it is, in all three types this cannot now be shown to occur (i.e., psi can account for everything) and the question is thus necessarily left up in the air. The best thing we can do, therefore, is to get on with

the more soundly productive types of psi research that will eventually make possible a more informed attack on all these currently unsolvable problems.

Other Futile Hypotheses of External Personal Agency

Various other somewhat similar questions remain that can readily be grouped together loosely with the three already considered. Among them are still other hypotheses of spirit agency, not necessarily discarnate. However, not enough scientific attention has been given these, I think, to warrant more than a brief mention as to where they belong. The religious doctrine of reincarnation is one of the more familiar of these; but it is surprising too how many claims have been made of mediumistic communication with the inhabitants of other planets, with theological realms, and such. What these all have in common is that, like the more familiar type of spiritualist mediumship, the reports of contact with states, transitions, or regions that have no more definitive evidential basis than the subject's own imagination (however much they may be supported by evidence of some kind of psi manifestation) cannot, so far as I can see, yield the acceptable proof of independent agency that is necessary. This is essentially the same defect as in the three preceding cases. Even if the evidence were acceptable by conclusive psi research standards (which is so far not at all the case) it would still be alternatively explainable by means of psi contact with the sources used in the checkup. We may as well face this experimental fact and cease to ease wishfully past it. This is an essential checkpoint of scientific objectivity.

Yet it could not be said about any of these hypotheses that no method will ever be discovered or invented that could allow a reliable test and thus solve such problems. It is not impossible—or to me even inconceivable—that this should one day occur. All that might be needed for such an advance would be that one or more subjects develop reliable enough tracer-sensitivity to identify reliably the sources of information received.

Unclear "Retro" Problems

Another problem that invited experimental attention in the 1920's (although of a much earlier origin) was the popular clairvoyant

object-association test, misnamed “psychometry.” It has also been identified as “retrocognition.” Before much time was given it in the laboratory, however, it was recognized back in the 1930’s that this test of the ability to “visit” and clairvoyantly cognize events in the past was not logically sound; or better stated, it was not a solvable problem. The defect was again the familiar one, that the design of the test was inconclusive. The subject’s retrocognitive responses could not be separated experimentally from his possible ESP of the very same *existing* sources of knowledge the experimenter needed in the checkup. Accordingly, since there is no logically tenable way of identifying retrocognition, the test was regarded as essentially just one possible form of contemporaneous clairvoyance.

Later on, with the advent of controlled researches in psychokinesis, a parallel variety of “retro” questions have also been proposed. In recent years some ideas concerning a backward-PK effect have been conceived and have actually been put to test. As with retrocognitive ESP, there have also been some significant results; but again the question of interpretation remains. “Retrokinesis” was the first name used; and later the term “retroactive PK” was used. So far, the outline of the basic procedure goes like this: first the target series was recorded by the experimenter on tape (magnetic or punched), so it could be replayed exactly later on. (The experimenter did not try to influence it either time.) Sometime, perhaps a week later, the subjects were selected and each was asked to try to influence this mechanically determined order of targets as it was replayed, although he was not told it was not actually the usual random order as in a normal test of PK.

Now then, can anybody say with confidence what was going on here? Were the subjects showing backward PK? (This is, of course, not the question of how retro-PK could work; no one knows how precognition works, or just cognition.) Rather, the question here is the same, in fact, that we have been asking repeatedly: How could one tell from this design whether, as an empirical fact, retroactive PK did occur—whether the subjects did, as was intended, influence the already recorded target order? One counterhypothesis is that it was the experimenter who exerted the influence, and that he used precognition (of what the targets would be later on for the intended

subject) to guide his own PK ability in making up the record of the original random order. So the idea that it was the *subject* who retro-PK'd that original order is obviously only one of the possible hypotheses and (although this is not the main point) a less conceivable one at that. In fact the subjects were not yet chosen for the tests when the target series was recorded.

If, as seems preferable, the results are interpreted as due to precognitive PK (i.e., the effect was registered in the recording of the original random order), this would only raise another double-header question as to whether the (still unselected) subjects even had anything at all to do with the result; the experimenter could have done it all himself. With no more discriminative rational design behind the test than is so far discernible, this type of experiment adds up to another shot in the parapsychological dark. It too belongs, as much as many an older one, on the already crowded shelf of baffling, unsolvable problems.

Some of these problems that qualify for the bad-risk shelf have admittedly been of some value up to a point. The beginning researches have in many cases shown at least that psi of some sort was present; and perhaps something else may have been learned incidentally. But this is a poor return, a weak argument, for a field of scientific research already a century old and in critical need of using the best scientific logic obtainable.

On the other hand, there is no such thing as absolute certainty in research in any science. There is some risk in every research undertaking. But a look through the literature of this field will reveal that for the most part the major questions successfully explored *have* given interpretable experimental answers, answers that have allowed the progressive advances of knowledge on which parapsychology is building. In fact there is a reasonably definable distinction: the good-risk problems have been those that, without making any important untestable assumptions, could be answered empirically by significant results from tests of a single essential hypothesis. While, as in all the sciences, the answers are not always final, those obtained in psi research are well on a par with the more comparably experimental behavioral branches of study. One by one these more secure problems were sifted out of the vast unsorted mixture of

existing heterogeneous claims, and the selection has become the basis of a rather clearly definable field of science.

At the same time, we still have to cope with further problems of fact, method, and interpretation, some that are only now emerging in parapsychology. As a matter of fact, it now appears (as I stated in the Comments section in the September issue) that there may be new limits of experimental method (for the present anyhow) not hitherto encountered; but then too (fair to say) there may be future discoveries coming up that will provide the means of solving these present problems. Such, of course, is always the risk and hope in the sciences; that is the essential challenge. Yet, while we will try to deal with these further difficulties of method and design, using all available help, a very large part of the necessary preparation will consist of ridding the field without any further delay of these older uncertainties of problem selection considered here.

Discerning persons today are more and more looking appraisingly at the great potential of the findings of this research field—some with a view to joining it, others with the urge to support it, and still others wishing to give it what it needs in some effective way. It should be possible to assure them that the psi researcher today is more than ever discriminating and far-seeing in this first requirement of the explorer—that *he know clearly and well what it is that he is attempting to do* and how to interpret the results if his experiment is successful.

The telepathy example, after nearly a century of trial, seems to offer an important lesson for the psi research worker, the necessity of selecting a clearly researchable problem; first, one that does not assume anything the method itself cannot test; and, second, one that with significantly positive results can be expected to answer the one question singled out for the test as designed. The lesson of working always with clear and sharp issues, if fully learned and applied at this stage of parapsychology, could multiply the rate of advance for the field as a whole more rapidly than anything else to be compared.

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