PHYSICAL MEASUREMENTS IN DOWSER-EXCITING ZONES

JOSEPH WÜST (*Germany*)

Since publication of Barrett and Besterman's *The Divining Rod,* British and American psychologists have held that performances of dowsers and pendulum operators are traceable primarily to paranormal ability. Physical causes, such as perception through exceptionally sensitive senses, or their indication through peculiar reflexes of the voluntary or involuntary nervous system, are thus dismissed. To determine the truth of the matter, experiments must be presented which show measurable changes in physical values in the reaction zones of dowsers, if such exist. Laboratory tests can establish whether such reaction to outward, artificially-induced influences is by myotonic reflexes: involuntary muscular tension-changes.

Certain surveys show that, in areas of dowser reaction, there are possibly present changes of magnetic horizontal intensity, electrical soil conductivity and radioactive influences. Therefore such physical causes should be taken into account, without, however, ignoring a possible parapsychological explanation.

Surveys of magnetic horizontal intensity were carried out in Bavaria and the Tyrol with Wüst's Local Variometer, tested for sensitivity and exactitude by comparison with a magnetic balance of the "Askania Werke" by the director of the Geophysical Institute, Prof. Reich, of Munich. Spots tested were always first established by the dowser, then checked instrumentally. In many cases, results coincided astonishingly. Spots with strong increase of magnetic field

seemed to affect the dowsers strongly. There were also areas of reaction in which no stronger magnetic field was indicated.

A second physical method tested the electrical conductivity of soil by a modified ground inductor. When exciting zones were measured there was found either a maximum of conductivity or a transition from a higher to a lower conductivity. In the case of fast-flowing underground water, the exciting zone was indicated by a geo-acoustic method by listening at the surface with a crystal microphone with a sound frequency of over 6000 hz. In clear windless weather, exciting zones in many cases are characterized by a heightened air potential.

Similar experiments were conducted by the French engineer Cody during surveys at Le Havre. His observations, which are still being checked and are not final, tend to indicate existence of infiltrating earth emanations, possibly a ray of slow neutrons brought into being by the influence of radium emanation on certain ground minerals—those containing beryl. The intensity of earth emission has a daily and a yearly course. There is a possible connection between his findings and the fact that there are many cases of cancer in the area.

These investigations all indicate that magnetic earth-electrical, seismic-acoustic, air-electrical and radio-active variations are measurable. Laboratory experiments by Haschek, Herzfeld, Tromp and Wüst show that dowsers also, under these artificial conditions, will react to such field variations and oscillations. Not all dowsers react in the same way. Many are particularly sensitive to one or another form; others adjust themselves to several forms, then react only to a particular one. Such action is comparable to concentration of attention on definite impressions received from a single sense—sight, for example.