

# Mental-Workload-Analyzer – Talking Eyes

## The eyes don't lie!

Unique new method of Usability-Research detects media user's subconscious reactions



- Pupils** reflect our reception and acquisition of information and emotions.
- Pupils** react involuntary to mental stimuli: they increase or decrease in diameter.
- Pupils** react, even when we apparently try to hide our reaction.
- Pupils** expand or constrict due to action of light, and due to psychological incidents.
- Pupils** expand due to „sympathetic arousal“ of the vegetative nervous system.
- Pupils** visualize our interest, our emotional activation, the observer's involvement.

### Mental-Workload-Analyzer: New treatment for Pupillometrie

The human pupil does not only react to changes in the intensity and incidence of light, but also directly responds to changes of cognitive action and emotional activation.

The Mental-Workload-Analyzer can measure, in how far certain stimuli increase or decrease emotional and mental activity.

The Mental-Workload-Analyzer can give a valid account of the way of information processing, the degree of attention as well as the emotional effect of media stimuli. In connection with Eye-Tracking the viewing direction can be measured additionally.

#### Innovation

- Globally unique
- Pupils reflect inner reactions
- Activation measurement
- Internationally patented

### Application

- **Spot-/Copytests:** which parts of an advertisement/commercial are regarded and how?
- **Advertising effect research (video, audio or print):** Measurement of the mental activation during the viewing process and analyses of the individual mode of action
- **Film and TV-production, -program planning:** real-time-analysis of mental activation during the movie.
- **Internet-Usability-Tests:** Do user find their way on a web page well?

Biometric treatments provide researchers with exact and detailed answers for questions that could not be answered adequately with classic methods such as Interviews.

#### Application

- Copytest
- Effect of media stimuli
- Advertising effect
- RTR-analyses
- Internet-usability

### Addressees

- Advertising agencies
- Television producers
- Television stations
- Newspapers/magazines
- Media agencies
- Movie producers
- Branded companies
- Internet companies

#### Addressees

- Advertising research
- Media research
- Program research
- Market research

### Globally unique and internationally patented

The Mental-Workload-Analyzer is internationally patented. Now and for the first time the movement of pupils can be measured reliably regardless of light irritations. The instrument was developed by Dr. Florian Kerkau at the Media Research Department of Berlins "Freie Universität".

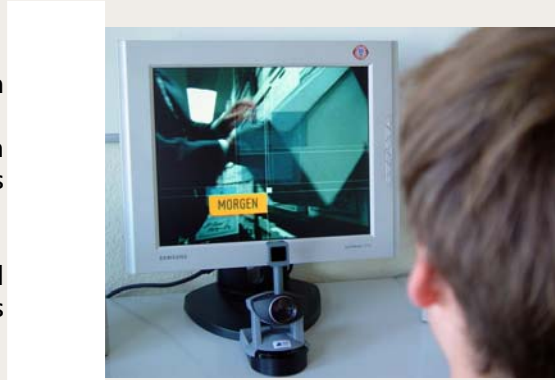
**Structure and Progress**

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- Infrared camera
- Computer network
- New developed software
- Natural test situation

For the test subject the reception situation is natural and comfortable. There is no need to wear camera helmets and distributing cabling is unnecessary.

The test subject's eye is being filmed by a specific infrared camera, which is positioned directly under the screen.

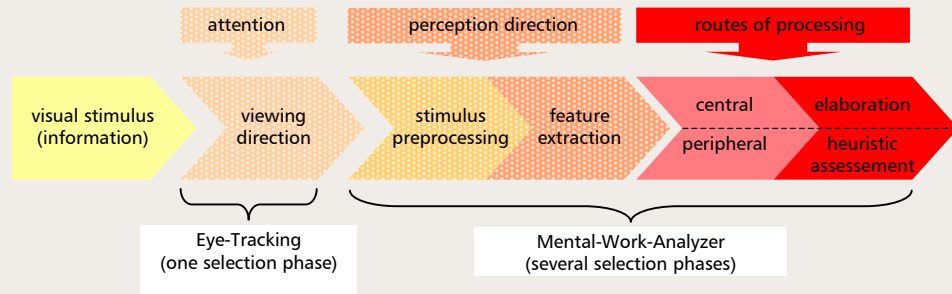


The total system is made up of: microsoft compatible and specifically developed software and a computer network which collects, evaluates and edits the data.

**Information processing: „The Path from eye to brain“**

**Advantages**

- Real effects
- Genuine results
- Pleasant test situation
- Quick analysis



Pieces of information have to pass many selective barriers before we consciously process them. The Mental-Workload-Analyzer can measure the probability of this profound processing.

When biometric data is additionally combined with psychometric data and information from interviews (multilayer analyses), detailed knowledge on the real effect of movies, advertisements, commercials, poster or web pages can be retrieved.

**Goldmedia GmbH**

Berlin-based **Goldmedia GmbH Media Consulting & Research** offers national and international clients high quality consulting and research services in the fields of media and telecommunications. Goldmedia uses in-depth analyses of markets and competitors, offers forecasts and strategic consulting services or the implementation of new business models. The company was established in 1998.

**Goldmedia Sales & Services GmbH**, newly founded in summer 2004 as an independent company, broadens the expertise and services of Goldmedia in the sales area. It supports print, TV and radio companies with analysing their complex sales processes, is a consulting partner for questions of strategic planning and develops market-orientated marketing and distribution concepts.

Goldmedia GmbH and the **Center for Media Research (CMR) of Berlins Freie Universität** cooperate with the commercialization of innovative research methods.

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