The Influence of Art-provoked Affect on Product and Product Attributes Evaluation*

명화(名畵)에서 유발된 감정이 차용된 제품과 제품속성 평가에 미치는 영향

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In recent years, a new way of differentiating product design has emerged — better known as 'masterpiece marketing,' this is a strategy where famous art pieces are borrowed on to product designs. Because the recent trends of well-being and LOHAS have encouraged the consumers' desires to enjoy culture and live a more opulent lifestyle, famous and notable paintings have grown to be more of "approachable masterpieces" to the public. As a strategy intended to develop a new consumerism, while still prioritizing customers' values and their satisfaction, companies have been drawn to this new type of marketing. The current consumption society has converted renowned art pieces from simply works of 'high culture' to a further way of marketing, aimed to differentiate products and dominate the market. Though many products have had masterpieces applied to their designs and have been noticed for their marketability, there has been less systematic research done on the scientific background behind this marketing approach.

This research focused on the art pieces' fundamental nature of inducing emotions in the viewer, and hypothesized about how the evaluation of a product may be influenced by the affect provoked by the art piece used. To be more specific, if art pieces with different levels of pleasure and arousal — the two axis of emotion suggested by existing research on emotion — were used on each product, the goal was to see how the different levels influenced the consumer's assessment of the products, focusing on product's type as well as the evaluation of their attributes.

First, a pretest was done to verify the relationship between the emotion provoked by the art piece and the consumer's preference. There were two types of surveys, each with five drawings from the ten that were assumed to differ in levels of the two axis of emotion. The survey was composed of questions asking for positive emotion, negative emotion, level of arousal, and preference. The correlation between the measurements of positive and negative emotions was -0.792, so an integrated entry was used in the analysis by subtracting the measurement of negative emotions from that of positive emotions. The first hypothesis that paintings that provoke positive emotions will be more preferred than paintings that bring out negative emotions was supported; and through this research, paintings that were to be used for the products were selected. The second pretest was conducted to settle on an item that would be used in the research. Items meant to measure utilitarian and hedonic attributes of milk and chocolate, the two products to be used in the research, were extracted. Because milk is a utilitarian product with strong practical attributes while chocolate is a hedonic product with strong hedonic attributes, these two were selected to be used in this research.

The first study was executed to see if there is a difference in attitude about products that have different painting on their designs, which either induces positive or negative emotions. It was also to verify whether this difference in attitude was mediated by the viewer's preference for the art piece. This study showed that when positive emotion inducing painting was used, the product was better evaluated compared to the product with a painting that provokes a negative emotion, thus supporting the second hypothesis. It was also supported that the effect of affect on product evaluation was mediated by preference for the art piece.

The second study was done to see the influence of the level of arousal on the evaluation of the product's attributes. Art pieces that differ in the level of arousal were selected through the pretest, and later it verified the hypothesis that the level of arousal has an effect on the assessment of the attributes of the product. In the case of milk, a utilitarian product, the fourth hypothesis that a high-arousal painting will better evaluated for its hedonic attributes was supported, as well as the fifth, which hypothesized that a low-arousal painting will receive a higher assessment for its utilitarian attributes. However, for chocolate, a hedonic product, both fourth and fifth hypotheses were not supported.

This study is significant for the following basis: first, it verified the importance of the emotion induced by the painting on the evaluation of the product's attributes, by applying a systematic and scientific method. Second, it expanded from the existing research on positive/negative emotions to confirm the additional influence of the state of arousal on product evaluation.

Key words: Art Marketing, Masterpiece, Preference, Affect, Pleasure, Arousal, Product Attribute, Product Evaluation

I. Introduction

Recent trends have put into spotlight 'masterpiece marketing', through which people have been able to possess and view masterpieces, such as the 'Guernica' by Picasso, without having to pay the astronomical sums. Consumers can now easily approach these masterpieces, formerly considered as privileged properties for the upper classes, through simple products, commercials and stores. Masterpieces have escaped from their original field of 'high culture' and are being strategically used in the current consumer society as a marketing tool for market domination. This method of borrowing from masterpieces is seen as an alternative that satisfies the desire for possession of masterpieces, a desire that had been considered as impossible to fulfill in the past, and is being used in various domestic and international firms. It is not difficult even in Korea to find diverse cases where masterpieces have been used in daily products, such as in snack packages, milk, chocolate, air conditioner; their usage has become quite diversified. Despite the increase of firms' trend in borrowing from masterpieces for their product design and the focus of this method within the market, it is difficult to find any systematic research in business management or marketing that suggests any clear related strategy based on scientific methods. Case-based researches in 'masterpiece marketing' are broadly conducted in the fields of industrial design in Korea, but such researches cannot be found in the field of business management, especially based on clear marketing theories.

Research on marketing in business management based on scientific and systematic method was first suggested by Hagtvedt and Patrick(2008). Hagtvedt and Patrick(2008) demonstrated that the usage of art in products or advertisement was viewed as more favorable to consumers than the usage of non-art, mainly because of the spillover effect of the 'luxury' element implied in this art on products. However, we are currently experiencing the frequent usage of common masterpieces in a much diversified range of products as well as the usage of multiple masterpieces within a single range of products. This phenomenon leads us to go beyond the studies of the positive effect brought by masterpieces and research into the response of consumers according to the type of product and type of masterpiece being used. We still have very little clue as to which masterpiece is to be used for which type of product. This current research is based on finding out the most appropriate masterpiece for different products. The research is based on the assumption that the essential function and characteristic of masterpieces lie in inducing emotions from the viewers(Tan 2000) and aims at finding the solution by tracing the influence that the affect from masterpieces has on the evaluation

of the product.

Different researches have already concluded that consumer evaluation could be influenced according to the different types of affect (Pham 1998; Shiv and Fedorikhin 1999; Adaval 2001; Barone, Miniard and Romeo 2000). These researches assumed that the affect provoked by the usage of masterpieces would influence the assessment on the product and product quality from the consumers.

The affect provoked as such will in turn influence the preference(Zajonc and Markus 1982). Compared to consumers who possess a negative feeling, those that experience a positive feeling will bring a positive assessment of the product, regardless of the objective information on the product(Isen et al. 1978; Srull 1983; Pham 1998). Based on this fact, we presuppose in this research that the masterpiece used in a product creates affect in consumers and this affect will lead to differences in product evaluation, depending on whether it has been positive or negative. Also we examine whether the preference for a masterpiece would play the role of a mediator in the relation between emotions induced by the masterpiece and the product evaluation.

Furthermore, we will observe the affect caused by the arousal dimension of the affect as classified by Rusell(1980, 2003) and investigate on the differences in product evaluation according to the different degree of arousal. Previous studies on the level of arousal have been conducted while focusing on information processing but are still incomplete when it comes to the concrete influence on product evaluation. This study thus aims at exploring the influence of the level of arousal on product evaluation according to the emotion provoked by masterpieces.

The product evaluation is performed in relation to the characteristics of the product. Previous researches confirm that cognitive and rational preference is strongly present in utilitarian products, while sensory preference is shown in hedonic products(Bazerman, Tenbrunsel, and Wade-Benzoni 1998). The level of arousal usually influences the cognitive elements(memory, advertisement recall, information processing) and the higher the level, the more the interruption on these elements. This study will look into the different influences that the level of arousal masterpieces induce has on the product's two proprieties.

