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Ryan Stiffelman
Chapman University, stiff100@mail.chapman.edu

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COGNITIVE NEUROSCIENCE AND ITS APPLICATIONS TO CONTEMPORARY ACTING THEORY

Ryan Stiffelman

Dr. Jocelyn L. Buckner, Chapman University Department of Theatre



Taken from *psy.ox.ac.uk.*

Why Cognitive Neuroscience?

In the last 30 years "the disciplines of cognitive science now have the empirical and theoretical tools to turn age old philosophical dilemmas into relatively straightforward problems." Many non-scientific practitioners of pursuits like literature, music, political science, and linguistics, and now acting have begun to engage with cognitive neuroscience in interdisciplinary research to expand their understanding of their fields. The goal of cognitive neuroscience in acting theory is to illuminate the processes within acting, creating a theoretical structure of the principles of performance, and make the actor more aware of the constant unconscious interplay between their body, mind, and emotion; a more **embodied** (alternatively **mindful body**) model of cognitive activity. In this model the actor is seen as holistic with the mind as an integrated attribute of the body.

Excerpt from: Lutterbie, John Harry. *Toward a General Theory of Acting: Cognitive Science and Performance*. New York: Palgrave Macmillan, 2011. Print.

Acting Background

Prior to the 1950's there was really only two dominant approaches to acting. There was the "**inside out**" method of Constantin Stanislavski, which was based largely on internal emotional identification work. The competing school of thought was that of the "**outside in**" approach advocated for by Vsevolod Meyerhold, with an emphasis on biomechanics as well as motion and plasticity in the body. Over the following fifty years all different practitioners like Bertolt Brecht, Antonin Artaud, Michael Chekhov, Uta Hagen, Stella Adler, Sanford Meiner, Lee Strasberg, and countless others not only picked sides in this argument but also developed their own schools of thought all based the principals put forward by Stanislavski and Myerhold. Each of these methods, a different amalgamation of tools meant to achieve uninhibited, responsive behavior, from which physical and emotional impulses arise.



Taken from neuroconscience.files.wordpress.com

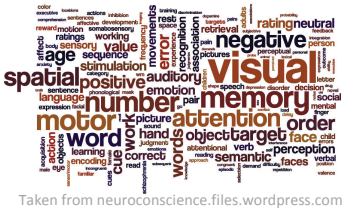
Shortcomings

The inherent issue here is that Stanislavski and Myerhold's "templates" for acting theory, are innately based on a logical fallacy. "Outside in" and "inside out" approaches are based on an idea that mind and body are separate entities. This represents the **Cartesian Dualism** that is so deeply ingrained in our culture. That's why we repeatedly see mind separated from body, feeling from intellect, reason from emotion. "Body and consciousness—or body, mind, and feelings—is a singular thing: everything that comprises consciousness derives from our physical being. A basic truth about what it means to be human is that there is no consciousness without a body. This is also a basic truth for acting: the body and the consciousness that rises out of it are the core materials of the actor's work."

Excerpt from: Blair, Rhonda. *Actor, Image and Action*. London and New York: Taylor & Francis, 2011-10-01. Book.

Insight of Cognitive Neuroscience

Cognitive Neuroscience sees our mind (indeed our very consciousness, reason, and language) are **embodied**, tied inextricably with the body as a **Dynamic System**. Different sensory stimuli, internal (**perception**) and external (**proprioception**), affect one another in a **circular causality** that leads to emotional response. As an actor works (attempting to reach **phase synchronicity** of all higher and lower order cognitive functions), through extensive repetition and trial and error in rehearsal, **synaptic connections** are built so that the memory becomes **implicit**, and they can rely on the same patterns of behavior emerging in the same "given circumstances".



Taken from neuroconscience.files.wordpress.com

Implications

Cognitive science, and it's embodied theory of acting, provides empirically derived basis for the description of the psychophysiological activities involved in acting, suggesting vocabulary that can be used equally across all styles of theatre. With so much of what we do is intuitive, this information will enable us to peer into the mystery of repeating successes and distilling failures with more regular success. When looked at through this lens we are able to understand an empirical practicality of particular acting techniques and theories over others. Concepts in Cognitive Neuroscience, appear to mirror the function of Stanislavsky's emotional memory, Myerhold's biomechanics, Meisner's repetition, Strasberg's affective memory, and Adler's mental representations and imagination. In terms of acting ability, the results are exceedingly positive. The research shows that play is an evolved inclination of human beings, and a skill that can be learned, honed and developed. The habits, thought processes, and emotional patterns that make for a successful actor are already in each of us, training is meant to make it easier for the actor to consistently utilize their cognitive and personal experiences.