

# Ganzfeld - The Next Step: QUANTIFYING THE QUALITATIVE



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## The Aim and Planning of the Project

The digital real-time ganzfeld project at the Department of Psychology at Gothenburg University is aimed at developing a method that will not only incorporate extensive controls against flaws, but will have as its unique feature that of giving us a window on the potential psi-event precisely as it happens.

## Testing Facilities and Equipment:

- The testing facility in the receiver room allows the receiver to make his judgements without leaving the room or even leaving the chair thereby potentially facilitating the use of state specific memory in judging.



Receiver room



Sender room

- The digital video library consists of 24 sets each with 4 film clips chosen on the basis of diverse content, emotional engagement, and "psi markers" - unexpected sequences of events in the film clips.
- The use of soundcards and visual basic along with specific programmes enables the mentation report (the ongoing verbal report of dream-like images from the person in the ganzfeld state) to be recorded in real time (synchronously) as the target film clip is viewed by the sender. Both the film set and the individual clip are chosen randomly by the computer programme. Two clips are shown per session, each being shown for 14 minutes. This means two hits per trial would occur by chance at a theoretical level of  $p=.0625$
- All choices are automatically recorded by the computer. Other security-aspects include an alarm system which signals any violation of the isolation of the sender to the experimenter placed in the receiver room.
- For the viewing procedure the sender is led through the sequence by a user-friendly introduction which allows an adjustment of the relative levels of sound from the mentation report and film. The experimenter makes choices as to language, type of experiment and judging.



Choices: Language, Randomisation source, Type of experiment, Participant Judging and/ or External Judging. The target set is selected randomly from 24 possible sets and one of those within a set is selected for viewing.



Instructions to the receiver concerning mentation report - to be spoken

## Viewing of the target film clips:

The computer selects the film which is shown for 14 minutes and then a second film is chosen from another set.

Target film is chosen and viewed by the sender:

Here it concerns a woman who falls into a fissure and her husband attempts to pull her out.

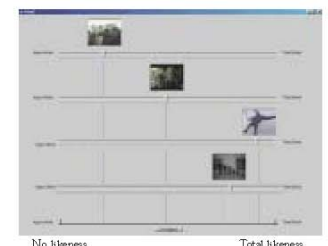


## Judgement procedure:

An on-screen display is provided of both decoy and target film clips along with an auditory replay of mentation reports. These are viewed individually or in pairs thereby systematically comparing the mentation with the content of all four film clips in order to arrive at the best match. The judge can move through the film clip with 5 seconds or 1 minute intervals. A graphic display of the voice activity allows the identification of the verbalisations thereby enabling the respective real-time recordings to be swiftly assessed.

Two films can be viewed at same time and compared for real time correspondences with the ganzfeld imagery as heard in verbal report

The use of on-screen rating scales with slide bars provides a easy means of rating the film and decoys in terms of their likeness of content to the mentation report.



No likeness

Total likeness

## Further Methodological Improvements

Improved accuracy of judgements can be achieved by the use of a book marking system. For each film clip whenever a likeness of verbalised imagery to the film clip is observed, a transcript is typed into the square provided as a bookmark along with a rating expressing the degree of likeness. Clicking later on these transcribed sequences will immediately recall this part of the film clip along with the receiver's synchronised (real-time) sound record. For each film clip a list will be built up of sequences that correspond in likeness to the mentation report. This procedure provides a convenient and logical and quantitative basis for determining which is the target film.

A bookmark list of utterances that appear to correspond in real time with the film-clips is built up here, giving also the real time, a coding for the clip, and rating of likeness.



## ON GOING WORK

- A conventional assessment of psi hitting in identifying the correct film clip ( $p=.025$ ) can be carried out using external judging as well as participant judging. The judge can log in and collect via ftp a copy of the sound file of the mentation report and the associated four films clips from the site where they are stored.
- A quantitative assessment of qualitative hits can be achieved. By keeping a collection of the ratings of individual bookmarks for the whole experiment, an evaluation can be made of the psi-hypothesis and the counter hypothesis that the good qualitative hits arise merely through subjective validation. The psi-hypothesis is that good real time correspondences should be a distinguishing feature of hits.
- The digital ganzfeld is enabling us to test psychometrical hypotheses for example do individuals with so-called positive schizotypy succeed better? And in co-operation with the Freiburg IGPP, physiological hypotheses for example does the real time psi show any identifiable brain states?