

collaboration to improve the data base, I suspect that the data will, for this reason, always be open to different interpretation.

Because of the profound implications the existence of psi would have for the neurosciences, I have tried, often with believing students running the experiments, to replicate certain classic parapsychological effects. If our consistent failures were due to "the experimenter effect" [see Rosenthal & Rubin "Interpersonal Expectancy Effects" *BBS* 1(3)1978], I wonder why psi has not helped subjects achieve above-chance discrimination in similar low signal-to-noise ratio tests, not considered by them or by us as psi studies, and where we expected positive results (Douglas 1978). We asked subjects to guess which of several vials of fluid contained a putative pheromone that had no conscious odor. Disappointingly, they selected the vials as randomly as subjects had in our attempted psi replications. Had they shown a small statistical advantage for the "pheromone" vial, how would we have known if it was normal olfactory detection or psi?

## Parapsychology's choice

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Alcock has amply demonstrated the way in which parapsychology continues despite its failure to produce convincing evidence for psi. I would like to ask two related questions: (1) Could parapsychology go on forever even without replicable findings? (2) How might the subject progress in the future?

**Could parapsychology continue forever?** It seems that it could. As Alcock has pointed out, the negative definition of psi and the methods used to explain away failure all help to keep it going. But there is another way of looking at the situation. In most of science – in biology or psychology, for example – progress often occurs very quickly and without one's checking and rechecking every step along the way. Errors due to fraud, carelessness, statistical error, or whatever, undoubtedly occur. They could be detected by meticulous replication, but at a high cost of time and effort. This cost is not justified when effective predictions can be made from theory. Some errors can be tolerated, or, as Alcock puts it, "the truth will out, and error falls by the wayside." This way of conducting science makes sense and is much faster. If all scientific claims had to be strongly replicated before publication, there would be fewer anomalies, but science would progress more slowly and rigidly. Thus, there could be a naturally adopted trade-off between speed of progress and possibility of error. In this way, psi-like anomalies could just be the price we pay for rapid progress, and they will keep being found as long as parapsychologists adopt the heuristics appropriate for the rest of science.

It is noteworthy that parapsychologists often claim, and with justification, to have research methods at least as good as any in psychology. The difference, however, is that psychology can tolerate considerable error and still progress, whereas parapsychology can spend enormous efforts trying to eliminate error and not progress. Of course, this may be nothing more than the jaded view of one who has consistently failed to find evidence for psi over 15 years (Blackmore 1986a). However, it will have some plausibility as long as parapsychology keeps asking the same questions and offering only unreplicable anomalies as answers.

However, parapsychology also claims relevance to many inexplicable experiences. Our present psychology has no remotely satisfactory accounts of mystical experiences, out-of-body experiences, near-death experiences, or visions (mundane or transcendent). People continue to have such experiences and to seek help in understanding them, and they turn to parapsy-

chology for explanations. Here they find some dualist accounts and plenty of use of "psi" as an explanatory concept. But neither of these explanatory ploys works. The experiences remain mysterious, and parapsychology meets the mystery with only a negatively defined, nonexplanatory concept. This it cannot do forever.

**How then might parapsychology change?** First, the long-hoped-for replicable psi experiment might be found. Then psi could cease to be negatively defined, doubters like myself could be appropriately overruled, and parapsychology could progress with "omegic" theory and hypothesis testing (to use Rao & Palmer's [R & P's] neologism). This is certainly possible, but no one can say how likely it is.

While we await this breakthrough, the alternatives depend entirely on how parapsychologists choose to define their subject area; whether it is confined only to psi or whether it includes those "experiences in the 'real world'" out of which R & P say it grew.

We can certainly hope for scientific accounts of such experiences. Already, progress is being made with near-death experiences (Greyson & Flynn 1984), lucid dreams (Gackenbach & LaBerge, in press), and cognitive approaches to out-of-body experiences (Blackmore 1984; Irwin 1985c) – and all with little or no reference to psi. One could speculate that a deepening and extension of an information-processing account of human experience will lead to something close to views expressed in some religions, especially in Buddhism; or, as Alcock puts it, to finding a secularized soul. For example, we may build on the assumptions that the self is a mental construct, that external reality is nothing more than models of the world, and that consciousness is a natural aspect of information processing. This "cognitive mysticism" could force us to accept our fundamental aloneness, our dependence on the physical body, and the illusory nature of the self and the experienced world – while potentially making sense of higher states and transformations of consciousness in terms of models of reality (Blackmore 1986b). Within this approach, the search for the elusive psi can only be seen as a red herring.

The founders of psychic research were deeply concerned with issues of man's place in the world, the government of the universe, and the nature of human experience and suffering (Gauld 1968). This new approach would not, I imagine, have gone down too well with them, but at least it addresses the issues – which a "science of psi" does not and cannot do. It also provides hope of a truly progressive research program. The stagnant program based on psi (which can never be overthrown by blank skeptical denials) could at last be superseded.

**But would this be parapsychology?** That is up to parapsychologists to decide. So far, the tendency is to be interested only in the evidence for psi; experiences are studied only if they seem to involve psi or are psi-conducive. In the past, this caused parapsychology to shrink, losing such topics as hypnosis, multiple personality, or animal homing, and retaining only the "still mysterious" ones. If it continues clinging to psi, parapsychology could soon lose all those human experiences that originally motivated the subject. Though parapsychology might never die, its claims of relevance to human experience would be seen as false.

Alternatively, parapsychology could opt to study the experiences, even though they may prove to require no paranormal explanation. This way (and perhaps only this way) the subject could take up a valid and valuable place within science, but it would have to accept that, after all, its subject matter might fit within the "basic limiting principles" (see R & P's Introduction, para. 4) and with the rest of science (unless or until the breakthrough ever came).

So parapsychology has a choice: Give up exclusive dependence on psi and settle for real progress in studying human experience; or stick to psi – hope for the jackpot, but risk eternal stagnation.