II. Theoretical background

2.1 Research on the products using masterpieces

Masterpiece marketing is currently being actively used in diverse forms; domestic and international cases have allowed us to divide the usage of these masterpieces in marketing

into three different categories: product, promotion(advertisement) and place(distribution environment). Berger(1990) argues that the usage of masterpieces in advertisement plays the role of administering attraction and authority on the advertisement. He further states that works of art, especially those that are already known to the public as masterpieces and acknowledged as such can be used to prove the financial and mental powers. The act of consumption of a product advertised by the masterpiece is a satisfactory act, an act that is accompanied with cultural value, which will convince the consumer even more easily. Berger (1990) further stresses that advertisement naturally stimulates the desire of people looking for pleasure, but the advertisement in itself cannot provide the product that creates the feeling of pleasure. However applying the effects and interpretation of the usage of masterpieces in that same advertisement directly on the product displays some difficulty. Unlike the advertisement, the product is being directly used by the consumer and can thus convey its attributes in a clearer and more direct way. Furthermore, the product does not only possess elements of pleasure, but also of utility and function(Batra and Ahtola 1990; Mano and Oliver 1993), and the usage of masterpieces will necessarily have different influences on the behaviors and attitudes of the consumer.

The positive effects of masterpieces in products have been proven by Hagtvedt and Patrick(2008). They found out that products using masterpieces had a more positive evaluation than those that did not use them. They suggest a special category within the spillover effect for the effects of masterpiece marketing. Works of art inherently possess elements of luxury, sophistication, and exclusivity(Hoffman 2002; Margolin 1992; Martorella 1996; Shrum 1996; Tansey and Kleiner 1996). These implied meanings establish a spillover effect on the assessment and perception of the products using the masterpiece, leading to a positive effect. The spillover effect issued from the usage of masterpieces will necessarily occur from works of art that are being recognized as masterpieces and that thus possess these inherent positive meanings. Hagtvedt and Patrick (2008) state that unlike other cognitive stimuli, art displays its natural positive meaning and that the favorable effect will always be present regardless of the content of the masterpiece.

However, their argument only focuses on the schema people have about masterpieces and fail to notice the most essential function of masterpieces, that of inducing emotions. In accordance with Hagtvedt and Patrick(2008), participants evaluated the product more favorably when it was presented with the negative art image than when it was presented with the non-art image. And there was no significant difference between art image with positive content and art image with negative content. Yet, in their empirical study, they used only

soap dispenser with Landscape art images that are relatively difficult to induce dramatic emotions as a stimulus. Hagtvedt and Patrick (2008) contribute insight into the art marketing through exploring the suggestion that the art infusion effect occurred independently of the content of the artwork. However they also leave room for the possible content-dependent influence of visual art. The aim of this study is to advance understanding of the content-dependent effects of visual art through concentrating on exploring and describing the affective response of art images, that of the most essential function of masterpieces. More specifically, This study aims at looking at the influences on the attitude consumers have towards certain products while focusing on the more fundamental characteristic of masterpieces.

2.2 Research on the definition of 'masterpiece' and the affect driven from masterpieces

The concept of 'art' by itself includes various heterogeneous elements, it is thus quite difficult to find a common essence among them. It is often claimed that a uniform definition on art is almost impossible and this debate is still ongoing. Discussions on the definition of the concept of art have continued for a long time and we lack a simple clear definition even today. Nevertheless, the various theories on the definition of art all agree on acknowledging the

pleasure works of art give to viewers. The role of emotion has become quite significant in art and aesthetics(김요한 2007). Tan(2000) also emphasizes the value of emotions in art. Presupposing that the basic characteristic of works of art is to draw emotions from the viewer and that emotions have a definite target, works of art are also evaluated according to the two targets they have(the artificial product itself/the world expressed within the work); He stresses on the induction of specific feelings as a result and also emphasizes that works of art accomplish various functions encompassing not only the aesthetics field but also religion and entertainment and functional purpose.

Based on the literary review on the definition of works of art, we were able to understand that the attribute of pleasure(emotional experience) is considered as the basic value of 'works of art'. This research has limited its scope to masterpieces that have been widely acknowledged as such by the public and by experts. The term of 'work of art' used in this study is limited to masterpieces and their common value can be defined as 'pleasure provided from one piece to the viewers'. Masterpieces induce certain special feelings from the viewers. Considering the influence of works of art beyond the aesthetics field and into the functional usage and the influence of emotions induced from masterpieces on the cognitive element(Tan 2000), we can predict that the different emotions induced by masterpieces can

lead to an evaluation of the product's cognitive factors.

2.3 Research on affect and its dimension

The definition and dimensions of emotions in psychology have been the subjects of endless discussion for a long time. The main theory on emotion that has receive the most support so far, also called the 'basic emotion' theory, there are elements of emotion that can essentially be distinguished from one another, just like chemical compounds. From this perspective, there are elements considered as basic, or as primary, and it is the combination of these elements that leads us to actually feel certain emotions. Various concurrent theories assume the existence of these basic emotional elements but they have not come to an agreement as to which emotion is the fundamental one or which standard is to be used to determine so(Kalat and Shiota 2007). In other words, the 'basic emotion' is more a 'belief' rather than an empirical evidence(Ortony and Turner 1990, p. 315). Researches are still ongoing to find an alternative approach to this theory. Among these alternatives, the most recent researches are focusing on the 'dimension theory'. Instead of enumerating the different categories individually, this theory claims it is possible to enumerate them according to their dimension. The most known scholar to argue this is

Rusell(1980, 1997, 2003), who states that it is possible to describe emotion according to a few dimensions of continuous dimensions. If we comply to his circumplex model, the emotions close to the circle are too similar and can easily be confused or experienced at the same time, whereas emotions that are located on the opposite side of the circle are recognized as disparate. Emotional experiences rely on two main dimensions, the first one being the arousal dimension and the second one being the pleasure dimension. This model describes every emotion as being a combination of a certain level pleasure (pleasantness-unpleasantness) and a certain level of arousal (arousal-quietness) (Rusell 1980).

Watson and Tellegen(1985) also present an alternative dimension theory. They explain the two axis of the circle as positive affect and negative affect. Positive affect reveals the extent to which a person avows a zest for life (active and drowsy) and the negative affect shows the degree of pain(fear and hostility). However, the main argument of this theory placed on the independence of positive affect and negative affect has been refuted by several other researches and is still left to further discussion(Green and Salovey 1999; Remington, Fabrigar, and Visser 2000; Rusell 1980). There is still much debate to be done related to the different scholars on dimension theory so that it is difficult to find a common ground of agreement, agreement has been made on the

facts that the dimension theory is based on the pure feeling aspect rather than on the cognitive aspect of emotions and that it is possible for emotions to be described through a few dimensions.

Masterpieces do not produce only one emotion that can clearly be defined. Furthermore, they convey pure feelings rather than cognitive ones(guilt, etc). This current research will not rely on the basic emotion theory but will rather distinguish the different emotions according to the dimension theory. As the type of emotions deriving from masterpieces is often better explained through the pleasant-unpleasant dimension rather than through the pain dimension based on fear and hostility, we will use the Rusell(1980) model.

