

statistical interpretations and appropriate mathematical formulations. This trend incorporates certain approaches to general theories of psi that are obligatory under the demands of science. But while obligatory, this trend either fails to (or perhaps is incapable of) incorporate easily the basic imperative of psychical traits, that is that these are part and parcel of human nature which has eluded totally the methodologies of the strict quantifier. Ehrenwald refers to trend two as "flaw-determined."

6. The difference in approach and result of these two trends is of exceeding importance in attempting to analyse for a recommended direction in mainline psychical research. As Dr. Ehrenwald notes:

"Indeed, at the risk of rocking the still somewhat wobbly boat of experimental parapsychology by shifting the emphasis from lab to life from computer printouts to plain clinical observation, it may be well to realize that the vast body of statistical findings amassed in the past four decades provides only a fragmented view of the real thing. ESP, PK, and flashes of apparent precognition are responses in a question-and-answer game played according to arbitrary, man-made rules. The rules dictate compliance with such conventional measures as statistical significance, levels of confidence, and tables of random numbers; they demand strictly defined experimental procedures, endless repetition of tests, and replication of positive results if possible.

"But we had better face the fact that the yield of all this Herculean effort has been rather disappointing. Charles Tart of the University of California (1976) has rightly pointed out that the standard experimental approach of the card-calling or dice-throwing type is apt to extinguish rather than to encourage the emergence of psi incidents. It would perhaps be unfair to describe such incidents as little more than freakish laboratory artifacts (Brown 1957); they rather amount to fitful bursts of subliminal behavioral responses, leaving tracks written in invisible ink behind them that can only be made visible in the flickering light of the statistical method. They may be "ESP," but they do not amount to an ESP experience. Indeed, we [can] see ... that psi phenomena of the statistical type are largely due to occasional flaws in our mental organization permitting the random intrusion into our consciousness of ESP or PK incidents or behavior that have no psychological significance

or tangible survival advantage. [They can be] described as flaw-determined.

"We [can] also see that, by contrast there is a world of nonsensory, extrasensory, transpersonal, psychic reality which is difficult to catch in the entomologist's butterfly net to break down into well-defined statistical variables, but which--perhaps for this very reason--is nevertheless possessed of marked psychological significance and a powerful emotional charge. Incidents of this type are apt to meet deep-seated emotional needs in those involved in the experiences. [They can be] described as need-determined."

7. There can be little doubt that while the statistical approach is necessary, the positive rout for mainline psychical research must travel along and through the vicissitudes and revelations signified by the need-determined trend. In pointing this fact out, as Dr. Ehrenwald has done, he has touched upon the survival line for psychical researchers. In this, however, Dr. Ehrenwald is not alone, but is supported in his contentions by Dr. Albert Einstein, a figure of almost unquestionable stature in the annals of mankind.

8. Not long ago certain destructive antagonists made gleeful prominence (in the pages of Scientific American magazine) that Dr. Einstein did not "believe" in psychical research, since in his archives they could not discover any evidence to support that he did. This begs the issue for two reasons. It might be considered that Dr. Einstein was interested in nearly everything, but even so that he was extremely careful and attentive to many universal possibilities not similarly enjoined by psychical research's detractors. Therefore, the few known comments he made pertinent to psychical research take on greater meaning than those from any detractors, and, indeed, those few comments are actually very sensible. One of his first known comments on any element of psychical research resides in his published preface to Upton Sinclair's accounting of certain experiments in telepathy, under the title of Mental Radio, published in 1930. These

experiments, carried out and recorded by Mr. Sinclair, represent one of the significant contributions to the need-determined independent researches typical of the World Wars epoch. Dr. Einstein must have considered these experiments very carefully before he consented to lend his name to them. His short comment regarding them is pertinent and to the point, and portrays the good sense of a thinker of his magnitude.

