# Anomalous Communication: The Transmission of Subjective Significance

## **Results:**

In this project, we implemented the psychophysiological concept of the orienting response (OR) in the investigation of anomalous correlations between physiological activity and events conventionally considered as unperceivable. We questioned whether the subjective significance of an object for one partner of an emotionally related pair modulates the OR in the second, spatially separated partner when he or she is confronted with a picture of the same object.

In the first main study, we investigated 50 participant pairs in a modified Guilty Knowledge Test. In order to (a) prevent a confound of physiological responses with answering behavior, (b) implement a synchronistic timing, and (c) increase a possible anomalous effect, we investigated 48 participant pairs in a modified guessing task in the second main study. This task was tested with 48 participants in a pretest study.

Taken together, results of the three studies provided no evidence for anomalous correlations of physiological activity and events conventionally considered as unperceivable. Analyses of electrodermal response amplitudes, heart rate changes, respiratory changes and pulse activity of the investigated participants revealed no significant differences of the OR (d < 0.15, p > .1) between objects with and without particular significance for the partner. Guessing rates were at chance expectation (p > .1). No influence of moderator variables (connectedness between participants, paranormal belief) was found. Methodological analyses provided evidence for an artifact in prior studies of this research approach: Effects of serial positioning can lead to a biased estimation of the alpha level, whenever physiological responses to stimuli presented serially are analyzed.

## **Published work**

### Full papers:

- Schönwetter, T., Ambach, W., & Vaitl, D. (2011). Does autonomic nervous system activity correlate with events conventionally considered as unperceivable? Using a guessing task with physiological measurement. *Journal of Parapsychology (in press)*.
- Schönwetter, T., Ambach, W., & Vaitl, D. (2011). Does a modified Guilty Knowledge Test reveal anomalous interactions within pairs of participants? *Journal of Parapsychology*, 75, 93-118

## Area(s) of interest:

Psychophysiology, Anomalous Communication, Detection of information

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