

Investigating Changes in Emotional State : *Kansei* Responses to Commercial Films

DaHyun Kim* SeungHee Lee**

* DaHyun Kim (Graduate School of Comprehensive Human Sciences, Doctoral Program in *Kansei*, Behavioral and Brain Sciences, University of Tsukuba, Japan)

kimda@kansei.tsukuba.ac.jp

** SeungHee Lee (Graduate School of Comprehensive Human Sciences, Major of *Kansei*, Behavioral and Brain Sciences, University of Tsukuba, Japan)

lee@kansei.tsukuba.ac.jp

Abstract: Films are not only for projecting graphical content but can also be evaluated from the point of view of *Kansei* i.e; the stimulation sense and emotion in real time. Also, when one views films or moving images with stories, including films and dramas, an audience reaction is caused through various factors; the performances of actors/actress, cinematography, and music, and thus can be moved to tears or feel fear. Especially, changes in emotional state are different from impression and brought about as a result of responding to joy, which is one of the basic emotions of human beings. Moreover, it is suggested that emotion is the most positive aesthetic measurement toward objects. In this study, focusing on emotional movement that is one of many aesthetic reactions in human beings' watching commercial films, we developed an interface for measuring emotional changes. The goal of this study is to apply the output of our quantitative analysis on the results of the measurements to the effective designing and production of films.

Key words: *Sympathize, affective, Emotional Movement*

1. Introduction

Media composed of texts, images, and sound like multiple-information. It is emerging as the emotional media to stimulate senses and emotions of human being. Especially, when watching the media such as narrative films or TV dramas, various emotions, tears, fear or anxiety can be evoked in the viewer through various means. In order to make effective films that satisfy the emotions of audiences, they need to be investigated and analyzed scientifically; need to understand about the change of feelings when the sensitivity information that a producer aims at was transmitted successfully.

2. Aims of the research

The present study aimed to report emotional responses to commercial films as specific data by investigating in real-time, emotion reactions to changes of music, images, or narrative during the course of watching a film. In addition, in films with similar narrative elements, we'd like to investigate why viewers prefer one film. Furthermore, want to know the change of feelings by it and a difference of the sympathy reaction. Conclusively, developing the systems that could be broadcasted emotional responses of the films in real-time can be expected to contribute to make high quality plans and productions of media of images.

3. Evaluation of impression using commercial films

3.1 Outlines of the experiment

This research was planned the preliminary experiment focused on emotional sympathy through the commercial films. Researchers produced a program which can discriminate impressive scenes in real-time simultaneously with chosen images from some portal sites that ‘感動(kandou)’ which has a meaning ‘Emotional movement by a strong impression (Kojien: a famous Japanese Dictionary) .’ of dictionary definition was searched as a keyword. Prior to the experiment, they investigated some personal information of subjects, the time required for watching and preference to films. Also, subjects were asked to choose one feeling that they had from their preferred film genres from ten basic emotional categories: interest, joy, surprise, fear, anger, disgust, contempt, distress, shame, and guilt (Izard 1991).

Researchers of the present study constructed new method for the evaluation free from Semantic Differential(SD) method using adjectives spread as examination of emotions for images and examined the validity. The subjects were selected twenty people those are attaching the media of images in their everyday lives.

3.2 Movies used in experiment

Three commercial films selected from searching ‘Emotional Movement’ as a key word were finally selected by the following factors (Table1).

- Less than 2 minutes for Length
- Available for all ages
- Common features of the plot
- Not so much irritated by languages and sounds

Table1. Form and content of commercial films

| NO. | Production of Movies | Length (sec) | Main actors | Plot |
|------|-------------------------------|--------------|-------------|---|
| CF 1 | Handicaps welfare Association | 60s | 3 | Meeting handicapped boy and dog. |
| CF 2 | More than Medication | 90s | 4 | Sacrifice of brother for his sick sister. |
| CF 3 | Ninos con cancer | 60s | 4 | Gift of sister for her sick old brother. |

3.3 Interface for evaluating impression

They tried to examine more emotionally having subjects choose impressive scenes simultaneously with watching commercial films. Interface used in experiment was created using Adobe Flash version 8. After watching three commercial films, participants should choose the one of the most impressive scenes. They could play them again and when they push the select buttons, the scenes they selected were stored as an image automatically at the same time. It is possible to choose from the first to tenth, and the image chosen first would be sorted again through the second choice. Selecting the images twice, helped to prevent some errors of selection and also improved the credibility of scenes.

4. Results and analysis

4.1 Results

Based on ‘The theory of film genres (Kato Mikiro 1996)’, seven film genres such as action, romance, comedy, war, SF, horror and musical were provided. Romance, comedy and action were selected by turns most frequently. Notably, subjects who chose romantic films were all female. Most of participants selected ‘joy’ regardless of film genres of examining basic emotions through the images and next they selected ‘interest’. But other emotions weren’t chosen without ‘joy’ (figure1). The CF3 was the best chosen for impressive scenes from many participants. In addition, male subjects tended to choose CF2 and 7 out of 9 people who selected CF3 were female.

