

Hearing is moving: Relations between auditory imagery and motor control in musicians

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Musicians engage in auditory imagery in order to keep the ideal sound in mind during music performance. A goal in performance is to realise this ideal sound through the precise control of body movements. The accuracy with which movements are timed is typically crucial. Some musical actions require rapidity, some require regularity, and others require specific expressive timing profiles to be produced. I will describe selected findings from recent behavioural studies that investigated how the ability to meet such temporal goals is influenced by the anticipation of sounds produced through a musician's own movements, as well as the anticipation of another musician's sounds. These findings, along with neuroscientific evidence for sensory-motor integration networks in the brain, are suggestive of an intimate relationship between auditory imagery and the motor control processes that underlie music performance.

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