

## **98/06 - "The Meaning-Switch - Investigation of Pre-Cognition in an Operationally Closed System"**

Instituição/*Institution*: T.REG Systems Research Labs, Staufen - Germany

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**Objectives:** We investigated a Triggered Random Event Generator (T.REG) for excursions from randomness during an intention task experiment and the effect of a so-called Meaning- or M-switch, whereby subjects can partly invert sequences of the output bit stream. We tested for hypotheses on mean and variance of scores, and correlation of gain with trial and participant numbers, indicative of individual and "morphogenetic" learning. Excess correlation between physical and psychological variables as a test for the Model of Pragmatic Information (MPI) was analyzed.

**Methods:** The T.REG is an electronic device for sampling bits from a binary stream of states, triggered by the subjects physiology. Brain electrical activity is measured at the forehead with one-channel differential EEG. Acoustic feedback is given for cumulative score deviations from theoretical expectation. 22 subjects performed in ten trials of approximately 5 min. duration and generated 3 Mbits each. In the last (tenth) trial the true physical REG was replaced by a similarly triggered but deterministic single-seeded Pseudo-REG (PREG) without people knowing. The instruction was to generate increasing pitch in the feedback tones.

**Results:** Without any subject the T.REG performs as a good random number generator. In PREG trials a clear mean shift was observed and gain showed positive but non-significant correlation with the participant sequence numbers. Individual learning in non-PREG was negative. M-switch activity, consistent within subjects, revealed five distinct clusters. Psychological variables deduced from M-switch and event timing correlated with physical variables significantly higher, showing 17 instead of 10 expected significant correlations ( $P=.03$ ).

**Conclusions:** There is no evidence that operational closure, thus conceived, is capable of enhancing precognitive performance. However, subjects seem to be able to discern between PREG and non-PREG conditions, which should be investigated in a follow-up experiment. A result from a previous study concerning increased variance could not be replicated. The M-switch proves as a promising and simple tool in psycho-physical REG experiments leading to many psychologically interesting results.

### **Publications:**

Braeunig M. and Faul T. (2009), The Meaning-Switch – Investigation of Precognition in an Operationally Closed System, *Bial Summary Report 98/06*

- Zeitschrift für Anomalistik (ZfA) planned for 2010.

- Journal of Scientific Explorations (JSE) planned for 2010.

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