

Good Form in Modern Silver Jewelry

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Abstract: Good form is the basic element that arouses visual aesthetic preference. Researchers of aesthetics have claimed that the forms of balance, clarity, rhythm, contrast, and so on are the objective determinants of beauty. Nowadays, there are much plenty of modern jewelries in the market. It appears that design of jewelry is a kind of form creation, and information quality of jewelry is an important factor contributing to aesthetics. Therefore, the purpose of this study is to explore the preferred forms by using modern silver jewelry as the experimental stimuli. A hundred pictures of stimuli were collected from the internet. A total of 88 volunteer participants responded to a Likert 5-point scale indicating the degree to which they preferred or non-preferred. Cluster analysis was performed, and two groups of preference and non-preference were analyzed pairwise in forms. The principal findings suggested that: 1. The high-preference form could be simplicity, balance, rhythm, lightness, contrast, space-substance juxtaposition, curve, natural style and multi-dimensional design; the low-preference form could be complexity, symmetry, heaviness, excessive decoration, vertical, horizontal, overly sharp lines, and rectangularity. 2. The inclusion of rhinestone enhanced the degree of preference, but the excessive decoration might cause the opposite effect. It was supposed that the decoration should not exceed half the jewelry body. The silver jewelry without rhinestone decoration could achieve higher preference degree by having contrasting elements in its shape. 3. The round shape was widely preferred by the subjects, but the jewelry construction needed to be simple and appropriately decorative in the meantime. Excessive complexity caused even the most preferred design to lose aesthetic appeal. 4. Figurative form, such as butterfly, flower, leave and small animal, was generally not scored high. Many of them were symmetrical, short of rhythm and contrast, and could be described by name. This makes them boring and dull. 5. The cross shape was generally not to be preferred. It was likely that in addition to the religious implications, the rigid horizontal and vertical structure made this a less popular choice even when curve elements were joined. On the other hand, although the heart shape symbolizes love, romance, eternity and so forth, the preferences varied. It seems that the styles with more curves and contrasts, as well as without excessive complexity and adornment received higher evaluation.

Keywords: *Form, Preference, Silver jewelry*

1. Introduction

Silver jewelry probably is the best material for exploring aesthetic forms. It is designed for decoration, has few functions, or even none at all. Although silver neither hedges against inflation like gold nor displays extravagance like diamond, it is a shiny material with good ductility and can be formed easily. With the rising price of gold, silver jewelry is a popular choice for the younger generation. However, there are very large numbers of silver jewelries available in the market. How to design an attracted silver jewelry becomes one of the important issues besides the brand awareness. To this end, silver jewelry samples were collected from the market and a questionnaire was conducted to obtain the answers about forms in the present study. These data were generalized to the principles of design that could serve as a reference for designers.

2. Literature Review

After the Industrial Revolution of the 18th century, designers grew tired of classical art styles, such as Gothic, Rococo, and Baroque. However, the influx of machine-made products resulted in much imitation and a lack of innovation. By the end of the 19th century, some craftsmen started to refuse producing vulgar and cheap replicas. This led to the rise of Art Nouveau that had a great impact on the descendants. With the rise of Cubism and Modernism, the evolution of silver jewelry design headed in two directions: Decorative and Geometric styles. Decorative expressions are characterized by asymmetry, naturism, curves, abstraction and individualism; Geometric expressions are characterized by symmetry and geometric forms [1]. These two styles have being the two mainstreams of silver jewelry design and express nothing more than the elements of form in beauty.

It has long been believed that symmetry, balance, contrast, and clarify are the determinants of objective aesthetics by the aesthetic theories [2,3]. Gestalt psychologists proposed that the sensory stimulation of “goodness” depends on the relationship between stimulus organization and psychological function [4]. A “good form” is easy to process in mind and can spontaneously bring feelings of pleasure. Hence, the information quality of objects is an important factor contributing to aesthetics [5]. Tjalve (1979) classified the characteristics of form into: integrity, sequence, visual balance, rhythm, and size ratio [6]. Lin (1986) claimed that verticality embodies steadiness, seriousness, hardness, and authority; horizontality suggests stability, harmony, silence, and peaceful emotions; obliquity is more stimulating than vertical and horizontal ones and implies instability, uncertainty, sensitivity and high changeability, and is more likely to obtain unexpected effects [7]. These principles of aesthetic form, included gradients, rhythm, repetition, radiation, contrast, symmetry, balance, proportion, and other elements, can be said is from the revelation of the generalization from the various natural forms.