2.4 Influence of emotion on product evaluation

There are various researches that suggest the interrelation between emotions and cognition in marketing. Different researches on emotions have proven it to be true that they can affect preferences of products or stores(Westbrook 1980), consumer behavior and message processing (Mano 1997), information processing(Shapiro et al. 2002; Asylesworth and Mackenzie 1998; Goldberg and Gorn 1987), and choice(Donovan and Rossiter 1982; Weinberg and Gottwald 1982).

Several other researches assert that the evaluation consumers make over their products can be affected by their emotions(Adaval 2001; Barone, Miniard, and Romeo 2000; Pham 1998; Shiv and Fedorikhin 1999; Westbrook 1980). Depending on the direction of these influences, they can be divided into two categories, one being the ones that have direct influence and the other, indirect influence. We can easily know that emotions have a direct influence on product evaluation through researches that have shown that consumers that experience positive emotion without being influenced by the given information evaluate the product in a more positive way than consumers that do not(Insen et al. 1978; Srull 1983) and that when consumers have been asked to evaluate a product, they use the emotions they felt as a basis for their judgment (Pham 1998; Schwarz and Clore 1983). These studies argue that emotions can be considered as direct elements used by consumers to evaluate their products.

On the other hand, emotions also play an indirect role by interfering information processing process consumers go through(Gardner 1985). When consumers are faced with information concerning a certain product they evaluate the familiarity of each of individual information from a subjective point of view and reach a general conclusion by combining them all(Adaval 2003). Emotions felt during the processing of information can thus act as a significant element in product assessment.

Ⅲ. Hypothesis setting

3.1 Influence of the type of emotions induced by masterpieces on product evaluation

Products that have borrowed from masterpieces have a more favorable evaluation than those that have not made use of masterpieces (Hagtvedt and Patrick 2008). We are then left with the question as to which masterpiece will bring out the most efficient result. People that are already at a positive emotional state will see everything in a positive way, no matter the product, and the opposite will happen for those that are at a negative state of mind. Stores thus use beautiful decorations along with rhythmic music to lead consumers into a more positive mood so that they can in return purchase their products(Kalat and Shiota 2007).

The affective response a stimulus elicits is a major determinant of preference (Bagozzi, Gopinath, and Nyer 1999). Particularly, people tend to prefer stimuli that elicit high levels of pleasure (Donovan and Rossiter 1982). The most basic characteristic of a masterpiece is that it can create certain specific emotions from the viewers(Tan 2000). These emotional elements will in turn influence preferences(Zajonc and Markus 1982) so that emotions derived from masterpieces as a stimulus will influence the degree of preference over the masterpiece. In

other words, we expected that people will prefer masterpieces as stimuli that elicit high level of pleasure. Thus, we posit the following:

Hypothesis 1: Preference over masterpieces that create positive emotions(high level of pleasantness) will be higher than that over masterpieces that create negative emotions(low level of pleasantness).

The emotions that the consumer feels when he is about to use, purchase or evaluate the product will have a direct or indirect influence over the product evaluation(Adaval 2001; Barone, Miniard, and Romeo 2000; Pham 1998; Shiv and Fedorikhin 1999). According to Mano and Olive(1993), pleasure induces a moderate level of positive emotion whereas displeasure creates a moderate level of negative emotions. With masterpieces, the emotions created from viewing them will not be as strong of a stimulus as emotions that are created when people are the main subjects themselves of such feelings. It is thus expected that masterpieces will not created extreme feelings located on both sides of the pleasure axis as proposed by Russell(1980). We have thus conducted our research assuming that a low level of pleasantness induced by masterpieces leads to negative feelings, whereas a hight level leads to positive feelings. In other words, if consumers experience the specific feelings created by the masterpieces at the time of the evaluation of

the product, they will be hereupon influenced in such evaluation. More specifically, positive feelings will lead the consumer to a more favorable evaluation(Insen et al. 1978; Srull 1983; Pham 1998). In accordance with this proposition, attitude towards a product will be influenced by the affective response as a major determinant of its liking. Our discussion can be summarized as the following hypotheses.

Hypothesis 2: Attitude towards a product with masterpieces that provoke positive emotions (high level of pleasantness) will be more favorable than that for products with masterpieces that provoke negative emotions(low level of pleasantness).

Hypothesis 3: Preference over masterpieces will mediate the influence of the level of pleasantness on product evaluation.

3.2 Influence of the level of arousal induced by masterpieces on product attribute evaluation

Evaluation of a product is achieved through the two main characteristics that the product possesses. One is the utilitarian attribute with the visible and objective property and the other is the hedonic attribute, intangible and linked with pleasure, delight and other feelings (Holbrook & Hirschman 1982). Emotional preference is translated into the 'want' preference

while the cognitive preference is translated into the 'should' preference. The former is likely to be induced from products with higher value of pleasure while the latter is likely to be induced from products with higher level of functionality. In other words, utilitarian products are preferred through a cognitive and rational process and hedonic products are differentiated through emotions(Nak-Hwan Choi 2008; Bazerman, Tenbrunsel, and Wade-Benzoni 1998). However, each product inherently possesses different degrees of both hedonic and utilitarian attributes. The attribute linked with means and functionality is the utilitarian attribute, and the one linked with pleasure and experience is the hedonic attribute. These different attributes help us differentiate between the type of products(hedonic product/utilitarian product), which can be noticed by how much one or the other attribute is strongest(Nak-Hwan Choi 2008). If we focus on the pleasure that a certain product displays, we will evaluate its hedonic attribute more highly and in opposition to this, if we focus on the functionality of a product, we will highly evaluate on the product's utilitarian attribute.

Previous researches suggest that cognitive powers such as memory, performance and deduction are best improved when under the intermediate level arousal or awakening(Teigen 1994). Researches in marketing about the level of arousal, attention and memory are usually conducted centered around advertising and

usually show that a high level of arousal decreases the information processing abilities and thus the cognitive judgment(Pavelchak, Munch and Antil 1988; Petty and Cacioppo 1986; Sanbonmatsu and Kardes 1988). Products using masterpieces are also bound to have both the utilitarian and hedonic attributes. However, the evaluation of weight of each attribute (utilitarian or hedonic) might be influenced by the emotions that the arts provoke.

Masterpieces that deliver strong emotions, in other words, masterpieces with high level of arousal, will feel as if they are overemphasizing on the sensuous side only. Focus will thus be directed on the pleasure and hedonic attributes and less attention will be devoted on the utilitarian attribute. On the other hand, when masterpieces with low level of arousal are used, the information processing level will relatively increase and products will be evaluated according to the cognitive and functional side.

Hypothesis 4: The utilitarian attributes will be evaluated more highly for products using masterpieces with a low level of arousal than those using masterpieces with a high level of arousal.

Hypothesis 5: The hedonic attributes will be evaluated more highly for products using masterpieces with a high level of arousal than those using masterpieces with a low level of arousal.

Ⅳ. Pretest

4.1 Pretest 1

The pretest 1 was conducted with 49 undergraduate and graduate students. We first chose 10 random masterpieces, which we expected would show differences in the two axis, that of pleasure(positive/negative) and that of arousal, as indicated in past researches, and we drafted two types of surveys. The respondents answered questions about the positive and negative emotions caused by each masterpiece, along with the level of arousal and their preference. The questions related to the positive and negative emotions were stated based on Rusell(1980)'s theory and referring to questions used in the researches formerly completed by Bodur, Brinberg and Coupey(2000) and by Mano(1991). There were 6 statements asking about the emotions when looking at the masterpiece. Every statement was measured following Likert's 7 point scale(1=Not at all, 7=Very much). The questions to measure the level of arousal were formulated referring to the researches by Rusell(1980) and Byrne and Clore(1967). There was a total of four, including 'It is tense', we also used Likert's 7 point scale. Preference was measured by modifying questions used by Mackenzie, Lutz and Belch (1986), which went as follows 'I like it a lot', 'I fancy it', 'It is favorable', using the same

Likert's scale.

