Performance Image Implementation using Audience's Motions

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Abstract. This article deals with a performance work using audience's motions. Media performance <Together> implements image by perceiving audience's movement. Since the experience is formed by interaction between user and work, active participation of audiences is expected.

Keywords: Interactive, Media performance, Media art, Real-time interaction

1   Introduction

Modern society sees newly added value which is created by synergy of art and technology. The integrated technology is named as Culture Technology (CT).[1]

As demands for both art and technology increased, naturally interactivity is getting its importance,[2] and also to satisfy the needs of audiences, the interactive technology is required.

Based on the fact, in this study, the interactive media performance <Together> was planned. The differentiating factor from other past performances is that the work is formed in the real-time interactivity between performance and user. Performance <Together> which adopts principle of real-time response to audience's movement, not a patterned one, is characterized by non-predictability and spontaneity.[3] The media performance based on the characters like those can be called an interaction as original meaning, so namely real-time interaction.[4] This paper would suggest a possibility of real-time media performance which includes active participation of audiences.

2   Contents

In media performance <Together>, the intent was to differentiate the work from existing visual performances by using technique which shows overlapped contents to each other, which are a patter image which took its motive from Korean traditional pattern, and a media contents using created images related with Korean traditional astrology.
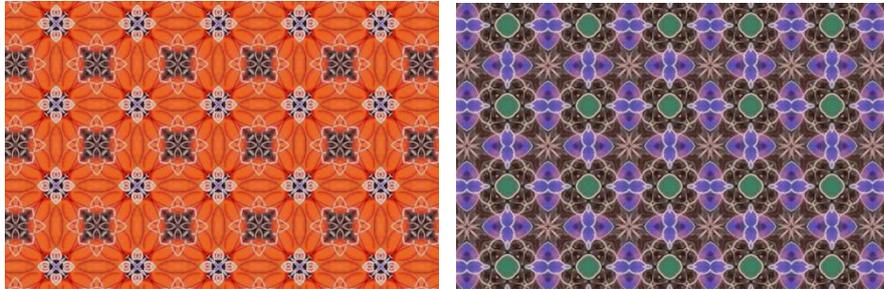
Fig. 1. Pattern images which took the motive from Korean pattern
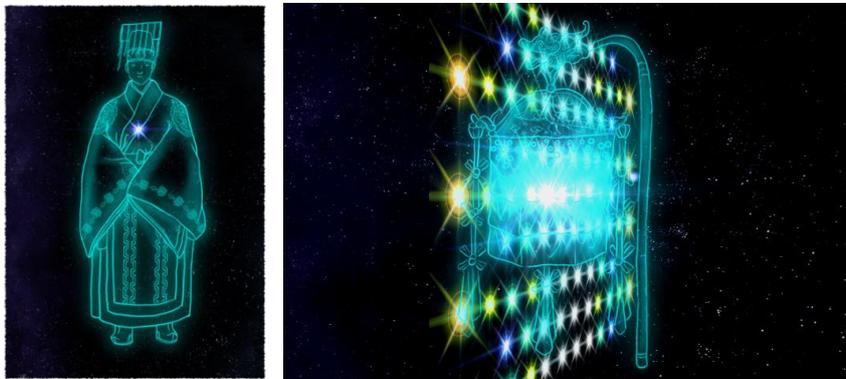
Fig. 2. Media contents using created images related with Korean traditional astrology

Fig 3. Example of a performance based on mixed contents

3   Implementation

1. Technical background
Kinect is a device by which the user uses his body as a controller for game and entertainment [5], and used in <Together> for real-time recognition of audience's motions as an image, and specifically audience's joint recognition as input sources.[fig4]
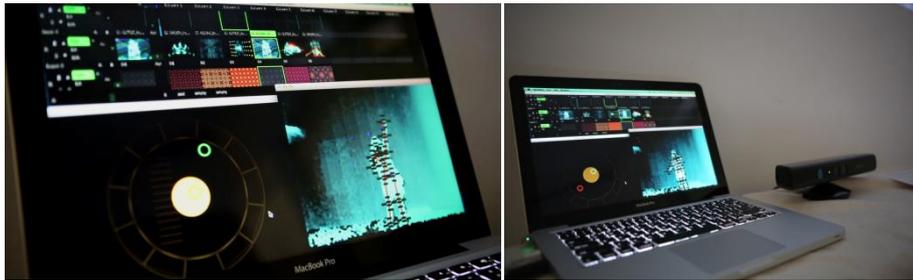

Fig. 4. Joint recognition on Kinect

2. Implementation
First, project image on screen and install Kinect in front of user to recognize audience's movements. [fig5] Audience participates in the performance by perceiving specific motions. By motions taken not pre-planned, but improvised, the performance images is implemented.

Fig. 5. Scene of Media performance implementation

4   Expectation effectiveness

<Together> is expected of audience's active participation due to its real-time interactivity between user and work. Ever-changing images according to participants, actions can be considered as a merit of real-time interaction. There is no difference

between performer and user in the media performance, and this activity can satisfy the audiences' needs for cultural activity.

5   Conclusion

This work was designed for everyone's participation by using movements taken by Kinect. It was how audiences participated as performer to lead performance actively. Media performance with real-time interactive function enhances experience by responding almost simultaneously to actions of audiences.[6] Thus, by the new experience of interactivity which exceeded that of simple watching, the possibility of real-time interaction media performance was verified. Afterwards, development of real-time interactive media performance proportionally to that of Culture Technology is expected.

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