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Real-time Interactive Media Art Implementation with DJING + VJING

Haehyun Jung[1], and Hyunggi Kim[1*],
1* Graduate School of Advanced Imaging Science, Multimedia & Film,
Chung-Ang University
h2media@outlook.com, unzi@cau.ac.kr

Abstract. This article covers the interactive media art piece exposed in Loop Barcelona held in Barcelona, Spain. The frequency of using videos in pop music or in festivals for electronic arts is increased; past simple selection of video by using of switcher has developed to real-time interactive implementation with developing IT technology. A real-time interactive media art piece was implemented which responds to audience's gesture being input through sound and visual signs via miniaturized DJING + VJING devices and various sensors

Keywords: Loop bascelona, Media Art, DJING, VJING, Interactive

1 Introduction

Our common interest is the technology's development along with interest on art and games.This emerged technology gave a birth to Interactive Media as a new genre art, and it is in fast development phase.Until now the Media Art is considered as one of pure art but they are entering one of the applied areas.[1] For the implementation by DJING + VJIN, while classic Vjing by Visual Jockey was on-going, other performance techniques like improvised, and up-to-situation's use of Movie clips or Still Image through projection was performed. [2] As Ditital related industry is developing, performance art is progressing accordingly, and there are increased number of works including interactivity as time goes by [3], the development enables enhanced role of new communication media, and it appears as interactivity in performance video, and a image content using movement of actor, so that it permits various interactive performances which overcomes existing limits in performance videos.

This study tried to implement real-time interactive using actor and audience's gestures with DJING + VJING.

2 Understanding VJING

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VJING is a 'playing' visual images with music in live performance.[4] Since Motion graphic and VJing can implement design, video, and music at the same time, this should be regarded as different one from existing imaging area.

Modul is a live video mixer program (Fig.[1]), which enables mapping with keyboard or controller. Selecting images by each clip, mixing between them, changing color, controlling speed are possible. MIDI controller is used to control, select, and APC 40 is generally used.

Fig.1. modul8

Resolume Arena in Fig.2 supports current Modul8's function as well as screen warping and edge blending,(Fig.3, Fig.4). Interactive Visualization(Kinect Sensor/Network communication interlocked), Image visualization with Syphon, Real-time Image control with OSC are supported as well.[5]

Fig. 2. Resolume Arena

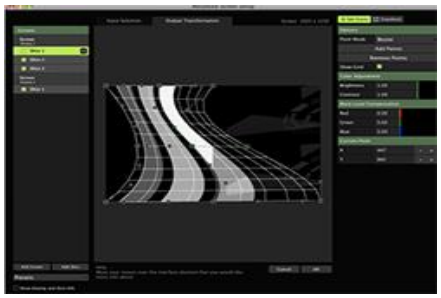

Fig. 3. Screen Warping (Arena)

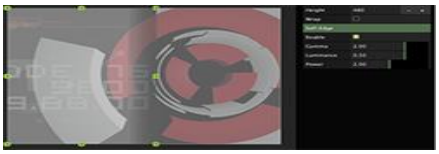

Fig. 4. Edge Blending (Arena)

Fig. 5 depicts Motion Dive, a representative software of VJing sold more than 20,000 copies world-wide.[6]

Fig. 5. Motion Dive

3 Application of Real-time Interactive Media Art

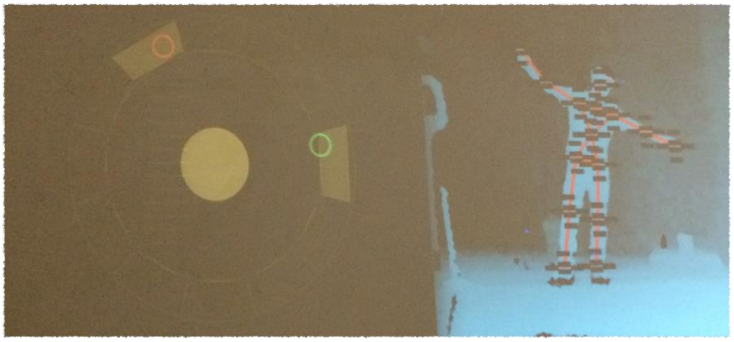

Fig. 6. Real-time selection with Kinect

It is an example of Vjing exposed in 2014 Loop barcelona by which audience can select image by his gesture. Programmed with Synapse for Kinect and Processing, selection is made with Resolume Arena. With 5 areas on the left, track selection, and

with 5 areas on the right, image selection is possible. Audience (Actor) can control by choosing tracks and images using both hands.

4 Conclusion

In this work, differently from simple use of video images, a real-time image interaction which responds to audience (actor) with Synapse for Kinect and Processing, Resolume Arena as using Digital media, was implemented. It uses processing to enables real-time control by audience (actor) to make them more immersed in the process, and finally more real virtual space is experienced. Afterwards, the interlocked action of audience's gestures with image (2d, 3d) will be also implemented, especially I hope to mention that for the 3D area, the use of character-based face detection technology as algorithm for mapping of audience face to a character. Hopefully this can be applied as media many different communications besides media art or VJing.

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