

Modelling body movement skill in the Japanese Tea Ceremony practice

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Abstract : *Traditional Tea Ceremony is an activity that has been thought in Japan throughout the years. Practitioners have to learn the correct movements used in the ceremony by observation and practice. Skills are acquired through tacit knowledge, which lead to a difficult representation of right or wrong at a higher level of practice. This research aims to describe the learning curve of movement skill in the Japanese Tea Ceremony in order to distinguish correct, beautiful movements from incorrect positions.*

Keywords : *Tea Ceremony, body movements, bodily sensors*

1. Introduction

Japanese Tea Ceremony is a traditional practice that involves several social and cultural aspects that have been researched from several approaches in the past. The particularities of the elements in the ceremony have been subject of research of a wide variety of fields, such as anthropology, psychology, and even women studies, but they do not often address directly the learning processes.

Cha-no-yu has also been related to other forms of Japanese traditional arts, such as martial arts and theater, in which Japanese traditional learning values are still enforced. They have in common that they rely heavily on the relationship between master and disciple, the learning in stages, and that learning relies in observation and practice [1]. In other words, tacit knowledge is created in the new practitioner through socialization with the higher ranked students and masters.

Body movement skill development has been of particular interest of activities that involve dexterity, such as sports [2], dancing [3], and craftsmanship [4]. The skills involved in the Tea Ceremony belong to this group of activities, but they have not been described by a comprehensive model.

This research will focus on the perceived aesthetic value of the movements of the practitioners. The objective is to identify which information is embedded in the motions of the performer that convey beauty and a sense of high skill. As movements differ from novices and experts, a comprehensive model of the learning curve can be constructed.

2. Proposed Experiments

For the experiment, a group of performers of different study groups will be observed. The group will consist of subjects that

will be categorized in three groups depending on their skill level: novice, experimented, master. For each subject, information about the time he or she has been studying, frequency of practice, age, and gender will be recorded.

In order to find patterns in the motion skill, subjects will be asked to perform basic staple movements of the Tea Ceremony while using movement sensors attached to their body. These movements will also be recoded and analyzed with a motion capture array of cameras that will provide another layer of data to consider.

After performing the recollection of data for the movements, subjects will be asked to describe the movements they are doing with words as accurately as possible. They will be asked to identify the movements in their own performance that think make it good or bad and the reasons behind that selection.

These performances will also be shown to high-ranked masters that are not part of the pool of subjects. They will be asked to identify the correct movements and the incorrect ones, as well as to give a subjective evaluation on the beauty of the performance. These results will be compared to the patterns obtained from the body sensors and motion capture cameras.

3. Expected results

The expected product of this research is a comprehensive model of the learning curve of motion skills involved in the Tea Ceremony. This model will provide new information to the practitioners in order to improve their skill in the future, as well as providing a guideline to assess more objectively the performance of an individual. It is expected that the methods used in this research can apply to other kinds of ritual-like activities that rely mainly in communicating by body motion.

References

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