Nowadays, studies of jewelry design may be divided into two aspects: style comparison and content analysis. Some research has focused on the technology innovation and material development, and the addition of cultural and ethnic elements as well as the discourse of social status symbols [8,9]. Other studies have been concerned with the analysis of single factor of form or image semantics. For example, Yen (2001) emphasized that, unlike two-dimensional graphics design, silver jewelry was a three-dimensional construction, especially in terms of direction, texture, and space-substance juxtaposition. A concise silver

ornament can be expressed through multiple contrast tactics with tangible visual and intangible conceptual elements [10]. Lin (2005) proposed an approach to express specific images of the concept of love on the metalwork products, and suggested that several form arrangement to convey the meanings of true love, eternity, romance, one-and-only, deep affection, uniqueness, commitment, and happiness [11]. In this study, the comprehensive discussion was conducted for the purpose of arriving at a more overall view of the preferences of form to silver jewelries.

Based on the above, it can be seen that the form expression in the development of silver jewelry design can be broadly divided into two types: asymmetric, natural “decorative” and symmetric, abstract “geometric” styles. As contemporary design has observably expanded, silver jewelry style has become more versatile than ever, but it seems that these are still the two most important categories that influence modern silver jewelry design. Furthermore, although the principles of aesthetic form have been mentioned, the focus in related literature is on the single factors like symmetry, asymmetry, or contrast, and the application of a combination of these principles has been rarely mentioned. The silver jewelry form should cover the existence of diverse elements. Hence, the preferred styles of silver jewelry design were classified and generalized with the principle of aesthetic form in the present study.

3. Method

An online survey was used to collect the ratings of the subjects for the silver jewelries. Cluster analysis was employed to distinguish the preferred and non-preferred groups. The characteristics of the stimuli were then analyzed to conclude the principles of silver jewelry design preferred by the market.

3.1 Subjects

A total of 88 subjects who volunteered to complete the survey were involved in this study, 22 men and 66 women. The age distribution was between 15-54 years of age: 17 were between 15-24; 58 between 25-34; 10 between 35-44; and 3 between 45-54.

3.2 Stimuli

The stimuli used for this study were collected from the YAHOO KIMO (Taiwan) online shopping website. There was a vast amount of silver jewelry available on the market and there were limitations to search all the images. For this reason, top-ranked objects on the site were chosen and any unclear pictures, or those not showing a frontal view were abandoned. A total of 100 pictures of silver jewelry were adopted for this survey. After downloaded the images, the brand text was removed and the edges of the pictures were cut off to leave only the main image. The stimuli images were uniformly 5 x 5cm and were about the same size as the actual items.

3.3 Procedure




















An internet questionnaire was conducted for this study. After viewing each picture, the subjects were required to rate it on the Likert 5-point scale: really dislike (1), dislike (2), neither like nor dislike (3), like (4), really like (5). In order to avoid affecting the validity of the study that might result from repeated filling

out by the same subject, only one fill in questionnaire was allowed for each IP address. The questionnaires collected were all valid. Cluster analysis of the SPSS software was used to obtain the high-preference and low-preference forms of silver jewelry. The stimuli with high preference and those with low preference, but in similar styles, were compared to summarize the preferable characteristics of silver jewelry.

4. Results

The mean of the overall preference was not high ($M = 2.89, SD = .93$), lower than the median. From the clustering results, a total of 18 silver jewelries with a higher degree of preference were found ($M = 3.25, SD = .91$), while the remaining samples fell within the group with a lower degree of preference ($M = 2.78, SD = .95$). This demonstrated that the majority of the silver jewelry designs on the market were not ideal. The main characteristics of the silver jewelries with high preference were contrast, rhythm, arc, and simplicity. Those with low preference were excessive decoration and over complexity. In addition, it was found that the cross, cube, and figurative forms were not generally preferred (Table 1).

Table 1. Top ten high- and low-preference forms

Degree of preference	Silver jewelry form				
High					
	$M = 3.45, SD = .80$	$M = 3.43, SD = .88$	$M = 3.43, SD = .98$	$M = 3.34, SD = 1.02$	$M = 3.28, SD = 1.04$
High					
	$M = 3.24, SD = .76$	$M = 3.24, SD = .84$	$M = 3.24, SD = .87$	$M = 3.23, SD = .81$	$M = 3.23, SD = .96$
Low					
	$M = 1.99, SD = 1.01$	$M = 2.33, SD = .99$	$M = 2.38, SD = .96$	$M = 2.42, SD = .93$	$M = 2.44, SD = .81$
Low					
	$M = 2.52, SD = .93$	$M = 2.57, SD = .97$	$M = 2.57, SD = .92$	$M = 2.61, SD = .94$	$M = 2.69, SD = .86$

