# **Psychological Foundations Of Empathic Listening**

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## EMPATHY

a. *Psychol*. and *Aesthetics*. The quality or power of projecting one's personality into or mentally identifying oneself with an object of contemplation, and so fully understanding or appreciating it.

b. orig. *Psychol*. The ability to understand and appreciate another person's feelings, experience, etc.

### (OED)

We use empathy as a broad umbrella term, including both:

- merging/blurring self
- maintaining self

### **Behavioral Level**

## Empathy and it's roots in perception action model (PAM)

The coupling of perception and action, that has also been discovered in Neuroscience, has the consequences that the state and circumstances of another human being automatically activate our own representations of the state, situation and object. The activation of these representations automatically primes or generates the associated autonomic and physical responses. (Clarke 2015)

## Neural Level

## **Mirror Neuron Systems**

Mirror Neuron Systems are neural networks that span between different brain areas, especially with premotor functions, where two crucial processes of (music) perception take place:

Experience of one's own actions

with <u>observation of other's actions</u>

- execution of goal-oriented actions
- experience of the above actions [efference copy]
- motor schemas make
   planning and anticipation of
   actions possible

Action

activation of motor schemas

- the observed action (or intention) is understood through a simulation of this action
- embodied experience of an observed goal oriented action

## Perception



## Russian doll model of empathy:

De Waal's (2006) proposed theory on the evolution of human empathy is based on a comparison with a Russian doll.



Empathy involves different levels of processes. The core, the smallest doll, is the evolutionary base of empathy (PAM) and represents the precursor of more complex and developed functions (the outer dolls). (De Waal 2006)

The evolutionary core of empathy is therefore the so called "emotional contagion", an unconscious reaction to perceiving someone else's emotions. (Dirnberg, 2000) Emotional contagion can be defined "as the tendency to automatically mimic and synchronize expressions, vocalizations, postures and movements with those of another person's and, consequently, to converge emotionally." (Hatfield, et al 1992)

Emotional contagion therefore plays an important role in music, especially when it comes to the interaction of band members. It fosters emotional synchronisation between individuals and their intersubjectivity.

### **Intersubjective experience in music**

Highly coordinated group intersubjectivity is based on shared emotions, intentions and cognitive processes among the group members. The common musical activity within the group leads to enhanced understanding of, and identification with one another. (Clarke, 2015)

#### **Experimental evidence**

These processes seem to be especially important for a deep understanding of music: Trained musicians show significantly more activation of motor areas in the brain than non-musicians, when they listen to music. (Bangert, et al 2006)

"A crucial element of esthetic response consists of the *activation of embodied mechanisms* encompassing the *simulation* of actions, emotions and corporeal sensation". (Friedberg, Gallese 2007)

## Structure of empathy

As different situations can lead to highly varying degrees of empathic reactions, it is reasonable to consider a disposition for empathy instead of a fixed trait.

Different reactions can be divided into cognitive and affective empathy:

- Cognitive empathy: Perspective taking, fantasy (e.g. identifying with a fictional character)
- Affective empathy: Empathic concern, personal distress (e.g. sadness induced by seeing someone in pain)

Cognitive empathy is usually associated with intellectual concepts (e.g. Theory of Mind), affective empathy is understood to be based on neural mirroring. However both types have been associated with neural mirroring and often several concepts are activated at the same time in reaction to a stimulus. (Clarke 2015)

## Empathic disposition and music

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Empathy can play a role in music-induced emotional responses:

- motor resonance with vocal (-like) features of music
- empathising with imagined emotion of performer/composer
- empathising with music as "virtual person" (Clarke 2015)

## Empathic Concern

