Título/*Title*: "Psi Reinforcement of Stochastic Mentation - the PRiSM model of dyadic ESP"
Instituição/*Institution*: University of Edinburgh - UK
Duração/*Duration*: 2001/01 - 2002/12
Investigador/*Researcher*: Prof. Paul Stevens
Abstract:
The Ganzfeld ESP protocol has become one of the most common experimental procedures used in parapsychological research, despite inconsistencies in different meta-analysis questioning its reliability. Such inconsistencies may simply suggest a need to standardise the procedure but could also be due to our lack of theoretical understanding of how ESP might operate. Although practically nothing is known about how any information might be transferred, several potential mechanisms are generally considered to have been ruled out by theoretical considerations of the bandwidth required to transmit the complex information required to identify the target. Such 'mental radio' models do have many problems - the low emissive capabilities of bio-systems, apparent ESP over large distances and degradation by noise - and this is generally taken to mean that ESP must not be a signal in classical terms. However, an alternative suggestion may be that no target-specific information is transferred at all. Instead, 'signaling' of a much simpler kind may play a vital role.
This study presented a model that could apply to cases of anomalous information transfer where there is some form of sensory feedback from receiver to sender. It proposes that a 'psi stimulus' is generated by a sender in response to real-time feedback of target-relevant receiver mentation, this stimulus acting to reinforce current mentation by momentarily changing physiological arousal and so reducing the need for complex information transfer. Experimental evaluation of the model involved two extensions to the standard Ganzfeld ESP design: (1) in one condition the sender received false feedback of receiver mentation; (2) receiver skin-conductance was recorded during mentation. No evidence of ESP was found based on target-rank (pi = 0.49) but the predicted skin-conductance response to target-relevant mentation was observed, with significantly higher arousal for relevant mentation than in baseline periods (p=0.04, 1-t). Arousal was increased in both conditions, indicating that the receiver's physiological response related to the sender's reactions

and not directly to the target material. This could suggest that the process involved is more akin to micro/bioPK, with the sender influencing the receiver's arousal at times of relevant mentation.

2002

Título/*Title*:"The use of an implicit grammar task and eye measurements to study the somatic marker hypothesis"
Instituição/*Institution*: Psychology Research Institute, Amsterdam – Netherlands
Duração prevista/*Estimated duration*: 2003/01 - 2004/03
Investigadores/*Researchers*: Prof. Dick Bierman, Prof. Axel Cleeremans, Dra. Eveline Crone
Abstract:
This project seeks to validate Damasio's somatic marker hypothesis with an artificial grammar implicit learning task. The final goal is the development of an instrument to measure, and possibly train, the factors underlying intuitive decision processes. Damasio's theory serves as a theoretical framework to study and differentiate the intuitive decision-making process. In the first experiment thirty-three subjects were instructed to choose one pseudoword out of two pseudowords. One is from planet 'Mars', the other from planet 'Venus'. Both words were constructed by two different sets of rules (grammar A and B). Subjects got a reward (money gain) when choosing the word from Mars, the 'correct' word and got punished by choosing the word from Venus. Because the word from Venus is associated with punishment this word is gradually negative emotionally marked. Likewise the word from Mars is gradually positive emotionally marked. Pupil size variations (temporal resolution of 33 msec) and skin conductance responses were measured while making 100 decisions. After every ten trials the subject was asked on which grounds s/he made her/his decisions. The performance of subjects started to improve without being able to specifically formulate one grammatical rule of one of both words (implicit learning hypotheses). In this pre-conceptual phase the skin conductance response was significantly larger before making incorrect decisions, than before making correct decisions confirming earlier results of Damasio's group. Also the pupil size of subjects was significantly larger looking at incorrect words than looking at correct words