As expected, the correlation between questions related to positive emotion and negative emotion was measured to be -0.792, a high number; it is based on this number that we came up with the combined item obtained by subtracting the negative emotion measurement from the positive emotion measurement, which we used for our analysis. To observe the relation between the combined emotion item and the preference over certain masterpieces, we set the former as the independent variable and the latter as the dependent variable, whereupon we applied a regression analysis. These results are shown in 〈Table 1〉. As shown in 〈Table 1〉, the emotions had a significant effect in all cases. Therefore Hypothesis1 was supported.

The other objective of the pretest 1 was to choose the masterpiece to be used in other studies to be conducted later. We needed to select masterpieces that would reveal differences in pleasantness(positive/negative). As a result of a t-test to find the difference between these two emotions, we found that the positive emotion for Masterpiece 4[The Heartstring] was higher than the one for Masterpiece 10 [The Rising City](5.058 vs. 2.565 t=7.495 p=0.000), whereas the negative emotion for Masterpiece 10 was higher than the one for Masterpiece 4(2.130 vs. 4.362 t=-5.511 p= 0.000). It is based on this that we selected Masterpiece 4 as a masterpiece that inspires positive emotions and Masterpiece 10 as one that inspires negative emotions. In order to

〈Table 1〉 The Influence of Affect on Preference for Artpiece

Dependent variable: preference for masterpiece

Art work	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1. The Dance Class/Edgar Degas	.339	.106	.554	3.189	.004
2. Place de la Concorde/Piet Mondrian	.747	.156	.706	4.781	.000
3. Madonna in the Meadow/Raffaello Sanzio	.663	.139	.705	4.765	.000
4. The Heartstring/Rene Magritte	.507	.140	.602	3.613	.001
5. Harmony in Red/Henri Matisse	.330	.084	.634	3.927	.001
6. Saturn /Francisco Goya	.502	.104	.708	4.811	.000
7. Water Lilies/Claude Monet	.402	.118	.589	3.420	.002
8. The Bathers/Pierre-Auguste Renoir	.479	.069	.833	6.890	.000
9. Golconde/Rene Magritte	.451	.101	.696	4.448	.000
10. The City Rises/Umberto Boccioni	.375	.101	.628	3.702	.001

perform Study 2 that would observe the influence of the level of arousal on the evaluation of the product's attributes. We had to select masterpieces that would reveal similar levels of pleasantness yet different levels of arousal. The reliability coefficient(Cronbach's alpha) related to items that measure the degree of arousal reached the high number of 0.801 and we used the single index from the mean score of these items. A comparison between Masterpiece 4[The Heartstring] and Masterpiece 8[Bathing Women] reveals there is no difference between the positive emotion (5.389 vs. 5.251 t=0.336 p=0.739) and the negative emotion(1.999 vs. 2.416 t=-1.036 p= 0.307), but in terms of arousal, Masterpiece 8 scored higher than Masterpiece 4(2.99 vs. 4.80 t=-2.957 p=0.005). Based on this, we selected Masterpiece4 as one with a low level of arousal while we chose Masterpiece 8 as one with a high level of arousal.

4.2 Pretest 2

Pretest 2 was conducted among university students to be able to come up with questions that would be used in the actual research. We used a total of 8 masterpieces for Pretest 2, we included a control group that did not use masterpieces and wrote a total of 9 types of survey. We had 20 respondents for each type and thus had a total of 180 samples. The survey first measured the degree of pleasantness

(positive/negative) and of arousal induced by masterpieces, and then respondents were asked to answer to questions about a virtual product created by image manipulation, on its utilitarian attribute, hedonic attribute and preference. The products used in the research included chocolate for 'hedonic product' and milk for 'utilitarian product' and the image was manipulated through Photoshop CS. The appearance, texture and other elements of the product remained the same while the masterpiece had been the only thing to be manipulated; it is regarding this research stimulus that respondents were expected to answer. All the surveys were color-printed. Six of the masterpieces came from Prior Research 1 and two were newly added. The stimuli used in pretest 2 were also used in the actual research. Questions about the positive and negative emotion, the degree of arousal and preference were the same as those used in pretest 1 and the Cronbach's alpha for the items asking about each concept was quite high, with respectively 0.914, 0.937, 0.769, 0.950. The 5 questions asking about the milk's utilitarian attributes included 'It looks nutritious'. The 3 questions asking about the chocolate's utilitarian attribute included 'I feel like my memory will improve after eating it'. The questions related to milk's hedonic attribute were a total of four questions including 'It looks attractive', and questions related to the same attribute for chocolate were a total of three including 'It looks sweet'. All questions were measured

according to Likert's 7 point scale(1=Not at all, 7=Very much).

An exploratory factor analysis on the utilitarian and hedonic attribute for each product revealed the expected differentiation of milk and chocolate. The reliability coefficient for the questions asking about both features for the milk and chocolate was high for each attribute, with respectively 0.916, 0.836, 0.908, 0.873 and can be reliable.

V. Study 1

5.1 Experimental design and characteristic of sample

Study 1 was conducted to examine whether there would be any difference in evaluation of the product according to the level of pleasantness(positive, negative) and to prove whether this effect was mediated by preferences. To prove the hypotheses we have presented, we applied the 2 x 2 experimental design for study 1, according to which we set up the product type as an between subjects factor and the emotional reactions(positive/negative) as an within subjects factor. We distributed the surveys to university students and office workers within Seoul. The surveys were divided into two types, according to whether the product was milk or chocolate, the respondent

had to answer one of these two surveys, selected randomly. We collected 67 surveys for milk and 55 for chocolate. The sample was composed of 60 men and 60 women, each composing 50% of the total. There were 84.6% of students and 10.3% of office workers, which represented 94.9% of the total. The age range was usually in the 20s(89.2%).

5.2 Experimental procedure and experiment stimuli

Study 1 was conducted by differentiating milk as utilitarian product and chocolate as hedonic product. The stimuli used in study 1 were the same as the imaginary product created in pretest 2. The image used for the stimuli was a masterpiece already selected through pretest 1 and pretest 2; we selected one masterpiece each inducing positive emotions and negative emotions, and incorporated them in the product image. Each subject received 3 product images and gave his evaluation on each product. The order of presentation of product image was fixed(the product with a positive art image-the product without any art image(control condition)-the product with a negative art image).

Similar to pretest 2, all the stimuli were made the same, except for the masterpiece included (for stimuli, see Figure 1). The respondent answered questions related to the product and then those related to his emotions and pre-

〈Figure 1〉 Stimuli for Study 1

Milk with positive art image	Control condition	Milk with negative art image

Chocolate with positive art image	Control condition	Chocolate with negative art image

ference over the masterpiece. He then had to answer about his general knowledge on the masterpiece and general beliefs on the product. The final question was to measure the demographic variable.