"Preface. I have read the book of Upton Sinclair with great interest and am convinced that the same deserves the most earnest consideration, not only of the laity, but also of the psychologists by profession. The results of the telepathic experiments carefully and plainly set forth in this book stand surely far beyond those which a nature investigator holds to be thinkable. On the other hand, it is out of the question in the case of so conscientious an observer and writer as Upton Sinclair that he is carrying on a conscious deception of the reading world; his good faith and dependability are not to be doubted. So if somehow the facts here set forth rest not upon telepathy, but upon some unconscious hypnotic influence from person to person, this also would be of high psychological interest. In no case should the psychologically interested circles pass over this book heedlessly. (signed) A. Einstein, May 23, 1930"

9. In addition to this, Dr. Einstein, some fifteen years later, still maintained a sensible view of the materials when, in a private communication to Dr. Ehrenwald, he indicated:

"It seems to me that from a physicist's point of view, we were not right to rule out, a priori, the possibility of telepathy, for the foundations of our science are too uncertain and incomplete." (July, 1946).

10. It must be assumed that Dr. Einstein surveyed and analysed the field of psychical research very carefully (even though evidence of such analyses may not appear in his written archives) for he found himself able to prefer the need-determined approach to the flaw-determined approach.

As Dr. Ehrenwald states:

"... it is only fair to say that the psychiatrist or parapsychiatrist deriving his facts from people rather than from figures has reaped ample benefits from the labor of those distilling them chiefly from figures. In case of doubt, he can still turn to the experimenter for support and reassurance. If necessary, he can even put part of the blame on him for his failure to convince the skeptic. The point is vividly illustrated by a passage from a letter Professor Albert Einstein wrote to me in 1946: "Very interesting, and actually of greater significance to me, are the tests with the nine-year old retarded girl (Ilga K., see p. 18 herein) Also, the experiments with drawings. (Upton Sinclair) seem to me to be of greater weight than the large-scale statistical tests in which the discovery of a minute systematic error may upset everything. Perhaps the reader will note that Professor Einstein's remarks had a seminal influence upon the argument presented in this book...."

"... The major, macropsychological events of the spontaneous type, obeying as they do familiar psychodynamic principles, can well be compared with ordinary, macrophysical, causally determined events. Incidentally, this may have been one of the reasons why the case of Ilga K. or the Upton Sinclair tests mentioned earlier, seemed to be the [suggested approach favoured by] Professor Einstein. By contrast, Rhine's micropsychological ESP experiments of the card-calling type show a close affinity to the randomness and indeterminacy of quantum physical events on the subatomic scale which ran counter to Einstein's faith in a harmonious, well-ordered universe. This may have been an added reason for his suspicion of Dr. Rhine's results. Rhine may well have made his mark by playing with Zener cards. [The universe] in Einstein's view, did not play with dice."

IX THE MEANING AND FUTURE OF PSYCHICAL RESEARCH

1. Psychical research, as rival theory, is obviously a research line looking for a home in some other substantial branch of science. Ejected, as it has been, from mainline psychology, its implications have been observed by the inhabitants of mainline physics, many of whom have already been able to draw correlaries from psychical research that correspond to problematical structures and implications of non-material physics. It is not surprising, then, that the majority of thinkers external to mainline psychical research have been and are eminent physicists.

2. There are also indications that psychical research, so long on its own, may, indeed, become an entity in itself, for its parameters are by now most familiar to psychical researchers and parapsychologists. Even though psychical implications might be incorporated into mainline psychics, it seems unlikely that these implications are going to be pummeled into conformity with the known hypotheses of psychology. Several of these (behaviorism, for example) starting to peter into obscurity because of lack of universal scope in their founding hypotheses.

3. To grasp the future implications of psychical research, therefore, it is important to review and absorb these implications as suggested by respected thinkers from mainline physics, as well as from other fields.

4. To the chagrin (and to the avoidance) of the determined anti-psychical destructive antagonist, many advanced thinkers have already made important statements concerning the implications of psychical research. There is no constructive reason to pretend that advanced thinkers, Nobel Prizewinners and inventive engineers have not made acute observations concerning the existence and implications of psychical materials, and any

attempt to cloak these rather clear and poignant statements must be taken exactly for what it is.

