

The investigation was carried out via simultaneous recordings of dream reports and polysomnography, during nocturnal sleep at volunteers' homes; scheduled regular awakenings during the night provided the data for dream and EEG analysis. In the morning, subjects were asked to make a drawing of their dream images.

Congenitally blind ($n=10$) were comparable to normal sighted subjects ($n=9$): the two groups presented equivalent visual activity indices, and no differences in the analysis of graphical representation of dreaming imagery. However, blind subjects presented a lower rate of dream recall than sighted (27% versus 42%).

Both groups had significant negative correlation between Visual Activity Index (VAI) and alpha power in the central and occipital O2 derivations (blind: C4: $r=-0.615$, $P<0.005$; O2: $r=-0.608$, $P<0.006$; sighted: C4: $r=-0.633$, $P<0.01$; O2: $r=-0.506$, $P<0.05$). This correlation was weaker for the blind in O1 ($r=-0.573$, $P<0.05$) and non-existent for the sighted. Blind individuals have significantly lower alpha activity in the central derivation. In conclusion, the congenitally blind have visual content in their dreams and are able to draw it and, as expected, their VAI is negatively correlated with EEG alpha power.

Título/Title: "High Hit-Rate Random Number Generator Experiment with High Gradient of Shannon Entropy Feedback"

Instituição/Institution: Laboratories for Fundamental Research, Palo Alto - USA

Duração/Duration: 2001/01 - 2003/02

Investigadores/Researchers: Prof. Edwin May, Prof. Dean I. Radin

Abstract:

The five senses of which we are most familiar share at least one common property: they are more sensitive to changes than they are to the steady state at their sensory "front ends." For example, we can see a blinking faint light more easily than the same intensity of a steady light. If Rhine were correct when he coined the term Extrasensory Perception, at least with the sensory part, then there must be some "thing" that correlates with anomalous cognition (a.k.a., remote viewing) more when it is changing than when it is not. Based upon a number of remote viewing trials against energetic targets during the US Government funded program, it was sug-

gested that the “thing” was entropy. To date, there have been five separate experiments each of which demonstrated that the quality of anomalous cognition correlates significantly with the gradient of Shannon entropy of the photographic target and not with the entropy itself.

The combined correlation is 0.294 with a 95% confidence interval of [0.127, 0.363]. This result is highly suggestive of a sensory system. Decision Augmentation Theory applied to the random number generator database has demonstrated that the RNG results are best described by an application of anomalous cognition rather than psychokinesis. So in an earlier BIAL Foundation funded study, we attempted to manipulated pseudo random sequences by varying their inherent entropic gradients to very high values. We expected to show a strong correlation of hitting in accordance with the anomalous cognition results shown above. This study failed to demonstrate the expected correlation. It turned out that the feedback displays were insensitive to the entropic gradients of the underlying sequences. In the study reported here, we corrected this oversight; that is, the entropic gradient of the feedback displays in a pseudo random number generator exactly matched that of the driving sequence. Surprisingly, this approach also failed to demonstrate the expected correlation. We will discuss this finding and explore its implication.

Título/Title: “Developing a digital autoganzfeld testing system”

Instituição/Institution: Liverpool Hope University College - UK

Duração/Duration: 2001/05 - 2003/05

Investigadores/Researchers: Prof. Mathew D. Smith, Dr. Jez Fox, Prof. Carl Williams

Abstract:

In this project we developed a flexible and low-cost digital autoganzfeld testing system, called *DigiGanz*, in order to replicate and extend previous psi research employing the ganzfeld procedure. In this procedure, two participants typically take part in any one trial. One participant, the receiver, is isolated in a ganzfeld environment (a mild form of sensory isolation) and is asked to report imagery that comes to mind, whilst the other participant, the sender, is shown a target film clip in a separate room. A judging procedure makes it possible to assess the degree of correspondence between the receiver’s imagery and the target film clip.