

A Semiotic Characterization of the Process of Teaching and Learning a Skilled Motion Taking Wok Handling as an Example

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Abstract: How to teach and learn a skilled motion efficiently has long been a crucial issue in various fields. This research pays attention to the fact that receiving advice from an instructor often accelerates the process of mastering a skilled motion, and thus assumes that a set of advice given to a learner functions as a trigger that introduces a structural change into how the learner performs the motion. This leads to a state transition model of the process of learning a skilled motion with advice. Taking a basic motion of wok handling as an example, this paper observes several actual processes of learning it with advice and captures and visualizes them according to the model. It further characterizes and compares the processes based on the sequence of advice and how the motion performance changes along it. As a result, it becomes obvious that the process differs among learners and that the instructor determines the set of advice to give based not simply on the observable characteristics of the latest motion performance but more strategically upon the history of the interaction with the learner.

Keywords: embodied knowledge, motion capture, skill development, skill science, skill transfer