5. For example, Dr. Brian D. Josephson, Professor of Physics, University of Cambridge, Nobel Prize for Physics in 1973 for research in superconductive tunneling (Josephson effect), who has published extensively on his research in physics and on the theory of intelligence has recently (1979) made the following statement concerning psychical materials:

"For the average scientist, psychic phenomena are something that in reality does not exist. His training conditions him to a belief, almost absolute in its intensity, that certain phenomena are possible while others are not. In consequence, if he thinks about psychic phenomena at all, it is in terms of "What must be wrong with the experiments?" rather than that here may be an exciting insight into the possibilities inherent within nature, and within the range of the human capability.

"Nowadays such an attitude is harder to find than it may have been in the past. In recent years a number of reputable scientists have entered the field, with expert knowledge of how to perform good experiments, and the knowledge of how fraud may be perpetrated and how it may be avoided by careful experimental design. Still it appears that the phenomena occur.

"If psychic phenomena are a reality, would it mean the overthrow of conventional physics (as some skeptics have said in arguing against them)? Hardly. The history of science shows clearly that new phenomena do not have to invalidate old physics. Let us suppose that psychic phenomena are mediated by an effect similar to superconductivity (the fact that certain metals when cooled to very low temperatures lose all trace of electrical resistance). Then as with superconductivity, under normal conditions no special effects would be seen. Changing the conditions, however, (as by cooling a superconducting metal down to the appropriate temperature) would allow dramatic effects to occur. The lesson to be learned is that it is never safe to extrapolate from one set of conditions to another.

"Psychic phenomena also seem to violate some of our preconceptions about space, time and causality. But, as a number of writers [have] pointed out, so does quantum mechanics. It is not too far-fetched to say that if psychic phenomena had not been found experimentally, they might have been predicted by an imaginative theoretician."

6. Similar assessments concerning the implications of psychical materials have not been made only recently, but have an incidence of occurrence that gives fundamental intellectual support throughout the history of psychical research, and in those cases where the high-class thinker actually participated in witnessing or conducting psychical experiments, gives fundamental support. Coming up through the years since the demise of the Grand Soviet Epoch, numerous opinions, advisements and assessments have been provided by individuals that have otherwise become established as momentous contributors to the history of general science.

7. Dr. Sigmund Freud, who developed the concepts of psychoanalysis, prepared a paper on the subject "Psychoanalysis and Telepathy" for delivery at the 1922 International Psychoanalytic Congress. He was persuaded by cautious colleagues to deal with another topic instead. The original paper was published in 1941, two years after Freud's death. The paper contained two case histories of apparent telepathic experiences. Freud wrote:

"Psychoanalysis may do something to advance the study of telepathy, insofar as, by the help of its interpretations, many of the puzzling characteristics of telepathic phenomena may be rendered more intelligible to us; or other, still doubtful phenomena, may for the first time be definitely ascertained to be of a telepathic nature."

Elsewhere, in his New Introductory Lectures on Psychoanalysis (Lecture 20),

Freud wrote:

"But taking all the evidence into consideration, there remains a heavy weight of probability in favor of the reality of thought transference."

8. Even Thomas A. Edison, the twentieth century's best known inventor and not inattentive to the old body-mind-soul "nuisance" of mainline psychology, at one time in his career hoped to invent a machine that could be used to contact the dead. He told B. C. Forbes, who later founded Forbes magazine, of these plans (American Magazine, October 1920). The inventor went into greater detail during an interview published in Scientific American (October 30, 1920). He also made pertinent entries in his diary:

"If our personality survives, then it is strictly logical and scientific to assume that it retains memory, intellect and other faculties and knowledge that we acquire on this earth. Therefore, if personality exists after what we call death, it's reasonable to conclude that those who leave this earth would like to communicate with those they have left here."

