

Plan for Mutual Development of Emotional Content, Dance Performing Arts, and Emotional Technology

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1. Introduction

Revolutionary changes given by the development of science and technology for the performing arts are now daily routines. There are electric-powered lighting design, performing music that is played by sound files and video art, change of the stage, for instances[2]. At the end of 2013, as smartphone penetration rate of 22% year-over-year to four times increase on the rise. In addition, for 2015, private collection that the commercialization of digital holograms. First, this study will overview current trend of the emotional content and emotional technology; and then, it will offer plans for emotional technology and dance performance measures for mutual development.

2. Emotional Technology

2.1. Features of Emotional Technology

[Table 1] Division and Definition of Emotional Technology[1]

Emotional Technology	Definition
Emotional Measurement / Evaluation	Technique that quantitatively measures physiological, psychological, and behavior responses in order to evaluate emotion of users
Emotional Reasoning / Cognitive	Technique that models, reasons, and recognizes human being's emotion based on various emotion-recognition characteristic parameter, which is obtained by quantitative emotion-sensing technique, with engineered method of approach
Emotional Interaction	Interaction technique that can commune with user's emotions, express and transmit them, and maximize the communion of emotion
Emotional Content Creation	Content creation technique that recognizes user's emotion, understands user's desired content, and then searches, creates, and changes various multimedia through knowledge engine; it feeds back the functional evaluation results to new content design.

2.2. Features of Emotional Contents

Feedback-based interactive emotional content figures of product and supplies[1]. It interacts in formation of hardware and software. It is not only ① purchasable, ② portable, ③ easy to use, but also it ④ exists at daily space, and ⑤ delivers text and context.

3. Convergence in Emotional Technology and Performing Art in Dance and Following Changes

The high-tech audience is the most notable change by development of emotional technology in performing. It develops the possibility of communication by emotional technology. It tends to use technology as a tool to broaden visual expressions in performing arts.

Emotional technology itself, however, has property to deliver immediate response; thus it is expected to be used as a tool that helps communication with high-tech audience. If emotional technology with immediate response meets impromptu performance, the synergy effect may become larger. Dance audience who has purchased emotional technology is expected to prepare foundation that current communication can be led to immediate reciprocal response. One can feel what the performer feels as he/she moves. This allows delivery of tactile sensation that was only available in indirect way in past.

The largest change in performing arts expected with the emotional technology may be the destruction of space. First, performing space with Digit Signage installed in the center of city may be used. If performance is fused with emotional technology that signage has, new form of artwork that can communicate with the audience will be born. In addition, emotional technologies that were not applicable in existing theaters can move to other applicable locations; naturally in future, new theaters where emotional technology can be applied will be constructed.

Demand for humanistic education on performing arts will increase, because art provides ① new reproduction technique, ② justification of scientific world outlook, ③ public for scientific technology, and ④ new experiences on the world [2]. Excavation of content as emotion-refinement is rather for scientists or managers who develop emotional technology. Technology of emotion enables the realization of analogue in digital environment. In fact, performing arts is already emotional content, just in analogue instead of digital form.

In 2010, Korea Creative Content Agency has performed support for development of emotional content, such storyteller recruitment. Such policy, however, presents that is does not deeply enjoy culture; it shows that it will use them for once temporarily. Korea Foundation for the Advancement of Science and Creativity provides supporting fund for performing arts with 'Fusion Culture Support Project' every year to support fused creative performance, science storytelling, and science visualization. Especially in fused creative performance field, performance in science or convergence performance are the subjects of support. If, however, the sponsors do not understand and enjoy culture in depth, such support will stop after few trials. Therefore, humanistic education on dance is necessary.

4. Conclusion

Development of science has resulted in digitalization of human beings' emotion; but such development of emotional technology enables analogue control in digital environment full of symbols. Emotional content is a digital cultural content that combines analogue emotion, digital content, and marketing. Thus, combination of emotional technology and digital technology is essential. The emotional technology is daily technology that can be purchased, possessed, and easy to use. Therefore, through emotional technology, artists can secure audience with high-tech.

The fusion of emotional technology and performing arts will bring changes in impromptu performance using audience communication, expansion of emotion with tactile sensation, destruction of space, and construction of new space. In addition, dance studies are expected to be developed and base expansion as the humanity.

In order to develop reciprocal emotional technology and art of dance, interest and respect in each other's field are necessary. Since demands of scientists or managers for humanity education on performing arts will increase, the dancing world may provide humanity education on performing arts and supply sufficient manpower such as cultural artists. Every engineering college and management college may create related classes to let them find the story they need. Dancers must continue to research on emotional technology. In addition, with continuous research and creative activity, the culture that only dancing can possess will last forever.

Emotional content aims to satisfy emotion of users. The most important matter when emotional technology is applied to art is that the author's message, image, or subject to be delivered to the audience must be clearly determined. Commercialization of dance should be looked out while applying dance as emotional content. Choreographers must not lose their spirit of artist and swept by capital or technology.

The scientific technology in past has built sound and lighting system in theater; and image system is taking big part in theater as well. The application of emotional technology will unfold generalization of scientific technology in performing arts, especially dancing field.

5. References

- [1] Korean Society for Emotion & Sensibility, Emotional Technology Survey and A Study for Contents Industry Combining Plans, Korea Creative Content Agency, Seoul, 2009.
- [2] S.U. Hong, Art, science, Ehanksa, Seoul, 2007