5.3 Measuring the variables

The main measuring variables were the level of pleasantness(positive/negative), preference over the masterpiece and the product attitude. All of the measuring items were selected based on previous researches and prior researches and all items were measured according to Likert's 7 point scale(1=Not at all, 7=Very much). To measure the dependent variable, which is the attitude towards the product, we referred to the items used by MacKenzie, Lutz and Belch (1986) and by Hagtvedt and Patrick(2008). The items were 'I like it', 'It looks good', 'and It looks interesting'. The variable, which was the level of pleasantness(positive/negative) and the mediator, which was the preference, were measured using the questions used in the prior researches. The positive emotion was measured based on three questions including 'It gives a positive feeling' and the negative emotion was measured based on three questions including 'It gives a negative feeling' and the preference over the masterpiece was measured based on

three questions including 'I like it a lot'. Aside from these variables, milk and chocolate were used to prove whether they were each perceived as a hedonic product and a utilitarian product. We came up with the measuring items in reference to Barbin et al(1994), Chaudhuri and Holbrook(2001). Surveys on milk asked questions such as 'It gives me pleasure', 'It gives me a pleasant(happy/delightful) feeling', 'It is useful(healthy, nutritious)', 'It fulfills a functional purpose(hunger/thirst)'. Surveys on chocolate included questions such as 'It gives me pleasure', 'It gives me pleasant feeling', 'It is useful', 'It fulfills a functional purpose'. Based on our assumption that general knowledge about the masterpiece might influence the emotions inspired by that masterpiece, we referred to Hagtvedt and Patrick(2008) and their items used to measure the respondent's knowledge on the masterpiece, asking the following questions: 'Are you familiar with the masterpiece?'(1=Not at all/ 7=Very much), 'How much knowledge on the history of art do you possess?'(1=None/ 7=A lot). We measured the degree of interest in the masterpiece by asking the question 'How interested are you in masterpieces in general?'(1=Not interested at all/ 7=Very interested). We calculated the mean score of each variable and transformed it into a single index, which we used for our analysis.

5.4 Result

5.4.1 Manipulation checks

Study 1 was conducted to look into the influence the level of pleasantness (positive/negative) had over the evaluation of a product and to examine whether the preference over a masterpiece would play the role of a mediator in the process. It was thus necessary to prove if the masterpiece leading to positive emotions and the masterpiece leading to negative emotions had been manipulated to show distinct differences in the level of pleasantness. The reliability coefficient(Cronbach's alpha) for both questions measuring the positive and negative emotion was high(0.919 and 0.927). They were therefore made into a single variable and used in the analysis. The analysis over whether masterpiece inducing positive emotions and masterpiece inducing negative emotions had been manipulated to produce a difference in the level of pleasantness showed that the former masterpiece provoked more positive emotions than the latter masterpiece(5.153 vs. 2.847 t=13.909 p=0.000), and that the latter masterpiece provoked more negative emotions than the former(2.250 vs. 4.281 t=-13.317 p=0.000). It was thus confirmed that the level of pleasantness had been appropriately manipulated. We then proceeded to analyze if indeed milk and chocolate were recognized each as a utilitarian product and a hedonic product. The

reliability coefficient(Cronbach's alpha) for the questions measuring the pleasure for milk and functionality scored each 0.779 and 0.757, chocolate also scored a high 0.899 and 0.897. This led us to judge they were both reliable and were used for the analysis as single variable. The analysis showed that milk scored higher in functionality than in pleasantness(4.977 vs. 4.174 t=4.605 p=.000), and that chocolate was evaluated higher in pleasantness than in functionality as expected(3.917 vs. 4.657 t=-3.764 p=.000). We confirmed that milk was seen as a utilitarian product and that chocolate, as a hedonic product.

5.4.2 Hypothesis testing

Study 1 was conducted in order to examine the influence of the level of pleasantness (positive/negative) on product evaluation and to verify whether the preference over masterpiece would mediate this influence. In other words, we confirmed our hypothesis that preference is clear for masterpieces that induce positive emotion over masterpieces that inspire negative emotions and that products using the former category of masterpieces would be more positively evaluated than those using the latter category. We also confirmed that such attitude towards the product was mediated by preferences. The reliability coefficient for items that measured the preference over masterpieces and product evaluation was high for both

(respectively 0.944 and 0.851) and they were both used for the analysis, after calculating their mean score and transforming it into a single variable, like the other variables. Hypothesis 1 stated that preference for masterpieces that induce positive emotions would be higher than that for masterpieces inducing negative emotions. We set the product type(utilitarian/hedonic) and the level of pleasantness(positive/negative) as the independent variable and the preference for masterpieces as the dependent variable and conducted ANOVA. The results indicated in ⟨Table 2⟩ show that the main effect according to the type of product and the interaction effect between the product type and the level of pleasantness are not statistically significant, but that the main effect according to the level of pleasantness was statistically significant (F(1, 239)=106.238 p=.000). A more specific analysis revealed that there was not much difference between preferences over product type(Mmilk=3.689 vs. Mchocolate=3.648 F(1, 239)=.042 p=.838), and there was a higher preference for masterpiece inducing positive emotion than for those inspiring negative emotions(Mpositive=4.539>Mnegative=2.794). Regardless of the product type, Hypothesis 1 stating that preference for masterpieces inducing positive emotions is higher than for masterpieces inducing negative emotions was supported.

Hypothesis 2 assumed that attitude towards products using masterpiece that induces positive emotions would be more favorable than that

〈Table 2〉 The Influence of Affect and Product Type on Preference for Artpiece

Dependent variable: preference for masterpiece

	df	Mean Square	F	Sig.
AFFECT	1	183.406	106.238	.000
PRODUCT TYPE	1	.072	.042	.838
AFFECT * PRODUCT TYPE	1	.434	.251	.617

towards products using masterpiece that induces negative emotions. To test this hypothesis, we set the product type(utilitarian/ hedonic) and the level of pleasantness(positive/negative) as the independent variables, and set the attitude towards the product as the dependent variable and conducted ANOVA. The results as shown in 〈Table 3〉 reveal similar results as with preference, that the main effect related to the product type and the interaction effect between the product type and the level of pleasantness were not statistically significant, but that the main effect related to the level of pleasantness was significant(F(1, 241)=26.972 p=0.000). Attitude towards products was also independent from the product type(Mmilk= 4.194 vs. Mchocolate=3.914 F(1, 241)=2.567 p=.110) and was rather dependent on whether the product was using positive emotion inducing

or negative emotion inducing masterpieces. It was more favorable for the former(Mpositive =4.525>Mnegative =3.609) and Hypothesis 2 was thus supported.