Edison said he was inclined to believe that "our personality hereafter" will "be able to affect matter" and therefore be capable of influencing "an instrument so delicate" as to record such an influence. In his laboratory, Thomas Edison occasionally engaged in telepathy experiments. These were of a casual and relatively uncontrolled nature; involved were a Norwegian assistant and a controversial clairvoyant, Bert Reese.

9. Professor F.J.M. Stratton, who served as professor of astrophysics at the University of Cambridge, England, and was Director of the Solar Physics Laboratory from 1928 to 1947, spoke of his life-long interest in psychic capacities during a presidential address to the Society for Psychical Research, London (October 23, 1953). Prof. Stratton urged increased quantitative studies and said:

"In time we may find clues which will enable us to regulate the conditions governing some of these phenomena, and the value and trustworthiness of fresh phenomena and of some of the earlier phenomena may both increase. The meteorites, once the subject of scoffing disbelief, now play a part in the discussion of the age and origin of the solar system. Psychical phenomena may one day play an important part in the understanding of mental processes."

10. Prof. Pacual Jordan, German atomic physicist whose work included biophysical random effects, theoretical relativity and cosmology, urged new approaches to parapsychological studies at an international conference, "Philosophy and Parapsychology," at St. Paul de Vence, France (April 20 to 26, 1954). Prof. Jordan expressed his views in a paper dealing with "New Trends in Physics and their Relation to Parapsychology." Dr. Jordan, who had been associated with Profs. Niels Bohr and Werner Heisenberg in studying the fundamentals of quantum mechanics, urged that scientists should:

"abandon the attempt to situate, explain, or convey parapsychical phenomena in the three-dimensional framework of our reality, as we conceive it, specifically on the basis of our study of physics."

Jordan also said that parapsychological studies are likely to show that "relationships will turn out to be far more complicated" than "the mere idea of multi-dimensional space would indicate."

"This may give rise to the suspicion that we cannot depict the world--including parapsychological phenomena--in a simple way, as extending in a definite space and with a definite number of dimensions, but that we must always take into account, as far as complementary relationships are concerned, concrete possibilities of verification and observation."

11. Dr. Henry Margenau, Sloan Physics Laboratory, Yale University, prepared a research projects memorandum for a committee of parapsychologists who met at Cambridge, England, in the summer of 1955. He referred to "the uncomprehending and often hostile attitude taken by scientists in established fields toward psychic research." He said that such an attitude "disturbed" him, because the challenge of psychic studies to physics and psychology "should be welcomed as another feature preventing stagnancy." Prof. Margenau suggested that studies in parapsychology emphasize methodological criteria, together with "speculations about meaning in terms of phytheses, even unconventional hypotheses." He called, among other aims, for a high

degree of credibility on all levels of research, and added:

"Full credibility involves (1) immediate experience or reports of them; (2) certain well-connected theoretical constructs, and (3) rules of correspondence between them. The latter two types of epistemological elements must be provided before the need for accepting experiences as real will be universally felt."

12. The Nobel Prize-winning surgeon and biologist Alexis Carrel who during his extended stays in the United States, worked at the Rockefeller Institute for Medical Research, advocated telepathy research, because he was convinced of human ability to "grasp the secret thoughts of other individuals" without the use of "sense organs." Dr. Carrell was quoted by Joseph T. Durkin, S. J., in Hope in Our Time (New York, 1965) as regarding clairvoyance as the power "to perceive events more or less remote in space and time." Dr. Durkin commented:

"The reason for studying these manifestations, Carrel declared, lay in the light they might possibly throw on the normal activities of the mind, and the additional knowledge they might afford concerning physical forces. He had no particular interest in developing schools of telepathists or clairvoyants; but he suspected that further understanding of these mysterious powers might reveal hitherto unknown capabilities of 'average' intelligences."

