

To Decipher the Capital's Cultural Image Based on the New Generations' Perspectives on Action Figure Design

Kuo-Li Huang¹, Tsen-Yao Chang², and Ting-Chun Tung¹

¹ Department of Visual Communication Design,
Southern Taiwan University of Science and Technology, Taiwan
{z3z, tungtc}@mail.stust.edu.tw

² Department of Creative Design,
National Yunlin University of Science and Technology, Taiwan
changty8908@gmail.com

Abstract. In this study, the population was based on the 585 works in a Nationwide Undergraduates Creative Action figure Competition which was themed “the capital image of Tainan”, while the samples were based on the 43 elected works among them. A questionnaire on the capital’s image was created, and then 300 copies of it were distributed to design departments in colleges and universities in eastern, southern, northern and central Taiwan. The capital’s image in the undergraduates’ eyes was deciphered by means of Kansei Engineering Theory, so that we could understand the historical changes in the capital’s cultural elements as well as the correlation between action figure modeling and the capital’s image in the new generation’s eyes.

Keywords: capital image, action figure, Kansei Engineering, cultural design.

1 Introduction

Due to globalised markets, every country all develops its own unique cultural features, so as to pass on cultural features of local cultures through designs. “When Eastern National Palace Museum Meets Western Alessi”, held jointly by National Palace Museum and foreign design “Alessi”, was an event that integrates eastern cultures into action figure designs. Tainan City Government held local cultural activities that have cultural action figure, for combining local cultures with action figure designs. Such combination of cultures and action figure designs can attract young generations’ attention. Through the works from Nationwide Undergraduates Creative Action Figure Competition, this study aimed to analyze new generations’ action figure modeling design elements, the images and feeling expressed, and the correlations between action figure modeling designs and local images. Due to globalised markets, every country all develops its own unique cultural features, so as to pass on cultural features of local cultures through designs. “When Eastern National Palace Museum Meets Western Alessi”, held jointly by National Palace Museum and foreign design “Alessi”, was an event that integrates eastern cultures into action figure designs. Tainan City Government held local cultural activities that have cultural action figure,

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2 Research Methods

Through the practice of Kansei Engineering, the correlation between new generations' action figure modeling designs and the feeling for local image was analyzed in this study. Four stages were divided in this study: (1) Selection of the scope of experiment samples; (2) Abstraction of the elements of action figure modeling characteristics; (3) Undertaking of a questionnaire survey; (4) Analyses of survey results.

2.1 Selection of the Scope of Experiment Samples

In this study, the population was based on the works from the 2009 Nationwide Undergraduates Creative Action Figure Competition. The themes of this competition centered on the historical figures, cultures and local features about Tainan City, which conformed to the purpose of this study survey. This competition had 585 works in total. Among them, the 43 pieces of elected works, which were selected by the jury in the first stage and which expressed Tainan cultures, were the samples in this study for performing a kansei image survey.

2.2 Abstraction of Action Figure Modeling Elements

According to the studies made by Chen and Shen(2011), the categorization and definitions of traditional cultural action figure models were performed, while the table of cultural action figure modeling design elements was generalized primarily. Through Morphological Analysis, the samples were categorized according to their sample action figure models. They were divided based on 23 categories in 8 items: (1) Cultural Elements; (2) Accessories; (3) Model Lines; (4) Colors; (5) Postures; (6) Facial Features; (7) Facial Expressions; (8) Changes of Symbolic Patterns.

2.3 Questionnaire Survey on College Students of Design Departments

In this study, a questionnaire survey of the kansei image of "Tainan" was conducted for the samples. The 43 experiment samples were appraised based on 7-leveled Likert Scale. Attached with the pictures of these samples, a questionnaire survey of the action figure images was conducted for college students. According to the pictures of these action figure works, the subjects gave scores of 1~7, based on their feeling about each action figure sample. The subjects of this questionnaire were the college students of design departments respectively from northern, central, southern and

eastern regions in Taiwan. Three hundred copies of this questionnaire survey were distributed, in which 268 copies were recovered. The statistic data of the survey results had been averaged, for performing Quantitative Theory Type 1 Analysis.

3 Results and Analyses

The analysis results of new generations' action figure modeling designs in terms of the kansei image of "Tainan" were listed as Table 1. The positive value of Categories Score (CS) represented positive image — feeling correlated with Tainan, while negative value represented the corresponsive negative image — feeling non-correlated with Tainan. In the item "Color Change", the category "7~8 colors" was 0.266, meaning that "7~8 colors" used in "Color Change" would be close to the image of "Tainan". Analyzed based on Item Partial Correlation (IPC), the results indicated that "Color Change" was 0.60 and "Facial Features" was 0.55, indicating higher IPC; their modeling would have greatest correlation and influence with Tainan image.

