"Move Ten Parts of the Mind, Move Seven Parts of the Body"
An *Embodied* Perspective on the Cognitive Study of the Aesthetic Principles of *Nō* 能
the Classical Musical Theatre in Japan

Andrea Amati
Department of Cognitive Science, Education and Cultural Studies (COSPECS), University of Messina, Italy

Abstract

This research falls within the broad field of computational aesthetics; this applies mathematics to the study of different forms of artistic expression: the artwork *signifiers*.

The object of the investigation is the formal principles of classical musical theatre in Japan – *Nō* 能 – and the aim is to *falsify* the aesthetic laws theorized by Zeami Motokiyo – playwright, actor, and author of a series of treatises that canonized the discipline in the early 15th century. To this end, I attempt to develop a tripartite model of aesthetic experience: comparing the mathematical description of mime and dance – the formal properties of the artwork itself – with the perceptual and cognitive processing of the artist and the spectator.

Scholars have traditionally underlined the particular importance attributed in this type of performance to intersubjectivity (actor-spectator): this could be related to the phenomenon of *embodied simulation* – as observed by the experiments performed by Freedberg (2017) and by Gallese (2020).
It is in this sense that the project can be framed within *Embodied Cognition* paradigm: the aesthetic experience is in fact considered not as an abstract interpretation of the artwork, but as a process that involves the spectator's sensorimotor system.

Specifically, Zeami wrote in *Kakyou* (1400-1424) – *The Mirror of the Flower*:

"Move Ten Parts of the Mind, Move Seven Parts of the Body"

Traditional interpretation of the passage explains that the gesture must be *restrained*; it must *suggest* the whole movement, which will then be completed by the spectator's mind. This process would generate a form of actor-spectator interaction (intersubjectivity by means of embodied simulation), and this should arouse greater interest in the viewer. To *falsify* this thesis, one must then compare the geometry (kinematic and dynamic) of the gesture executed by the actor with the mental reconstruction of the movement, deduced from mapping the observer's brain activity; and verify whether this actually arouses greater interest.

Moreover, the *Noh* stage is structured so that spectators located in different areas of the audience witness a very different performance: the actor directs his performance and gaze predominantly toward a specific position in the audience. This is a situation that could allow us to understand how engagement varies depending on the point of view: think of the so-called *top-down* cognitive process versus *the bottom-up* bodily driven sensorimotor process.