AVIEM

• AVIEM – example of exploration of emotions in audiovisual art:

• “We have developed the project AVIEM (AudioVisual Emotion) with an inspiration from VJing tools for experimenting on audiovisual relations with an interface that enables users to compare, arrange and create multisensory compositions.

• With the integration of a tag database, AVIEM forms an audiovisual library where users can sort all single and multisensory components according to emotion tags added by others.”
AVIEM

• “AVIEM puts emphasis on the creation process and strategic use of sound and image in order to catalyze strong emotional response on the viewer.

• AVIEM aims to employ immersion and interactivity with its audio and visual elements designed to engage participant on an emotional stage, thereby enhances the overall experience of virtual environments.”
AVIEM’s research objective – how to trigger emotions with audiovisuals

“In the creation process, AVIEM investigates how to elicit a target emotion using digital abstraction in order to transmit audiovisual signals at a preconscious level.

It gives examples on how to trigger an emotion by building associative audiovisual relations that are derived from repeatable patterns of experiences such as motion, directness of action, degree of intensity and so forth.”
AV cognition and emotion

• AVIEM and cognitive / emotion theory:
• “Recent theories on cognition and emotion points out that sensorial, cognitive and emotional process of the stimuli are strongly related to each other [1].
• Sensorial processing is directly related to audiovisual perception and consists of parallel and simultaneous synthesis of two different sensorial data: cross-modal or inter-modal processing [10].
• Intermodal processing provides the essential data for cognitive and emotional processing by interpreting diverse stimuli from audio and visual channels.”
AV cognition and emotion

• Intermodal processing “plays a crucial role on the emotional response emphasizing that the successful reception might rely on the harmonic perception of the moving image and sound [1].

• Upon the reception of audiovisual signals,
  – the brain starts to mentally construct the meaning of what we see and hear;
  – some elements are recognized consciously and create links to previous events of memory;
  – at the same time the viewing and hearing activate many associative connections at a preconscious level.”
 AV cognition and emotion

• “The meaning that is processed as a result of this complex cognitive evaluation seems to be highly flexible and fluid as it depends on subjective and unconsciously predefined relations [2].

• To sum up, the construction of the audiovisual meaning and the emotional response as a result are highly subjective matters depending on the individual’s personal luggage.

• However, researches on human behavior have indicated that a target emotive response can be produced through strategic employment of sound and imagery [11, 12].”
• Available at: http://www.eecs.umich.edu/nime2012/Proceedings/papers/60_Final_Manuscript.pdf

References in the above article: