The Impact of Personality on Emotion Perception from Auditory-Visual Associations

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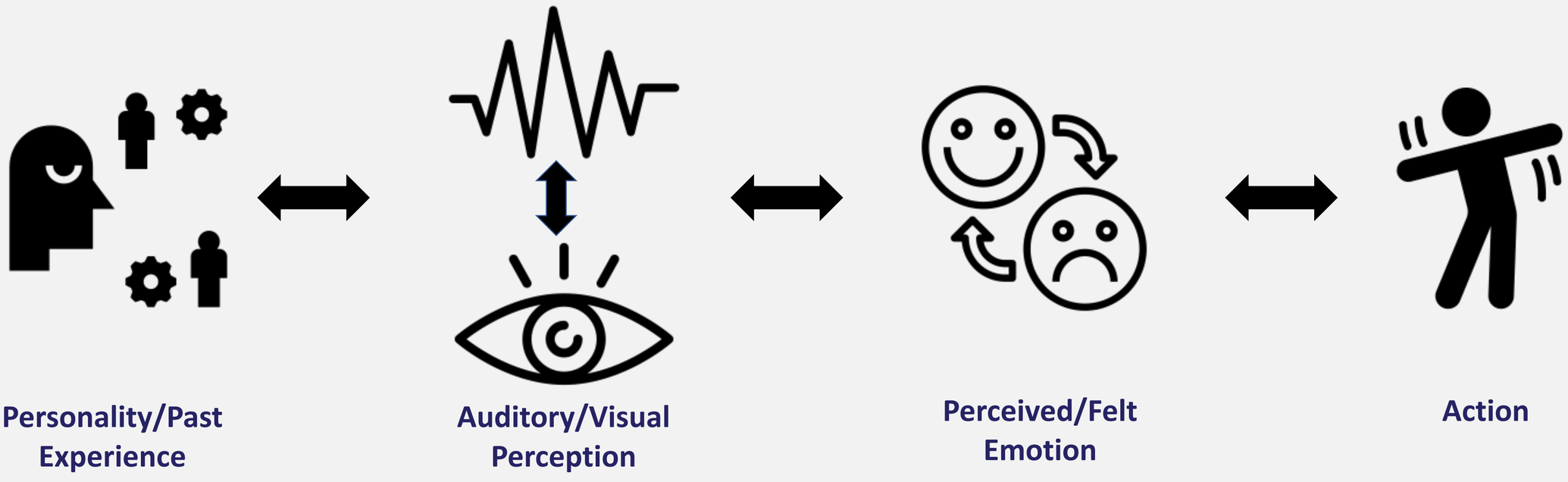

To build adaptive systems of the future, there needs to be a focus on gaining a deeper understanding of how our perception in the dominant senses interact with each other. Patterns of expression vary in many ways; however, personality gives us clues to these patterns [1]. Emotion response has been shown to vary between culture, personality and development [2], so it is the relationship between personality and emotion that can unlock issues in affective computing.

Research into understanding personality in the auditory-visual senses has shown promise [3] and along with research into congruent cross-modal associations [4], a new and individualized way of interface interaction is possible. The goal of affective computing is to move away from having to adapt to the machine and have the machine adapt to our own personality and style. This is the goal of my research and below are some areas that could benefit from it.

Real World Use Cases for the Research

- Reducing anxiety through music [5]
- Interactive cross-modal interfaces for injury rehabilitation
- Entertainment to enrich the user's emotional experience in video games or immersive applications
- Adaptive learning styles for people with learning disabilities

Current Projects:

- The Influence of Age, Gender & Personality Predictors on Auditory-Emotion Association.
- Visualising Violin Audio and EMG Data to Investigate Congruent Auditory-Visual-Artistic Associations.
- A Study to Evaluate How the Leadership Style of a Conversational Agent Affects the Perception of the Transactive Memory System.

References:

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