13. Dr. Eguene Paul Wigner, who worked on the Manhattan Project, and won the Nobel Prize (with Maria Goeppert-Mayer and J.H.D. Jensen) for work on the structure of the atomic nucleus, wrote in 1979, that:

In ancient times, it provided a great deal of pleasure and surprise if some not obvious regularity in the events around us could be discovered. The oldest such regularity discovered describes the motion of the sun and of the stars. However, the effort to give a common basis to all such regularities seems to have started only about 300 year ago when Newton gave a joint basis for the description of the motion of the moon and that of freely falling objects here on our Earth. Since then, the reduction of the different laws of nature to a common basis has proceeded spectacularly. Even at the start of this century,

the properties of our materials, physical, and chemical were outside the scope of physics. We now take it for granted that these can be derived from quantum mechanical theory.--Which are the further areas to which we wish to give a common basis with that of present day physics? The most obvious area not subject to the present laws of physics is that of life and consciousness and there is no path apparent yet leading to a common basis of physical and mental phenomena.--The question naturally arises whether there are other phenomena, equally far removed from the applicability of present day physics, of which we are not yet cognizant. The answer is probably 'yes' and it is not likely that we ever recognize all of them. In addition, it is quite possible that regularities will be discovered between events which we now consider independent. The completion of the scientific endeavor is not in sight and, some of us hope, will never be.

14. The recent literature of psychical research and parapsychology reveal countless assessments in a similar vein by respected individuals, only indirectly involved in psychical materials, but whose expertise and epistemological scientific ethics made it uncumbent upon them to extensively and exhaustively survey the fields of psychical research, and to draw appropriate positive conclusions. Not only do these conclusions signify the implications of psychical materials, but can and should act as warnings to science in general that the continued avoidance of coming to grips with psychical materials may constitute a serious deterrent in understanding non-material implications as they apply to physics and to studies of consciousness. Consciousness studies began to come into their own only very recently, obviously as a result of the closed doors of mainline psychology, continuing to opt for physical explanations. Therefore, it is not surprising to find, concerning consciousness studies that similar high-class thinkers have sought to link up physics, consciousness and the non-material implications of psychical materials.

15. Sir John Eccles, the noted Australian neurophysiologist, Nobel Prizewinner (with A. L. Hodgkin and A. F. Huxley) 1963 for work on the transmission of signals from nerve cells and, in 1968, head of research

of the neurobiology unit at the State University of New York at Buffalo, addressed the 19th annual convention of the Parapsychological Association, 1976.

"I have been interested in the problem area of parapsychology a lot of my life, and I think I have something to offer to you which will arouse quite a lot of discussion. First, I have a slight word of criticism, a feeling that parapsychologists are too concerned with phenomenology, with the description and investigation of extraordinary manifestations; that they're not enough concerned with the detailed implications of their proposed explanations. For example, I assume you all take it that these phenomena are due to the brain or the mind. Parapsychological phenomena can't be due to the body; it must be the brain or mind. But are these really separable, and how far are parapsychological investigations concerned with brain, or with mind, or with the two together? Is it dualism, or do you believe in their identity, that there is an identity as in the Identity Philosophy, or what? ...

"The trouble about it is, you see, that with biologists in general, neuroscientists are strict believers in the religion of materialist monism in one form or another, and it's based upon nineteenth-century physics. Physicists are much more skeptical of that religion, and I am a complete heretic with regard to it. With the philosopher Karl Popper I have written a book called The Self and Its Brain in which we claim that nonist materialism is dead and that it is superseded now by what we give as a strong dualism. We don't think that materialist monists will cease to believe in it. People have gone on believing in dead religions until the end of their days, but I just think that as a viable religion it's dead....

"The human brain is principally a great folded sheet of about one-half meter square, and about three millimeters thick, of cortex. There are about ten thousand million neurons in the cerebral cortex. The synaptic connections which are made by them, whereby they communicate to one another, number about 10^{13} , and the potential number of connectivities of networks and patterns is infinite. Compared with the human brain a computer looks like a little child's toy. Don't underestimate the human brain. This is the most complex and wonderful piece of matter in the cosmos. And if you want to object to that, you have to use your brain to object to it!