After observing all the designs, those with high preference and those with similar form, but low preference, were compared and analyzed to determine the form-related characteristics preferred by the subjects (Table 2):

- (1) The characteristics of the high-preference form include simplicity, contrast, rhythm, and a proportionate relationship between tangibility and intangibility. The lines are round, soft, and plump; on the other hand, the low-preference forms have a dangling appearance, sharper lines, lower length to width ratios, and lack expression of space-substance juxtaposition.
- (2) The high-preference form has proportionate tangibility and intangibility ratios. The arc lines are handled nicely, while the low-preference ones seem to flatter and lack contrast.
- (3) The high-preference form has strong contrasting elements, simple shapes, and reversed designs in different directions that show rich rhythmic motion; on the other hand, the low-preference one is excessively decorated.
- (4) The high-preference form is simple and uncomplicated. The decorative rhinestones take up no more than half the area of the main body; the low-preference one has a dangling appearance and the rhinestone decoration is excessive.
- (5) Although the rhinestone decorations on this item, which has a higher degree of preference, exceed an area of half the main body, the two round rhinestones on top and bottom do not give it a dangling look. Supplemented by flowing simple arc lines, they give it a symmetrical balance. Compared to the designs with low preference, it is more elegant and stylish as a whole.
- (6) The high-preference form has graceful lines, and takes on a high rhythm and natural decorative style. Compared to surfaces with rigidly straightness and clump roughness, these forms are preferred.
- (7) The high-preference form emphasizes the characteristics of the rhinestones through contrast. The positions of the silver parts and rhinestones compete mutually and reach the status of equilibrium and stability. It is to achieve an elegant finishing touch. On the other hand, the low-preference ones have cumbersome rhinestone decoration. The juxtaposition of tangibility and intangibility, contrast, and gracefulness of lines are far from perfect.
- (8) Arc elements are more popular than sharp lines although both take on the attachment of rhinestones. Simplicity is highlighted by a contrasting approach to achieve a competing effect between the silver parts and the rhinestones in the high-preference forms. On the other hand, the low-preference forms have excessive and complex decorations of rhinestone with rigid lines. This makes them unpopular.
- (9) The high-preference form has smooth arcing lines. The design is lithe and meticulous, and the rhinestones give a decorative finishing touch. The low-preference ones have rigid lines that appear stiff and uneven, making them less appealing.
- (10) The circle is a special form element and is generally more popular than heart and rhombus shapes. It is the most popular shape in overlapping designs using the same shaped element. However, the decoration should not be excessive. The high-preference form has simple decoration and elegant curves instead of excessive ornaments and complicated details.

Table 2. Comparison of high- and low-preference forms

	High-preference form	Low-preference form		
1	 <p>$M = 3.45, SD = .80$</p>	 <p>$M = 3.01, SD = .98$</p>	 <p>$M = 2.97, SD = 1.01$</p>	
2	 <p>$M = 3.40, SD = .98$</p>	 <p>$M = 2.83, SD = .93$</p>	 <p>$M = 2.42, SD = .93$</p>	
3	 <p>$M = 3.43, SD = .88$</p>	 <p>$M = 2.95, SD = .84$</p>		
4	 <p>$M = 3.20, SD = .96$</p>	 <p>$M = 2.74, SD = .80$</p>		
5	 <p>$M = 3.22, SD = 1.02$</p>	 <p>$M = 2.82, SD = 1.05$</p>	 <p>$M = 2.74, SD = .99$</p>	 <p>$M = 2.60, SD = .94$</p>
6	 <p>$M = 3.23, SD = .96$</p>	 <p>$M = 2.61, SD = 1.01$</p>	 <p>$M = 2.52, SD = .93$</p>	
7	 <p>$M = 3.23, SD = .81$</p>	 <p>$M = 2.77, SD = .84$</p>	 <p>$M = 2.61, SD = .94$</p>	

8	 $M = 3.24, SD = .76$ $M = 3.24, SD = .87$	 $M = 3.08, SD = .81$ $M = 2.89, SD = .82$
9	 $M = 3.34, SD = 1.02$	 $M = 3.08, SD = .82$ $M = 3.00, SD = .83$
10	 $M = 3.28, SD = 1.04$	 $M = 2.66, SD = .88$ $M = 2.57, SD = 1.06$

While the stimulus images were being collected, it was found that there were large numbers of “cross” and “heart” shaped silver jewelry designs available on the market. Therefore, these designs that symbolize faith and love were listed individually below, while the other figurative styles were included in the discussion (Table 3):