According to related studies made by Sugiyama & Inoue (1996), the correlation between Multiple Correlation Coefficient (R) and reliability was proposed. When Multiple R was 0.70~1.00, a very strong correlation was shown. When R was 0.84, it could be known that a very strong correlation was shown in the reliability of the predictive value. The survey results were sub-categorized into four different regions: northern, central, southern, and eastern regions in Taiwan. Such comparison results are listed in Table 2: In Northern Region, R was 0.77; in Central Region, R was 0.90; in Southern Region, R was 0.86; In Eastern Region, R was 0.82. As for the correlation analysis of the survey results of different regions, the students in Central Region would have higher correlation degree in terms of the feeling degree of modeling elements and Tainan image. The students in Northern Region and Eastern Region would have lower correlation degree in terms of the feeling degree of modeling elements and Tainan image. In this survey, because Tainan City in Southern Region was the main city of kansei image and it is nearer to Central and Southern Regions, we could infer that the students in Central and Southern Regions would have stronger correlative feeling in terms of the feeling and modeling elements about Tainan, compared with those students in Northern and Eastern Regions.

In terms of the CS in modeling elements, the categories of the highest scores and the lowest negative scores respectively corresponded to the image of "Tainan" in terms of kansei image. Listed as Table 3. The sequence arrangement of the optimized modeling elements of "Tainan" image was: "7~8 colors", "realistic", "simplification", "accessories-contained", "motion posture", "historic figures", "with obvious expression", and "geometrical— smooth".

The analysis results indicated: In terms of the manifestation ways used in new generations' Tainan cultural action figure designs, the color style of "5~8 colors" was the color effect that enables new generations to have greater feeling; in terms of the way to show facial features, they would have greater feeling about realistic practice; if local cultural elements were changed to be symbolic patterns in the applications of

Table 1. Quantitative Theory Type 1 Analysis

Item	Category	CS	IPC
Cultural Elements	(1) Historic figures	0.097	0.249
	(2) Historic spots and snack food	0.065	
	(3) Folk festivities	-0.104	
Accessories	(1) Accessories-contained	0.094	0.311
	(2) Non-accessories-contained	-0.175	
Model Lines	(1) Organic	-0.107	0.133
	(2) Geometrical— solid	-0.002	
	(3) Geometrical— smooth	0.056	
Color Change	(1) 3~4 colors	-0.482	0.601*
	(2) 5~6 colors	0.128	
	(3) 7~8 colors	0.266	
	(4) 9 colors and more	-0.099	
Posture Change	(1) Integration	-0.166	0.309
	(2) Motion posture	0.146	
	(3) Static front posture	0.065	
Facial Features	(1) Simplification - lines	-0.056	0.550*
	(1) Simplification - geometric ways	-0.202	
	(3) Realistic	0.783	
Facial Expressions	(1) With obvious expression	0.076	0.221
	(2) Without obvious expression	-0.087	
Changes of Symbolic Patterns	(1) Simplification	0.356	0.413*
	(2) Transformation	-0.044	
	(3) realistic	-0.279	
Constant Term		3.661	
Multiple Correlation Coefficient (R)		0.837	
Coefficient of Determination (R²)		0.700	

Table 2. Comparisons of the Multiple Correlation Coefficients (R) in northern, central, southern, and eastern Taiwan regions

Region Item	Northern	Central	Southern	Eastern
R	0.77	0.90	0.86	0.82
R²	0.60	0.80	0.73	0.68

modeling designs, the change practice of “simplification” would result in strongest feeling. The use of accessories for action figure models would enhance new generations’ feeling about Tainan image. As for the motion changes of action figure extremities, obvious motions of extremities would enhance their feeling. In terms of their feeling about Tainan culture, they had stronger feeling and understanding about historic figures. If obvious expressions were applied in facial expressions, new generations would have better feeling about Tainan image. As for action figures’ model lines, the manifestation of “geometrical— smooth” would result in enhanced feeling about Tainan image.

Table 3. Portfolios of the Optimized Modeling Element Designs

Sequence of the importance of modeling elements	Kansei image of “non-Tainan”	Kansei image of “Tainan”
1. Color Change	3~4 colors	7~8 colors
2. Facial Features	simplification - geometric ways	realistic
3. Changes of Symbolic Patterns	realistic	simplification
4. Accessories	non- accessories-contained	accessories-contained
5. Posture Change	integration	motion posture
6. Cultural Elements	folk festivities	historic figures
7. Facial Expressions	without obvious expression	with obvious expression
8. Model Lines	organic	geometrical— smooth

4 Conclusions

According to the analysis results, the portfolios of the optimized elements of new generations' Tainan cultural action figure designs were concluded. Future studies can be made to have further explorations of different groups and different local cultural features.

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