"Whenever you experience any sensation, there is activity in your brain and then you perceive it into your mind, which is World Two, this separate world of the conscious self. It is an entity with existence, a self-subsistent entity. It doesn't exist just because of the brain; it is over and above the brain. This is a strong dualism. Don't think that your sense experiences are in the brain; they are actually in the mind. All your memories and feelings and thoughts and imaginings and dreams are in the mind, though there is a brain counterpart, of course. And there is the self or ego, which has gone on through all your lifetime, which is you, your conscious being. When you go to sleep at night, it cuts off; when you wake up in the morning, it's the same self; you go on the next day, and so on, and this is what you are. And all of this is in the mind. Now, there is an interface between the world of matter-energy (World One) and the mental world (World Two). And this is the most horrendous interface in the cosmos. We know of nothing comparable to this in any aspect of science, the interface between what goes on in the brain, the brain events, and the mind events. This is of very great interest to parapsychology because you're operating with that interface all the time, and I want you to recognize more precisely what ideologically it should be like." ...

"The modules of brain cells are not all open to mind influences all the time. They are opening and closing, depending on the actions of the cells firing. If the modular activity sinks, you can become unconscious, as in sleep. When you dream, a few of the modules will light up, and you will get the dream. The mind is wandering over the brain and when any modules light up it's happy to receive from them and give you whatever they're telling it and make a dream of it for you. And so this liaison brain, big as it is, is not all open to the mind; it is only partly open some of the time, and the mind is scanning it. There are perhaps two to three hundred thousand of these modules available in the liaison brain, and I should imagine that the mind scans over the whole in an amazingly fast way, perhaps like a multiple searchlight, looking at all the modules. But not only is the mind reading out from them, but it is making an integrated picture. When I see this room here I have thousands and thousands of modules, perhaps fifty to a hundred thousand, firing in some patterned array, and my mind is scanning them, and immediately makes the picture that I see in experience, my visual experience. That just gives you some idea of the problems of consciousness.

"Furthermore, it isn't as if each module were by itself; each one goes to a hundred others and receives from a hundred others, to form an immense weaving pattern of modules. It is conjectured that there is a complexity of pattern and time which we know nothing much about, which we can only visually imagine. At any given time there are open modules, closed modules, and half-open modules; some are active, and some are not active; some can receive or give to the mind, and some can't; and some are half and half. They are firing in different manners, and the mind is scanning the whole area instantaneously, and building up from it. The experienced unity comes, then, not from anything going on in the brain, but from the mind, scanning and assembling, synthesizing from moment to moment. And that is how we get the unity of our experience.

"And how does it know how to do this? We experience selectively according to our intentions, and what we're interested in. I can be looking just at three candles and nothing else, and all the rest of the things in the room disappear. We do this moment by moment all the time, you see; the total ensemble of things is not what we're concerned with. We can concentrate on one little piece or another, and make that into our experience for the moment. We don't know how that happens. This is all, again, for the future. But this hypothesis of mine is one which has tremendous explanatory power, and all the other theories of the relationship of the brain to mind or free will or voluntary action have large areas of experience which they don't account for all. But I think I can in principle account for them all on this basis. This is a big story, and I think you can see it has many implications for parapsychology. This is a tremendous change from the old materialist monism where at the best they would say that there are things going on in the brain which give you some mental action, but they would deny that the mind is an independent self-subsistent, existent entity."

16. With regard to contemporary work in the hard sciences, Gerald Feinberg, Professor of Physics at Columbia University, pointed out in an address to the International Conference on Quantum Physics and Parapsychology (Geneva, 1974) that so-called "advance-wave" solutions of the equations in physics could in principle account for certain kinds of precognition without violation of the basic laws of physics, and that, conversely, the observation of apparent precognition may be interpretable as a physics experiment indicating the existence of such waves.