Hypothesis 3 predicted that the preference for certain masterpieces would mediate the influence of the level of pleasantness on the attitude towards the product. Referring to the research conducted by Baron and Kenny(1986) on the effect of mediation, we administered a regression analysis and used the Sobel test to analyze the statistical significance of the mediation effect. We had already confirmed, through Hypothesis 1 and Hypothesis 2, that the level of pleasantness influenced the mediator variable (preference for masterpiece) and the dependent variable(attitude towards product). The regression analysis with the level of pleasantness as the independent variable and the preference

〈Table 3〉 The Influence of Affect and Product Type on Product Attitude

Dependent variable: product attitude

|	df	Mean Square	F	Sig.
AFFECT	1	50.947	26.972	.000
PRODUCT TYPE	1	4.849	2.567	.110
AFFECT * PRODUCT TYPE	1	.074	.039	.843
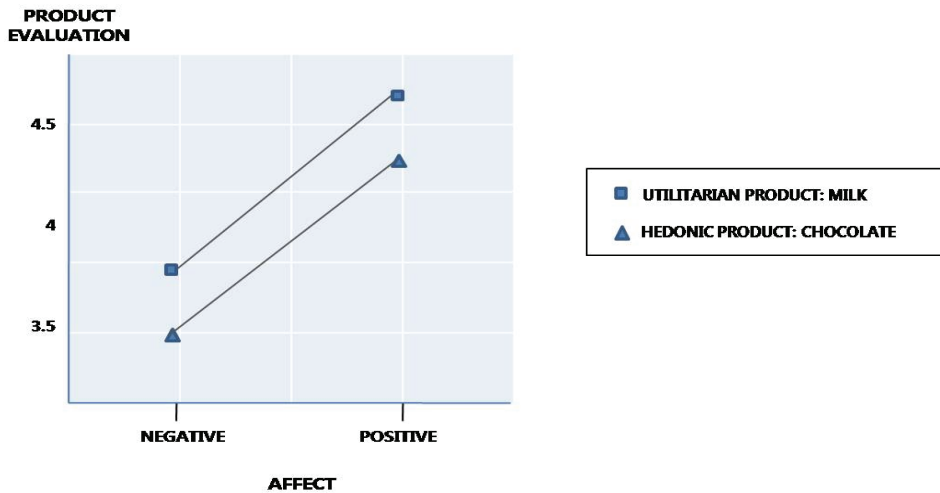
for masterpiece as the dependent variable revealed a regression coefficient was 1.746, which is statistically significant(t=10.349 p=.000). Furthermore, when we predicted the attitude towards products on the basis of the level of pleasantness, the regression coefficient was .916, which was also statistically significant(t=5.187 p=.000). In other words, masterpieces inducing positive emotions had a positive impact on the preference and attitude towards the product. When we predicted the attitude with the pre-

ference as the independent variable, the regression coefficient was .468 and was positively significant(t=9.152 p=.000). Finally, we conducted a last regression analysis on the attitude towards products with the level of pleasantness and the preference as two independent variables. As a result, the coefficient for the independent variable of level of pleasantness was of .114, became insignificant(t=.588 p=.557), while for the preference variable, it was quite significant (.448)(t=7.267 p=.000). The Sobel test also

〈Figure 3〉 Mediation Analysis
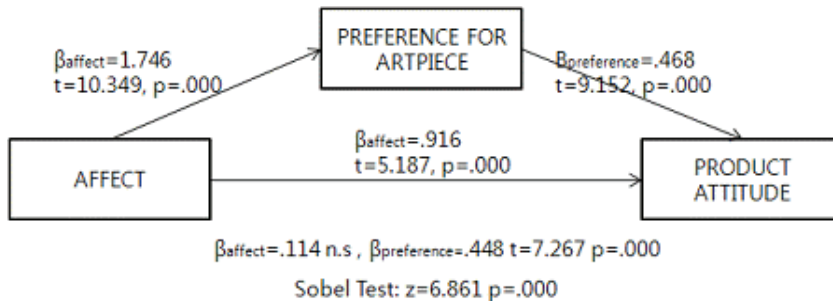
revealed a statistically significant result($z=6.861$ $p=.000$). We therefore confirmed that the influence the level of pleasantness has on the attitude was completely mediated by preference, hence confirming Hypothesis 3. Finally, the variables of knowledge of masterpiece, gender and age did not have any influence on the result.

Ⅵ. Study 2

6.1 Experimental design and characteristic of sample

Study 2 was conducted to examine whether the level of arousal would influence the evaluation of the product. To test this hypothesis that the evaluation on the product attributes would change according to the level of arousal, We applied a 2 x 2 experimental design with the product type as the between subjects factor and the level of arousal as the within subjects factor. We conducted the surveys to university students and office workers in Seoul and collected them directly. The surveys were divided into two categories according to the product type, milk or chocolate, and the respondents were given one type of survey randomly. 58 respondents answered about milk, whereas 54 did so about chocolate. As in study 1, the sample was divided according to gender, occupation and age range. There were 53 male,

which represented 55.8% of the whole and there were 48 female respondents, which was 42.5%. There were 87.2% of university students and 10.1% of office workers, which constituted 97.3% of the total sample. Respondents were mostly in their 20s(92.8%) and there were 0.9%o of teenagers and 6.3% of people in their 30s.

6.2 Experiment procedure and experiment stimuli

As in study 1, study 2 also divided between chocolate(hedonic product) and milk(utilitarian product) to categorize the products and conducted the survey as such. The stimuli that was used was also a virtual product created through a manipulation of images. The masterpiece used in the stimulant was selected through pretest and two were chosen, without significant difference in the level of pleasantness but with difference in the level of arousal. The masterpiece with a low level of arousal was the same as the one inducing positive emotions from study 1. The respondents saw the virtual products with masterpieces differing in the level of arousal inserted in them and evaluated each product. The survey questions were designed so as to answer questions about products with masterpieces with lower level of arousal and those with high level of arousal and the evaluation on products not using any masterpiece. The evaluation on products not using any masterpiece was con-

ducted between the evaluation on products using masterpieces with low level of arousal and that on products using masterpieces with high level of arousal. Study 2 was the same as study 1 except for the masterpiece used for the stimuli. Respondents answered the questions related to the attributes of the products first and later were asked about the level of arousal by the masterpiece used in the products. There were other questions repeated from study 1, asking about the general knowledge on the masterpiece and about general beliefs on product used, as well as about the demographic variable.

6.3 Measuring the variables

The main measuring variable was the level of arousal, the product's utilitarian attribute and the hedonic attribute. All measuring variables were made based on pretests referring to past researches and literature. The two different attributes of the product were the dependent variable and pretest 2 was conducted to compose them and it is based on the results that we came up with the questions. The utilitarian attribute of milk was measured based on 5 questions, including 'It looks healthy' and the hedonic attribute of milk was measured based on four questions, including 'It has a differentiated image'. Chocolate's utilitarian attribute was measured based on 3 questions, through questions such as 'I may have a clearer mind after I eat it' and its hedonic

attribute was measured based on three other questions, including 'It looks tasty'. All the questions were measured on the Likert's 7 point scale(1=Not at all, 7=Very much). The independent variable was the level of arousal and was used just as it was in pretest 1 and pretest 2, through four questions such as 'It stimulates me'. The question asking about the level of arousal was also measured according to 7 point scale. Questions were asked to examine whether milk and chocolate were perceived respectively as utilitarian product or hedonic product and questions about general masterpiece knowledge were also added. These questions were the same as in study 1. The analysis in study 2 also used the mean score of all questions measuring the variables, just as in Research 1.

