

Undergraduate Research Symposium May 17, 2013 Mary Gates Hall

Online Proceedings

SESSION 2O

SENSORY INPUT IN MUSIC, SPEECH, AND THE VESTIBULO-MOTOR SYSTEM

Session Moderator: Ludo Max, Speech & Hearing Sciences
288 MGH

3:45 PM to 5:15 PM

* Note: Titles in order of presentation.

The Effect of Presentation Mode on Memory for Western and Chinese Music Performances

Jacob Cameron (Jacob) Bloom, Senior, Neurobiology

Mentor: Steven Morrison, Music

Mentor: Steven Demorest, School of Music

Previous research has shown that adults demonstrate better memory for novel music from their own music culture as opposed to music from a foreign culture. This passive learning imprinted upon kids as they grow up in a certain musical culture its known as "enculturation". Visual information has also been shown to impact musical memory in adults. Pertinent visual images may augment the encoding process of music and lead to greater recall abilities. In this study, we will include a visual component to the audio information presented. This addition will test the facilitation of visual information to the musical memory of culturally unfamiliar music in adults. Using four video/audio excerpts of musicians performing music in a classical Chinese style and four video/audio excerpts of musicians performing western (classical) style music, we tested the audio and visual memory of adult human subjects in culturally unfamiliar and familiar music. To test them we used twenty-four test items (twelve true tests and twelve false tests) in audio or video format. These different test items can be prepared in three different combinations: audio/audio, AV/audio, AV/AV. Preliminary data demonstrated significantly better overall memory for culturally familiar music. However, music memory scores were higher in the audio condition than in the AV condition in culturally unfamiliar music tests. These results indicate that adding visual information does not aid in musical memory of culturally unfamiliar music. Dichotomous from our initial hypothesis, it is possible that this occurred due to the dominance of visual memory in encoding, or that audi-

tory and visual stimuli provided too much novel information for effective recall.

SESSION 2Q

INTERSECTIONS: ART, CULTURE, TECHNOLOGY, PHYSICALITY

Session Moderator: Jennifer Salk, Dance

389 MGH

3:45 PM to 5:15 PM

* Note: Titles in order of presentation.

The Jazz Aesthetics of Light Gloving

Paul Eschbach, Sophomore, Philosophy, Whitman College

Mentor: Keith Raether, Office of Fellowships and Grants, Whitman College

"Gloving" or "light-gloving" is the art of manipulating light by means of the hands. Typically, LED microlights are affixed to stretch gloves. The placement of lights on the gloves varies; thumb lights and palm lights are optional. My multimedia presentation links the improvisational movement techniques of light-gloving to the improvisational lines, digressions and interpolations a jazz musician introduces and explores in a solo. In the video portion of my presentation, I and Tom Shellum each take "solos" using light glove techniques on the composition, "Rear Control," by a quartet led by drummer Matt Wilson. Our independent styles of light-gloving are much like the independent lines of improvisation between one jazz musician and another. Each of us picks up on different cues from the music. We are improvising on improvisation. Light-gloving is, after all, an improvisational art form; like jazz, its essence is found in spontaneous creation.