17. Professor O. Costa de Beauregard, noted quantum and information theorist at the Poincare Institute in Paris, carrying the above argument through in complete quantum mechanical detail, concluded his efforts noting that "It goes without saying that accepting the appearance of advanced waves at the macro level means acceptance of the phenomena termed 'pre-cognition' and 'psychokinesis' in parapsychology." Discussing this result from the standpoint of information theory, he sums up its implications with regard to consciousness by stating: "Consciousness has two faces symmetric to each other: cognizance and will. Both should show up in the quantal measurement process."

18. The realization that the "naive materialist" view has been completely shattered by modern quantum theory is beginning to be felt even at the level of popular consumption. In an article for Scientific American, entitled "The Quantum Theory and Reality," by Bernard d'Espagnat, Professor of Physics at the University of Paris, Director of the Laboratory of Theoretical Physics and Elementary Particles at Orsay, and well-known philosopher with regard to the foundations of quantum theory, states that the common-sense interpretation of the world (so-called "local realism") conflicts with both quantum theory and experiment. What must be confronted is the fact that rejecting "local realism" means rejecting at least one of three premises which would appear to be true (at least some part of reality is independent of the mind, ordinary inductive inference is a valid mode of reasoning, and the world is made up of objects that can generally be regarded as separate).

19. In addressing this issue d'Espagnat recognizes that these three premises "are essential to a common-sense interpretation of the world, and most people would give them up only with reluctance; nevertheless, it appears that at least one of them will have to be abandoned or modified..." After a careful analysis of what quantum theory and experiment tell us

about the world as it actually exists, he concludes that "in such a world the concept of an independently existing reality can retain some meaning, but it will be an altered meaning and one remote from everyday experience. ... and that it now seems that unless some extraordinary coincidence has distorted the results the quantum-mechanical predictions will be confirmed. It follows that the local realistic theories are almost certainly in error. With regard to the details of how that reality differs, it is perhaps best expressed by Josephson's comment that the violation of common-sense views of space, time and causality by both quantum theory and psychic functioning are sufficiently similar that had psychic phenomena not been found empirically, theoretical physicists might have been led to predict them.

Appendix A

SOME COMMENTS ON THE CONFLICT BETWEEN RATIONALISM AND EMPIRICISM

1. It seems to me that the time is drawing near when thinkers, (if certain of them have not already) will begin to look back on the conflict between rationalism and empiricism as perhaps the greatest catastrophe in the history of consciousness, save perhaps the inquisitions of the Middle Ages.

2. The metaphysical functions of human consciousness are perhaps the greatest victims of this catastrophe, but average human consciousness, psychical aptitudes, high-stage creativity, intuition, scientific foresight and aesthetics are also probably gross victims.

3. It would appear that rational thinking and empirical observation both are human traits or aptitudes, and to have reduced these into competing and mutually exclusive philosophical doctrines is just so much low-class rubbish. The individual, if he is to survive, needs the benefits of rational awareness as well as the certainties brought to him by empirical facts. To insist otherwise is tantamount to projecting a sour melodramatic pretense, one that ultimately lays waste to the possibilities of consciousness.

4. The reason why this monolithic battle has clanged its way through the last four centuries of philosophical diatribe somewhat escape me; but I suspect that practical people have quietly avoided getting too embroiled in it, and have gone about their goals in life, achieved them, or come near, and I further suspect that it is to these that mankind owes a great deal.

5. Since, in the context of this document, psychical research has been subjected ad nauseam to accusations of being "irrational," an intimate

understanding of this foolish battle is perhaps mandatory to anyone seeking either reason or facts concerning psychical materials.

6. Unfortunately, encyclopediac and dictionary definitions of the concepts involved are not helpful, and only compound the problem:

Rationalism (Columbia Encyclopedia, 1940), a system of thought which assigns the first place in the ascertaining of human knowledge to reason. It holds that the human intellect is capable of discerning everything that can be known. In general the chief appearance of rationalism in western thought has been in combatting the claims of religion....