- (1) It is speculated that, in addition to the religious implications of the cross style, the reasons they were not generally favored by the subjects were that the vertical and horizontal elements make them seem too stiff. The degree of preference was not enhanced even by the addition of curve elements to the design.
- (2) The heart shape symbolizes love, romance, eternity, and one-and-only. In terms of design, as long as the style remained simple without excessive decoration, the degree of preference was generally high. However, if handled improperly, the evaluation will be rated rather low.
- (3) Figurative forms that depicted butterflies, flowers, leaves, and small animals were generally not preferred by the subjects. This outcome is possibly due to the fact that these styles were mostly symmetrical, lacked the properties of rhythm and contrast. Additionally, the significance of such representative design is plain to see. All of these make them boring and dull.

5. Discussion and Conclusions

It can be inferred from the results that silver jewelry with a low degree of preference includes the following elements: 1. Simplicity; 2. Rhythm; 3. Juxtaposition of space-substance; 3. Balancing entity; 5. Roundness and arcs; 6. Lithe and meticulous; 7. Contrast emphasis; 8. Appropriate decoration; 9. Natural decorative style; 10. Multiple-dimensional design. On the other hand, silver jewelry with a low degree of preference features: 1. Complexity; 2. Symmetry; 3. Horizontal, vertical, or overly sharp lines; 4. Heaviness and roughness; 5. Excessive decoration; 6. Rectangular style.

Table 3. Figurative silver jewelry forms

Classification	Form				
Cross	 $M = 3.06, SD = .86$	 $M = 2.94, SD = 1.00$	 $M = 2.78, SD = .94$	 $M = 2.75, SD = 1.02$	 $M = 2.38, SD = .96$
Heart	 $M = 3.23, SD = .81$	 $M = 3.15, SD = 1.02$	 $M = 3.07, SD = .83$	 $M = 3.06, SD = 1.11$	 $M = 2.90, SD = 1.12$
	 $M = 2.86, SD = .95$	 $M = 2.74, SD = .88$	 $M = 2.74, SD = .96$	 $M = 2.65, SD = .98$	 $M = 2.65, SD = 1.01$
	 $M = 2.65, SD = 1.11$	 $M = 2.57, SD = .92$	 $M = 2.57, SD = 1.06$		
Other	 $M = 3.02, SD = 1.04$	 $M = 3.01, SD = 1.11$	 $M = 2.95, SD = .95$	 $M = 2.94, SD = .96$	 $M = 2.94, SD = 1.01$
	 $M = 2.83, SD = .99$	 $M = 2.74, SD = 1.10$	 $M = 2.67, SD = 1.05$	 $M = 2.64, SD = .94$	 $M = 2.64, SD = .97$
	 $M = 2.57, SD = .97$	 $M = 2.33, SD = .99$			

Vertical and horizontal forms were less preferred, but the ratings for round styles were variable. It is assumed that if circular construction implies purity, simplicity, and appropriate decoration, it makes the ratings high. In contrast, complex forms damaged aesthetic feeling and reduced the degree of preference. It seems that the attachment of rhinestones was a kind of application about round element. The shiny characteristic of rhinestones and the contrast property produced by the silver lines enhanced the degree of preference. It is worth noting that an excessive amount of decoration could reduce the preference of design. We suggested that large numbers of rhinestones and complexity of form be avoided. An appropriate proportion of rhinestones should not exceed half the body of the jewelry. Interestingly, even without rhinestone decorations, some pure silver items were still preferred, but the design needed more strongly contrasting elements to emphasize differentiation of the form, produce lively fun, and create different levels of aesthetics.

Styles that are excessively figurative, or without any abstraction, or can be directly labeled a name were not preferred. Especially if the form is symmetrical, lacks rhythm and contrasting aesthetics. This makes them even more boring. The most common themes among the figurative styles are the cross and heart shapes. The cross form has religious significance, while the heart symbolizes love, romance, and eternity. However, crosses are generally unpopular. This may be due to the religious implications as well as the fact that vertical and horizontal structures appear stiff. The aesthetics cannot be improved even if an arc element is introduced. The heart shape has higher preference as long as it stays simple, does not become complex and the decoration is not excessive. If these principles are not followed, the rating will drop immediately.

The findings of this study could also have implications for other design research and practice field, such as the decorative design objects and the fashion items. However, the stimuli used in this study were collected from the shopping website. The generalization of the results to other populations with luxury brands may be limited, and thus future work will hopefully clarify this important concern.

6. References

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