Outlines of Final Report

Our Tai Chi VR/3D Motion Project Group is one of the three project groups organized by Dr. Nicol Pan, Associate Director, Common Core Officer of HKU for this Intergenerational Participatory Co-design Project (IPCP). Our group members include young old volunteers, HKU staff, students from university and high school, working together most of the time on zoom meeting and exercise Tai Chi at the HKU Library with the VR/3D Motion Capture Equipment.

Based on what we have learnt about “Design Thinking Cycle: 5 stage process” at the beginning of the programme, and we have group discussion. Then we have stablished objectives of our Project, identify problems needed to be solved, frame it as a design question etc. Following this, our group members search App Store and Web to find relevant solutions that could meet our objectives.

Unfortunately, due to our limited resources, time and technical constraints, we have to revised our scope and objectives. Our senior member Lisa to act as Tai Chi Master to demonstrate two Tai Chi postures wearing headset, tracking equipment in the area set-up with 3D motion capture equipment and cameras in the HKU Library.

Members of the group have opportunity to use the VR/3D Motion Capture equipment at HKU Library to exercise Tai Chi and providing physical and digital data for the technical members to analyze the results and consider whether the proposed final product match with our revised objectives. They also shared their experience after the technology testing.

Except the health data issue which we have not touched upon, and there are insufficient data for AI method, yet in future “VR analytics” may be a solution, to compare the motion between the Acting Master and participants; we basically match the revised objectives.

During the process of this Tai Chi VR/3D Motion Project, we realize that technology is not omnipotent, it need to be explored continuously before we could find appropriate solution to meet our original objectives. That also teach us a lesson in designing the “scope and objectives” of our project, we have to face the core problems identified truly and adjust them for a possible complete product.

In light of this, we hope that in future we could develop appropriate technical solution for launching digital format of Tai Chi for all people to learn and exercise it daily and properly that eventually improve their health condition.

As Tai Chi is one of the Chinese traditional culture which relates to the variation of the “Five Phases of Chinese Philosophy” including “Metal, wood, water, fire, earth”, corresponding to “Footwork” including “To advance, to retreat, glancing the left and right, to hold still in centre” and the Ëight Divinatory Trigrams of the Book of Changes” to combine and form thirteen styles, but not thirteen individual “chuan” postures.