Rationalism (The New Columbia Encyclopedia, 1975), in philosophy, a theory that holds that reason alone, unaided by experience, can arrive at basic truth regarding the world. Associated with rationalism is the doctrine of innate ideas and the method of logically deducing truths about the world from "self-evident" premises. Rationalism is opposed to empiricism on the question of the source of knowledge and the techniques for the verification of knowledge. ... More loosely, rationalism may signify confidence in the intelligible orderly character of the world and in the mind's ability to discern such order.

Rationalism (Webster's Seventh New Collegiate Dictionary),
1: reliance on reason as the basis for establishment of religious truth.
2a: a theory that reason is in itself a source of knowledge superior to and independent of sense perceptions. b: a view that reason and experience rather than the nonrational are the fundamental criteria in the solution of problems.

Empiricism (Columbia Encyclopedia, 1940), the philosophical doctrine that all knowledge is derived from experience, that is, from sense-perceptions. Empiricism denies the existence of innate ideas or a priori truths, and explains all abstract ideas as merely names, or

short-hand devices, for dealing economically with troupes of particular objects. The doctrine opposed to this is rationalism. Empiricism denies the possibility of certain knowledge, holding that generalizations (based on experience) can never yield more than a greater or lesser degree of probability.

Empiricism (The New Columbia Encyclopedia, 1975), philosophical doctrine that all knowledge is derived from experience. For most empiricists experience includes inner experience--reflection upon the mind and its operations--as well as sense perception. This position is opposed to rationalism in that it denies the existence of innate ideas. According to the empiricist, all ideas are derived from experience; therefore, knowledge of the physical world can be nothing more than a generalization from particular instances and can never reach more than a high degree of probability. Most empiricists recognize the existence of at least some a priori truth, e.g., those of mathematics and logic.

Empiricism (Webster's Seventh New Collegiate Dictionary)
1a: a former school of medical practice founded on experience without the aid of science or theory; b: quackery, charlatanry. 2a: the practice of relying upon observation and experiment esp. in the natural sciences. b: a tenet arrived at empirically. 3a: a theory that all knowledge originates in experience. b: logical positivism.

Logical positivism (Columbia New Collegiate Dictionary, 1975), modern school of philosophy that attempted to introduce the methodology and precision of mathematics and the natural sciences into the field of philosophy. ... The logical positivists held that metaphysical speculation was nonsensical, propositions of logic and mathematics tautological (repetitive), and moral or value statements merely emotive (appealing to or repressing emotion).

Logical positivism (Webster's Seventh Collegiate Dictionary), a 20th century philosophical movement that holds characteristically that all meaningful statements are either analytic or conclusively verifiable or at least confirmable by observation and experiment and that metaphysical theories are therefore strictly meaningless.

7. Of the two, it might seem that the individual trusting to empirical facts might survive more profitably than the individual trying to survive on reason alone, for reason unbuttressed by facts might create some quite fanciful rationalisms. But rather than dancing on either of these two high-wires, it would appear that consciousness might meld the two into "rational-empiricism" or "empirical-rationalism."

8. It is the recent two-hundred year tide of rationalism--together with its dependencies of rational materialism, rational ideologies and dialectical materialism--that have rejected psychical research and the materials with which it has concerned itself. Empirical facts uncovered by psychical research were seen, by rationalists, not to fit at all into any rationalism they might rationalize. The practical man or woman might suggest that perhaps the foundations or base of rationalism might be somehow broadened to eventually include these facts; but it appears that the rationalist, as ideologue, has generally decided to debunk them. It is unclear as to how this maneuver benefits knowledge, but nevertheless this tack has been proceeded with for quite some time. The ultimate solution was, of course, to try to destroy the sources of empirical psychic facts.

9. There are not many convincing descriptions of this battle royal, but one, although perhaps a little prosey, is to be found authored by John W. Dunne as the introduction to his book, The Serial Universe, which is a speculation upon time as a fourth and interlapping dimension. Dunne is not without his credentials as a practical inventor, having been an