

Título/Title: "Retrocausal Signalling with Prestimulus Response"

Instituição/Institution: Geonet Technologies, Inc., Beverly Hills – USA

Duração prevista/Estimated duration: 2003/02 - 2003/12

Investigador/Researcher: Dr. James Spottiswoode

Abstract:

This project aimed to determine whether a novel kind of precognition effect, called pre-stimulus response, could be used to reliably transmit data backwards in time by a fraction of a second. The Pre-Stimulus Response protocol consists of exposing individual subjects to a startling audio stimulus at randomly selected and unprompted times. In experiments using a single subject subjected to approximately 10 such audio stimuli over a twenty minute session May and Spottiswoode found that the 3.5 second long epochs preceding the sound stimuli were much more likely to contain a skin conductance response than a corresponding set of control epochs in which no sound was about to be played. The difference was highly statistically significant ($N = 290$, $Z = 5.648$, $P = 8.1 \times 10^{-9}$).

In this experiment the same audio stimuli were used and were presented in an identical manner and number to the conditions in the single subject experiments described above. But between 15 and 52 subjects participated simultaneously, either all hearing an audio stimulus or a silent control simultaneously. The purpose of this arrangement was to allow for the summing of the number of skin conductance responses (SCR's) observed across the set of subjects at each stimulus time. If this number exceeded a certain threshold the probability was high that the upcoming stimulus would be an audio startle. If lower than another threshold, the upcoming stimulus was likely a control.

Six multiple subject PSR trials have been performed with subject numbers ranging between 15 and 52 persons. A total of 220 subjects have contributed data with a result for the SCR counts of $Z = 0.389$, $P = 0.35$. If the subjects had exhibited pre-stimulus response at the same rate per session as in the single subject experiment the multiple subject experiment would have yielded $Z = 4.817$ which is significantly different from the Z-score observed, $Z_{diff} = 3.131$, $P = 8.7 \times 10^{-4}$.

It is therefore concluded that the PSR effect did not replicate in the group setting. Various explanations could be hypothesized ranging from psychological, based on differences in set and setting, to fundamental along the lines of a limitation to the precognitive effect. However, a

reanalysis of the single subject data suggests an intriguing alternative. It appears that the single subject data may have been entirely due to a paranormal experimenter selection effect. If this interpretation of the data is correct, the multiple subject experiment would be expected to produce a trial effect size of $0.33, \pm 0.41$, statistically indistinguishable from the observed trial effect size of 0.16 ± 0.41 .

Título/Title: "The Pro Attitude and its Relationship to Psi in a Psychophysiological Study involving the I Ching and the ProComp+ Neuro-Biofeedback Apparatus"

Instituição/Institution: Anomalistic Psychology Research Unit, Dep. Psychology, University of Adelaide – Australia

Duração prevista/Estimated duration: 2003/03 - 2004/02

Investigadores/Researchers: Dr. Michael Thalbourne, Dr. Lance Storm

Abstract:

The first part of this project involves the use of the Chinese book of divination, the *I Ching*. Following on from two successful studies, the present investigation is a replication and extension of the previous findings. The goal is to test a total number of 200 participants, half of them from the general population of metropolitan Adelaide, and half of them students, mostly from the University of Adelaide. The *I Ching* task requires of a participant to preselect 16 out of 64 "hexagrams" (six-line structures) each of which has its own unique reading. There is thus a probability of .25 of obtaining an outcome hexagram brought about by throwing three coins six times that matches one of the preselections.

Thus far we have tested 170 persons. The overall results are not yet significant, but preliminary correlational data show some signs of the operation of the unitary phenomenon psychopraxia.

This experiment will be used to select "hitters" for the later psychophysiological study, involving neuro-biofeedback training in a psi task.