6.4 Research result

6.4.1 Manipulation checks

Study 2 was conducted to examine the effect of the level of arousal on the evaluation of the product attributes. Accordingly, it was necessary to confirm whether there had been any manipulation that would allow for a statistically significant difference between the levels of arousal from the two different masterpieces. The reliability coefficient(Cronbach's alpha) for the questions measuring the level of arousal scored a high 0.808, a single index was made

from the average questions and used for the analysis. As a result of an analysis to examine whether the level of arousal had been appropriately manipulated, there was a significant difference between the two masterpieces(2.210 vs. 4.970 t=-18.724 p=.000). We thus confirmed that the manipulation of the level of arousal was successful. We also test whether chocolate and milk were each perceived as hedonic product and utilitarian product, as in study 1. The reliability coefficient measuring the degree of functionality and degree of pleasure for chocolate presented each 0.830 and 0.805 the same index for milk's functionality was of 0.955 and 0.905 for its degree of pleasure. The mean score was calculated and used for the analysis. The test process led to the same results as in study 1, milk scored higher in its functionality than in its pleasure (4.754 vs. 4.246 t=3.688 p=.001), whereas chocolate was more perceived for its pleasure (4.500 vs. 5.179 t=-3.901 p=.000). We thus confirmed that milk was seen as a utilitarian product, whereas chocolate was perceived as a hedonic product.

6.4.2 Hypothesis testing

The hypothesis for study 2 was suggested so as to examine the differential influence of the level of arousal on the evaluation of the product attributes. More specifically, products using masterpieces with low level of arousal will be evaluated more highly in their utilitarian attribute than products using masterpieces with high level of arousal. On the other hand products using masterpieces with high level of arousal will be highly evaluated in their hedonic attribute, than products using masterpieces with low level of arousal. The reliability coefficient measuring the hedonic attribute for milk and chocolate each scored 0.852 and 0.815, and for the utilitarian attribute, the index was of each 0.906 and 0.890. All numbers of high value, they were concluded to be reliable and their mean score was used for the analysis, following the example of other variables.

Hypothesis 4 predicted that products using masterpiece with low level of arousal would have their utilitarian attribute judged higher than products using masterpiece with high level of arousal. To test this hypothesis, we set the product type(utilitarian/ hedonic) and the level of arousal(low/ high) as the independent variables, and set the utilitarian attribute as dependant variable and conducted ANOVA. The results revealed that the main effect related to the level of arousal(Mlow=3.850 vs. Mhigh=3.605 F(1, 220)=1.927 p=0.167) and the interaction effect between the product type and the level of arousal(F(1, 220)=1.079 p=0.300) were not statistically significant, Yet, there were significant differences between utilitarian product and hedonic porduct(Mmilk=3.925 vs. Mchocolate=3.531 F(1, 220)=4.978 p=0.027). More specifically, we conducted two

separate analyses, by dividing the products into milk, a utilitarian product and chocolate, a hedonic product and analyzed each. The level of arousal(low/high) was used as the independent variable and the utilitarian and hedonic attribute was used as the dependent variable and ANOVA was hence conducted. Results on milk showed that products using low level of arousal had their utilitarian attribute evaluated higher than products using masterpieces with high level of arousal(Mlow=4.139 vs. Mhigh= 3.710 F(1, 114)=4.308 p=0.040). Hypothesis 4 was thus supported, but chocolate did not reveal significant difference according to the level of arousal in its evaluation of its utilitarian attribute(Mlow=3.562 vs. Mhigh=3.500 F(1, 106) =.045 p=.833) and thus Hypothesis 4 could not be fully supported. Hypothesis 5 expected that using masterpieces with high level of arousal would lead to a higher evaluation of the hedonic attribute than when using masterpiece with low level of arousal. To identify hypothesis 5, we set the product type

(utilitarian/ hedonic) and the level of arousal (low/ high) as the independent variables, and set the hedonic attribute as dependant variable and conducted ANOVA. The results showed that the main effect of the level of arousal (Mlow=4.333 vs. Mhigh=4.400 F(1, 220)= 0.131 p=0.718). There were no significant differences between product type(Mmilk= 4.332 vs. Mchocolate=4.401 F(1, 220)=0.140 p=0.708). However, the interaction effect between the product type and the level of arousal was statistically significant(F(1, 220)= 5.279 p=0.023). More specifically, we conducted two separate analyses, by dividing the products into milk, a utilitarian product and chocolate, a hedonic product and analyzed each. Results on milk revealed that products using masterpieces with high level of arousal led to a higher evaluation of the hedonic attribute than for products using masterpiece with low level of arousal(Mlow=4.086 vs. Mhigh=4.578 F(1, 114) =4.137 p=.044) and thus supported Hypothesis 5. The difference for chocolate however was

〈Table 4〉 ANOVA: The Influence of Arousal Level on Attribute Evaluation

Product Type	Dependent Variable	Independent Variable	Sum of squares	df	Mean square	F	Sig.
Utilitarian: Milk	Utilitarian attributes	Arousal Level	5.323	1	5.323	4.308	.040
	Hedonic attributes		7.002	1	7.002	4.137	.044
Hedonic: Chocolate	Utilitarian attributes	Arousal Level	.103	1	.103	.045	.833
	Hedonic attributes		3.456	1	3.456	1.612	.207

not significant (Mlow = 4.580 vs. Mhigh = 4.222 F(1, 106) = 1.612 p = .207) and Hypothesis 5 was not supported. In other words, utilitarian product such as milk supported Hypothesis 4 and 5 because the level of arousal influenced the evaluation on the utilitarian and hedonic attribute. This did not apply to the hedonic product that was chocolate, where the level of arousal did not influence the evaluation on the attribute, impeding us from supporting the two hypotheses. This matter will be further discussed in the next part. It was revealed that general knowledge on the masterpiece, gender and age were variables that did not affect the results, just as in study 1.

Ⅶ. Conclusion and Discussion

7.1 Result and implication

The trend of using masterpieces to differentiate products has recently been on the increase and it has almost become natural to question about which masterpiece is to be used for which product to maximize the effect. Suggesting that emotions induced by the masterpiece did indeed influence the product attitude and the evaluation on product attributes, this study has provided an answer to the previously asked question. Study 1 revealed that products using masterpieces inducing positive

emotions had a more favorable evaluation than products using masterpiece displaying negative emotions and that this effect was mediated by preferences for masterpiece. Study 2 confirmed that for utilitarian products such as milk, the use of masterpieces with low level of arousal led to a higher evaluation of its utilitarian attribute than when using masterpieces with high level of arousal. It was also confirmed that products using masterpiece with high level of arousal led to an evaluation on the hedonic attribute higher than for products using masterpiece with low level of arousal. However, this tendency did not apply for hedonic products such as chocolate and we predict the reasons to be as follows. First, Tripat (2008) argues in his research that the effect of additional functions is different according to the base of the product. In other words, the addition of the hedonic attribute and utilitarian attribute to respectively hedonic products and utilitarian products has led to a difference in the effect. Although the results of his research cannot completely be applied to this research because his research was conducted for convergence products only, the results suggested that adding the pleasure attribute to practical goods was effective, whereas the addition of practical attribute to pleasure goods was less efficient. In the light of his research results, we can predict that depending on the base of each product using masterpiece, the evaluation of the different attributes of the product will

vary. There was not much difference when we were giving an overall evaluation of the product(Hypothesis 1-3), but the difference in categories during the evaluation of product attributes led us to infer that the level of arousal played a moderate role. The focus of this research was to find a more efficient way to use masterpieces and we did not examine the differences in attribute evaluation according to the level of arousal for masterpieces inducing negative emotions, where the products attitude was significantly low. However, research focusing on the moderate effect of the level of arousal induced when using masterpieces and thus examining the effects between different types of product would be another valuable research.

