

REPORT ON PROFESSOR ROCARD'S STUDIES ON DOWSING

JEAN-ROBERT L'HUILLIER, M.D.

*Centre Européan de Recherches Pharmacologiques
Arcueil, France*

ULLMAN: We are going to hear a report from Dr. L'Huillier which deals with experimental work performed in Paris on a particular type of sensitive, the dowser. May I introduce Dr. L'Huillier.

L'HUILLIER: Mrs. Garrett, Mr. Chairman, ladies and gentlemen. It has been very stimulating for me to listen to your discussions about experiments in parapsychology. I am a psychopharmacologist, but have never applied my experience to parapsychology. From the reports I have heard here on hypnosis and drugs, I have the impression that it is impossible for the investigator in parapsychology to interrelate the factors at play, owing to the great variety of permutations possible with the parameters involved. Time and space dimensions, sensory perceptions and apperceptions, and motor responses must be taken into consideration. Various patterns of integration of these variables in the central nervous system can give rise to a large number of possible states, very difficult to evaluate and especially to produce. However, in some instances it is possible to introduce strict scientific methodology in this field.

I am going to give a very brief report of one of these cases, that of dowsing. The experimental work of Dr. Y. Rocard,¹ professor of physics at Paris University, has given an indication of the type of physical forces for which the dowser might be sensitive. How the signal is detected and decoded by the human organism is not yet possible to say. This ought to represent a great challenge for neurophysiologists.

Professor Rocard's conclusions can be summarized as follows: A sensitive holding the rod very tightly with his arm and hand muscles contracted

seems to react to certain magnetic gradients. These gradients can be expressed by variations of weak magnetic fields in space, or in time if the dowser is in rapid movement. The order of magnitude of these gradients has to be from 0.3 to 1.0 mG across one meter at the level of the subject's chest. Stronger gradients seem to provoke a saturation. The human reaction seems to consist of a blocking of the nervous signals regulating the grasping of the rod, resulting in an abrupt fall of tonus.

I shall briefly report the Rocard laboratory experiments with artificial magnetic gradients of the order of magnitude described. He built rectangular wooden frames, 1/2 x 1 meter, supporting coils of copper wire. By means of a 6-volt battery and a few variable resistances, he could obtain magnetic fields varying from 100 to 0.5 mG in the center of the frames.

The subject was brought to a place where there would be no stray magnetic gradients (this condition is of paramount importance) and was asked to walk repeatedly in front of the coil. After a short training period, during which positive reinforcement was given (in the sense that the subject knew when the current was flowing through the coil and when it wasn't), subjects responded consistently to magnetic perturbations produced without their knowledge. The best results were obtained with intensities of 0.3 to 1.0 mG at the subject's body. The use of a second coil to reinforce the signal, synchronized with the first, brought the hits to 100 percent. On the other hand, the application of two small magnets on the forearms of the subject completely abolished his capacity to respond. If nonmagnetic blocks of the same size, shape, and weight were used, the response was not affected.

We think that the Rocard studies deserve consideration, as they represent an attempt to analyze—by physical means—the transmission and decoding of information which appeared to be extrasensory. We hope that this report will generate interest, so that other specifically competent researchers will feel prompted to repeat these experiments and expand their scope.

TART: What precautions were taken to be certain that there were no sensory cues as to when the magnetic field was switched on and off? Is there any possibility that the coils might slightly contract owing to the magnetostriction effect?

L'HUILLIER: No. The fields involved are extremely small. There are no other physical effects in these experimental magnetic fields besides those picked up by the dowser.

BELOFF: Has this only been tried on one subject so far?

L'HUILLIER: I don't know how many subjects have been tested, but I think that even ordinary persons might achieve this sensitivity by proper training.

BELOFF: In other words, just ordinary volunteer subjects who have no special gift for dowsing could succeed after training in reacting this way, and achieve 100 percent hits?

L'HUILLIER: Yes, it seems so.

SERVADIO: For centuries the question of dowsing has been very controversial. This type of research is just what we need to limit a certain category of dowsing to where it belongs. The rest may be of a completely different nature.

ULLMAN: I wish to thank Dr. L'Huillier for his report. It is important to realize that even though scientific concern with parapsychological phenomena has been going on for many decades, definitive experiments to evaluate possible electromagnetic effects have not been carried out. No one is in a position to say that they might not be an important factor in connection with results that are obtained. Therefore, any clue, such as the one we have just heard, that there may be a certain sensitivity to specific fields of a definite intensity range, is an important lead.

REFERENCES

1. ROCARD, Y.: *Le signal du sourcier* (Paris: Dunod Editeur, 1962).