

## BIOLOGICAL ROOTS OF PARAPSYCHOLOGY

WILLIAM MACKENZIE (*Italy*)

The achievements of Dr. J. B. Rhine and his school have demonstrated, by admirably devised statistical experiments, that parapsychological phenomena are not limited to a few paranormally gifted subjects. Paranormal faculties, variously developed, are potentially an integral part of the psychic structure of every human being. From now on, parapsychology can rejoin psycho-biological research and be integrated into a general Science of Nature. Subconscious psychical phenomena thus establish a link between all living organisms inhabiting our planet. Paranormal phenomena will be recognized, sooner or later, as fundamental and essential characteristics of life itself.

The time has passed when scientists advancing the theory that psychical phenomena have roots deep in biological realities, risk academic ostracism. Even at the end of the last century, when materialistic biology was dominant, Ernst Haeckel spoke of the "soul of an organic cell." Since that time many scholars in many countries have caused a tremendous evolution in biological thinking, away from Haeckel's materialistic monism, toward acceptance of the fact that psychical realities are an essential characteristic of every living being.

Psychical phenomena always contain important elements of a parapsychological nature. This may be observed by considering (1) The world of insects, and (2) The world of birds.

1. Without constant and active extra-sensory perception, construction and maintenance of huge termite colonies would be inconceivable. The shape of a termite colony, adapted to

a particular species of termites, requires cooperation by thousands of individual insects, which are blind and operate in total darkness, but which are functionally related to each other. The contribution of each individual is a submicroscopic apport of soil, mixed with saliva, which makes it harden. The place where each grain is deposited changes each time for each individual, since the work of all has been progressing. This coordination results in a rationally built edifice, with lodgings for the Queen, nurseries, food depots, aeration tunnels, etc. The whole, when complete, has a specific form. In all this it is impossible to deny the constant presence of paranormal knowledge. When a metallic separator is introduced, dividing the colony into two parts, the paranormal knowledge and its resulting coordination are not affected. Work continues as before; workers on one side continue to be as well-informed of what happens on the other side. This contains not only implications regarding extra-sensory knowledge of the workers considered as individuals; it has also implications concerning the "poly-psychism" of the group, an essential question for psycho-biology.

2. In the case of certain birds, observed under controlled laboratory conditions, parent birds deliberately poison their offspring when the latter are unable to leave the nest as soon as they can fly. They deliberately select poisonous seeds, grains or insects for the feedings. How does the parent know, unless it has a precise paranormal knowledge of such poisons, how to select them—substances unusual and strange to the normal needs and habits of the species?

Also in primitive peoples, with such phenomena as "lactatio serotina," artificially stimulated by witchcraft in elderly women, the same question arises. Even in organisms situated at the very foot of the biological ladder, parapsychological phenomena are a condition of life. Where life exists, there is constant necessity for choice between conditions and environments, to maintain survival. At every stage of biological reality is disclosed two distinct forms of intelligence. One is peculiar to the individual; the other goes farther and is inde-

pendent of the biological condition of the organism. By it, through extra-sensory means, the individual maintains constant relations with other organisms, with the Bios and the Cosmos, in order to maintain conservation of the species.