Secondly, developed countries such as the United States, Canada and European countries have a higher tendency to emphasize upon experiential and sensible consumption(hedonic attribute). The general belief that the utilitarian attribute for hedonic product will become lower is more certain than the belief that the hedonic attribute of utilitarian product will decrease(Pine and Gilmore 1998). In case the hedonic attribute is emphasized upon for utilitarian products, the additional hedonic attribute will be further noticed and will be even more influenced. On the other hand, for hedonic products, there is a tendency to disregard the importance of the utilitarian attribute. Evaluation on the specific attributes will thus be meaningless, hence the above results.

Finally, there may be an issue with the categories of the products. If we had chosen a hedonic product whose utilitarian attribute is considered as significant past a certain level and yet without a similar strong attention on the hedonic attribute, we might have had different result. This research was only conducted with one single product for each category and has its limits in proving this point. Nevertheless, the present study also possesses some significant implications as follows.

First, masterpieces inducing positive emotions are more efficient in increasing positive attitude than masterpieces inducing negative emotions. Hagtvedt and Patrick(2008) suggested that the use of masterpiece led to a more favorable evaluation than the absence of it and stated that this reaction was due to the spillover effect of 'luxury' implied in these masterpieces. They are merely focusing on the cognitive aspect of 'luxury' and disregarding the emotional side. This study has shown that luxury is not the only effect that masterpieces have and that the emotions they induce and the preference for certain masterpieces have a critical influence on the evaluation of the product, thus revealing the importance of not only the cognitive element but also the emotional element. It will therefore be most efficient to use masterpieces inducing positive emotions, among those that display their luxurious side to increase the product attitude.

Secondly, regulating the level of arousal of the masterpieces that are being used can lead to more satisfactory results in terms of product positioning. For utilitarian products like milk, low level of arousal led to a higher evaluation of its utilitarian attribute, whereas high level of arousal led to a higher evaluation of its hedonic attribute. These results suggest that to effectively emphasize the functional attributes of milk, such as getting nutrition or satisfying thirst, one needs to use masterpieces with a low level of arousal. On the other hand, if it is not the usual but premium milk and that the main purpose is to differentiate it from other brands of milk, one will need to use masterpieces with a high level of arousal and thus achieve the positioning intended. This applies not only to milk but also to other products whose utilitarian attribute is strongly emphasized upon, such as the air conditioner. If the purpose is to point out its air-conditioning or dehumidifying traits, one will use a low-level arousal masterpiece. If the purpose however is to focus on its unique design or its luxurious implications, one will use a high-level masterpiece and thus obtain similar results to those of the milk.

7.2 Limitations and implications for future research

This research is meaningful in the fact that we have examined the influence of emotions induced by masterpieces on how the evaluation on the product and its attributes is conducted. The analysis for this research was based on the two axes of pleasantness(positive/negative) and level of arousal. Nevertheless, some limitations still exist and we believe that further research will have to be conducted to supplement them.

First, this study only used a single product from each category, milk and chocolate, and it might not be appropriate to apply the results of this research to all products. In order to expand the results, additional research will have to be done in relation to more diverse products within the categories of utilitarian and hedonic products. Especially, more specific research for high price, high involvement and self-expressive products could be meaningful to generalize the results of this research. For example, research to classify high-priced home appliances into functional product and self-expressive product and examine the influence of emotions induced by masterpieces could be important.

Secondly, although we have confirmed that the effect of the level of arousal is displayed in different ways varying from product type, we have not been able to clarify the specific cause behind such results. The reason this study dealt with both hedonic products and utilitarian products was to include all categories of products and the focus thus was not whether or not the level of arousal would have a

differential influence on hedonic products or utilitarian products. Nevertheless, we believe that the fact that the level of pleasure has similar influence on utilitarian products and hedonic products yet the level of arousal has different influences is quite interesting and that future research to look into this pheno-menon could also be quite meaningful.

Finally, this study measured the level of pleasantness(positive/negative) and the level of arousal from a general perspective and con-ducted its analysis based on such. However, emotions are often described in clearer ways, such as 'happiness', 'joy', 'fear' and 'anxiety'. It would thus be meaningful to examine the numerous emotions and how the products and evaluations of the products would change when these different emotions are induced.

〈논문 접수일: 2011. 04. 08〉
〈게재 확정일: 2011. 07. 15〉

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명화(名畵)에서 유발된 감정이 차용된 제품과 제품속성 평가에 미치는 영향

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국문요약

　최근, 제품 디자인의 차별화 방법 중 하나로 제품에 명화(名畵)를 차용하는 이른바 '명화 마케팅 (masterpiece marketing)'이 각광받고 있다. 본 연구는 시장에서 널리 사용되고 있는 명화 마케팅에 체계적이고 과학적인 방법을 적용하여, 명화에서 유발되는 감정이 제품 속성 평가에 영향을 미치는 중요한 요소임을 밝혀내고자 하였다.

　본 연구는 명화가 가지는 본질적 기능인 감상자의 정서 유발에 초점을 맞추어, 차용된 명화에서 유발되는 감정(affect)이 해당 제품 평가에 어떠한 영향을 미치는 가에 대한 가설을 세웠다. 보다 구체적으로 기존 감정 연구에서 제시된 감정의 두 축, 쾌(pleasure), 환기(arousal)의 수준에서 차이가 나는 명화가 각각 제품에 차용되었을 경우, 소비자의 제품 평가에 어떠한 영향을 미치는 가에 대해 제품의 유형(실용재/ 쾌락재)과 각 속성(실용적 속성/ 쾌락적 속성)에 대한 평가의 차이를 통해 살펴보았다.

　분석 결과, 긍정 감정을 야기하는 명화에 대한 선호도가 부정감정을 야기하는 명화에 대한 선호도보다 높았으며, 제품 유형에 관계없이 긍정감정을 유발하는 명화를 제품에 차용하였을 경우 부정감정을 유발하는 명화를 제품에 차용했을 때보다 제품태도가 더 높게 나타났다. 또한 이를 바탕으로 명화가 유발하는 감정이 제품태도에 미치는 영향은 명화에 대한 선호도에 의해 매개됨을 밝혀냈다. 감정의 또 다른 한 축인 환기 수준이 높은 명화를 실용재인 우유에 차용했을 경우, 쾌락적 속성에 대한 평가가 높아진 반면, 환기 수준이 낮은 명화를 차용했을 경우에는 실용적 속성에 대한 평가가 높아졌다. 그러나 쾌락재인 초콜릿의 경우 이러한 차이가 발견되지 않아 제품에 차용된 명화에서 유발되는 감정 수준(환기 수준)이 제품 유형에 따라 각각 다른 영향을 미치고 있음을 확인할 수 있었다.

　본 연구는 다음과 같은 점에서 의의가 있다. 첫째, 시장에서 널리 사용되고 있는 명화 마케팅에 체

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계적이고 과학적인 방법을 적용하여, 명화에서 유발되는 감정이 제품 속성 평가에 영향을 미치는 중요한 요소임을 밝혀내었다. 둘째, 긍정/부정 감정에 초점을 두어 진행되었던 기존 연구에서 더 나아가 감정의 또 다른 축인 환기가 제품 속성평가에 차별적인 영향을 미칠 수 있음을 확인하였다.

핵심개념: 명화 마케팅, 명화, 감정, 환기수준, 제품평가, 제품속성