

after a careful analysis is completed, there can be vigorous reasonable arguments about the appropriateness of the formulation and its analysis. These investigations leave me reinforced with the belief that people cannot do hard mathematical problems in their heads, rather than with an attitude toward or against ESP investigations.

When I first became aware of the work of Rhine and others, the concept seemed to me to be very important and I asked a psychologist friend why more psychologists didn't study this field. He responded that there were too many ways to do these experiments in a poorly controlled manner. At the time, I had just discovered that when viewed with light coming from a certain angle, I could read the

backs of the cards of my parapsychology deck as clearly as the faces. While preparing these remarks in 1991, I found a note on page 305 of volume 1 of *The Journal of Parapsychology* (1937) indicating that imperfections in the cards precluded their use in unscreened situations, but that improvements were on the way. Thus I sympathize with Utts's conclusion that much is to be gained by studying how to carry out such work well. If there is no ESP, then we want to be able to carry out null experiments and get no effect, otherwise we cannot put much belief in work on small effects in non-ESP situations. If there is ESP, that is exciting. However, thus far it does not look as if it will replace the telephone.

Rejoinder

Jessica Utts

I would like to thank this distinguished group of discussants for their thought-provoking contributions. They have raised many interesting and diverse issues. Certain points, such as Professor Mosteller's enlightening account of Feller's position, require no further comment. Other points indicate the need for clarification and elaboration of my original material. Issues raised by Professors Diaconis and Hyman and subsequent conversations with Robert Rosenthal and Charles Honorton have led me to consider the topic of "Satisfying the Skeptics." Since the conclusion in my paper was not that psychic phenomena have been proved, but rather that there is an anomalous effect that needs to be explained, comments by several of the discussants led me to address the question "Should Psi Research be Ignored by the Scientific Community?" Finally, each of the discussants addressed replication and modeling issues. The last part of my rejoinder comments on some of these ideas and discusses them in the context of parapsychology.

CLARIFICATION AND ELABORATION

Since my paper was a survey of hundreds of experiments and many published reports, I could obviously not provide all of the details to accompany this overview. However, there were details lacking in my paper that have led to legitimate questions and misunderstandings from several of the discussants. In this section, I address specific points raised by Professors Diaconis, Greenhouse,

Hyman and Morris, by either clarifying my original statements or by adding more information from the original reports.

Points Raised by Diaconis

Diaconis raised the point that qualified skeptics and magicians should be active participants in parapsychology experiments. I will discuss this general concept in the next section, but elaborate here on the steps that were taken in this regard for the autoganzfeld experiments described in Section 5 of my paper. As reported by Honorton et al. (1990):

Two experts on the simulation of psi ability have examined the autoganzfeld system and protocol. Ford Kross has been a professional mentalist [a magician who simulates psychic abilities] for over 20 years . . . Mr. Kross has provided us with the following statement: "In my professional capacity as a mentalist, I have reviewed Psychophysical Research Laboratories' automated ganzfeld system and found it to provide excellent security against deception by subjects." We have received similar comments from Daryl Bem, Professor of Psychology at Cornell University. Professor Bem is well known for his research in social and personality psychology. He is also a member of the Psychic Entertainers Association and has performed for many years as a mentalist. He vis-