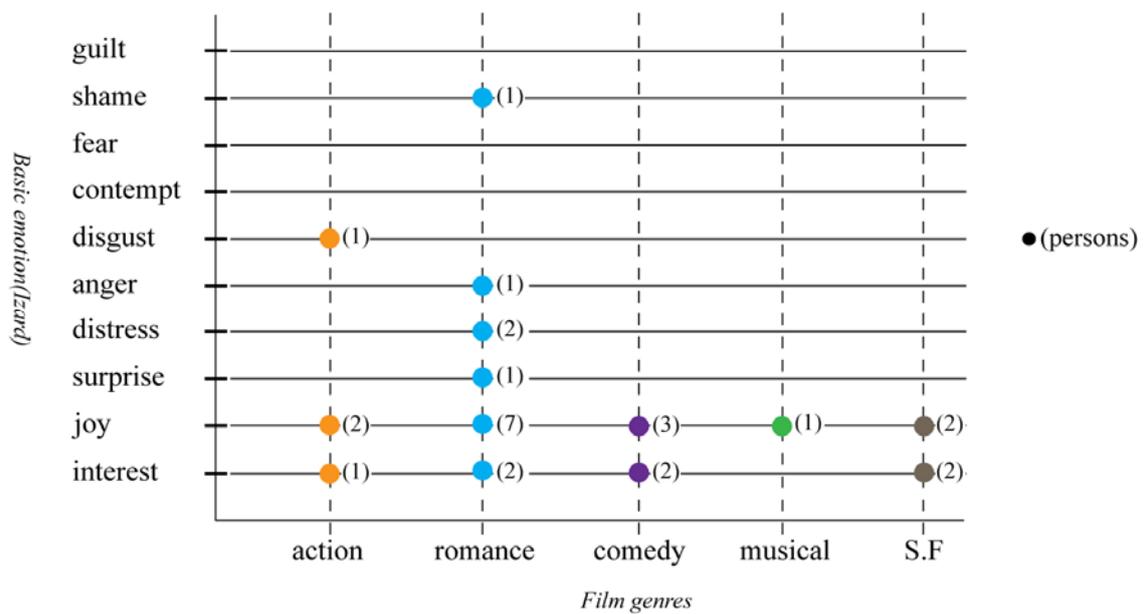


Figure1. Emotions selected by each film genre

4.2 Analysis of scenes

The researchers that major in media design at university classified four sections of the images by writing synopses out a gain according to the development of the narratives (figure2). They classified chosen images in four sections. As a result, in case of the CF3 which participants selected most frequently, no one chose any images in section3. Also, the images of section4 were divided in to two categories. In the case of the CF2, everyone selected identical images in section4, and also they tended to select the same images in section3 (figure3). On the other hand, in the case of the CF1, various selecting behaviors appeared from section1 to section4 and unlike the other two images, the chosen image in section4 appeared in various ways compared with the others section.

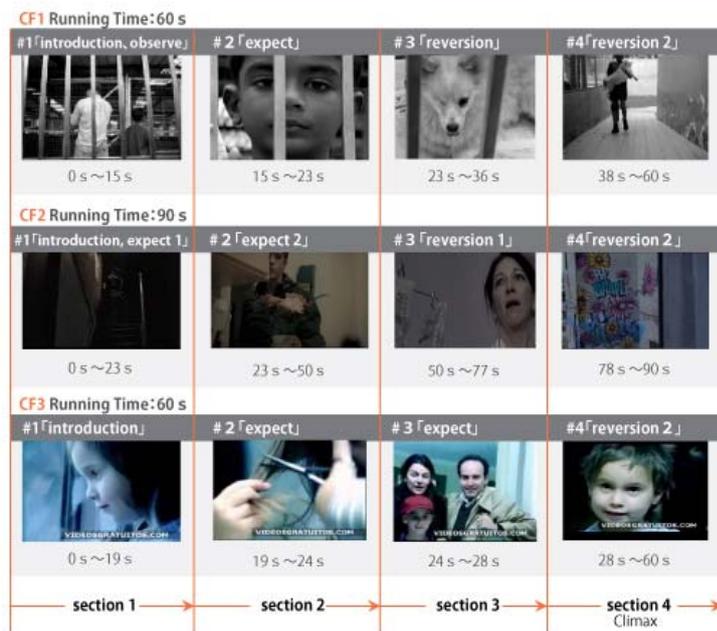


Figure2. Classified of four sections by stories

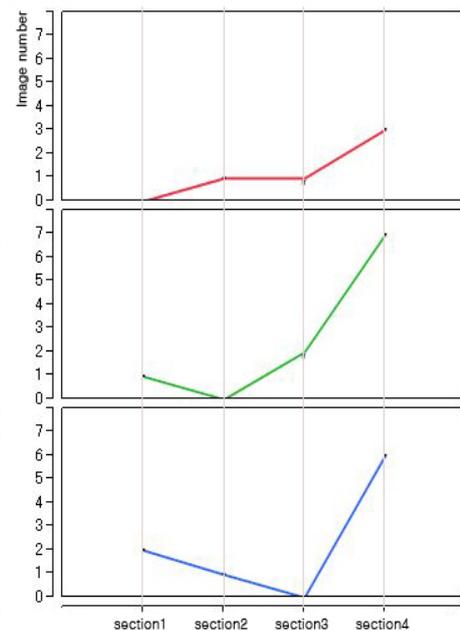


Figure3. Selection of numbers

5. Conclusion and Plans for Further Study

There was no correlation between the time required for encountering the media of images and favorable genres or emotions in everyday life. However, we found that 'joy' is the one that we feel and expect through the images regardless of preferred genre. Moreover, the analysis of the impressive scenes, the more correspond to images those people have impressions those bring more certain climax and the more effective to have the emotions of audiences to move only in the case of commercial films.

This experiment was a new trial to measure some emotions through the commercial films. In order to make up for the weak points for this study, the analysis of data in various ages and statistic results would be essential. In this study, brief commercial films were used to measure emotional responses. In the future studies, we are plans to examine affective responses using short films.

6. References

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