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## The study of formal composition application in interior design

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### ABSTRACT

Since the early 20<sup>th</sup> century, formal composition has been widely applied in interior design education and integrated into design art. With the developing of art, formal composition has laid its own theoretical basis by referring to some basic theories. At end of the 20<sup>th</sup> century when the policy of reform and opening up was carried out in an all-around way, with the rapid increasing of the livelihood, people's passion to pursuit material happiness was replaced by passion to spirit richness. Since then more and more people focus on the developing and applying of soft environment. In order to meet people's demand, designers apply notions and principles of design composition to interior soft environment, not just to interior functional design, so that not only creating an innovative living environment and the spacial culture but also improving ecological environment. This paper mainly studies formal composition's application in interior design.

### KEYWORDS

Formal composition; Interior design; Three-dimension composition; Application.



## INTRODUCTION

With the developing of China's urbanization, people's demand for high living quality promotes the rapid grow of interior design. Humanized design has integrated into space design such as the design for office space, living space, entertaining space and commercial space. Because our study of interior design begins later than that of developed countries, so almost all of our skills and styles of interior design are learn from the western, making our designs lack national characteristics. So designers have responsibility to integrate Chinese traditional culture and regional characteristics into interior design by studying interior design theories, making designs not only root in China's characteristics but also manifest national style. Designers should not only focus on design patterns and design skills but also try to give interior design rich connotation, so that to enable interior design to be economic, practical and rich of modernity.

## FORMAL COMPOSITION IN INTERIOR DESIGN

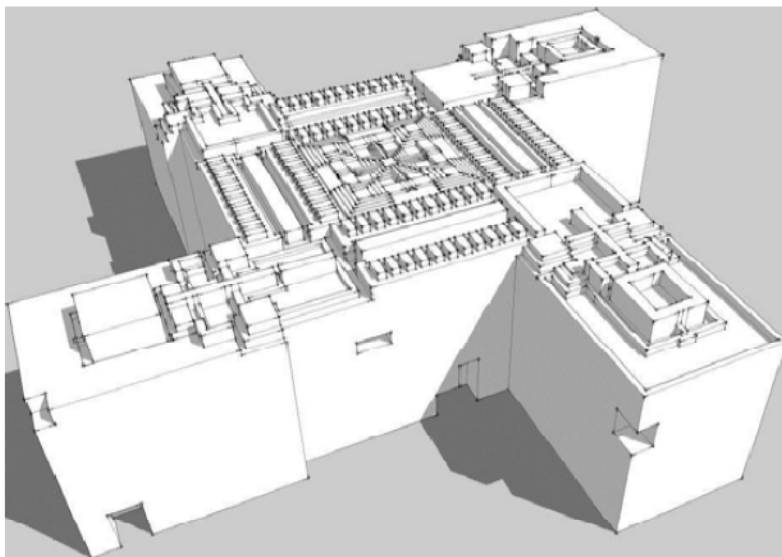
### Two-dimension composition and color composition in interior design

#### (a) Interior design and two-dimension composition

Two-dimension composition in design means that using some basic elements such as point, line and surface to create an object, whose characteristics must be reflected by following the laws of beauty. Graphic design aims to create a three-dimension objective by cutting, processing and recombining the two-dimension surface with the help of abstract thinking. The artistic beauty in two-dimension composition can be classified into two kinds, beauty in order and beauty out of order. Design composition focuses on beauty in order, reflected by symmetrical forms achieved by using techniques of repetition, gradient and scattering, all of which can make figures full of sense of rhythm. Beauty out of order represents designs breaking the traditional symmetric form to create a new balance in design by using composition techniques such as comparison and special figures. The rule followed by this design is that the combining of point, line and surface should be rich of sense of rhythm, realizing the combination of change and unification.

In order to make interior design full of rhythm and rhyme, after studying the repetition form of interior environment, we should carry out a design program: using lined decoration, decorative figures and furniture's location to make the whole environment present a coordinating and unifying visual effect. In interior design, with a goal of avoiding tedium and monotony, designers should make a soft and balanced change the repetition, making the design coordinated and harmonious. This design composition not only can strengthen the interior spacial sense but also achieve the ideal visual effects.

Taking density comparison composition as an example, trough comparison, designers can enable objectives have an invisible visual tension, giving people a sense of instability. However, the whole visual effect must remain balanced and make people feel stable and unified, to rise the design's comfort-ability. The adjustment of objective's similarity can enable designers to find their commons after they do interactions, finally making design rich of comparability and concordance. Comparability referred here mainly points to color comparison. Different space would give people different feel, for example warm-toned color is usually for bedroom and cold-toned color for washroom. Such color comparison can make spaces distinct. The so called concordance is for the whole space. When there appears any inharmonious parts in a whole space, designers should use comparison and concordance to make up them, giving people a sense of security and improving design's comfort-ability (Figure 1 shows the density comparison composition).



**Figure 1: Density comparison composition**

### (b) Interior design and color composition

Color composition means color distribution in objects. In artistic spacial design, color property has its own characteristics. Designers should build a connection between them according to a certain proportion, to make all colors harmonious with each other. Interior design can make changes according to the changing of environment, space and applied objectives, so designers should use colors to do adjustment, changing design's visual effect.

In interior design, the using of color has its own target. For example, public interior environment's high demands toward color requires designers to properly collocate rich colors to accord with public space's function. A law office is usually designed to be clean, bright and distinct, to make employees feel relax. Because color can adjust interior atmosphere, designers should pay attention to color's concordance. Firstly the interior color should be the proper main color to avoid damaging sense of wholeness. Based on space's functions, interior decoration should realize the balance in color. Because interior design shares an necessary connection with day-lighting, designers should ensure the color is helpful to achieve daylight, so that the collocation of interior colors can give people a good visual effect. Because the geological location is different, Sunshine can make interior orientation produce different visual effects, so the choosing of colors should also make some changes. For example, the space facing the north should be printed by warm-toned colors and the space facing the south should be printed by cold-toned colors or neutral colors. Interior design should not only pursuit fashionable style but involves in regional characteristic and cultural concordance. China, as an eastern country with long history and rich culture, is the world's treasury of both traditional culture and local customs. Treating traditional culture as the main element and integrating it into space's functions and regional characteristics can make interior space full of cultural meaning. The collocation of color can be traditional or modern, so designers should come up new ideas, so that to create successful interior design.

### Three-dimension composition in interior design

In the 1980s, a period of China's reform and opening up comprehensively being carried out, the transformation of command economy to market economy enable three-dimension composition in interior design to be brought to China. Then, three-dimension composition, as the basic discipline at art colleges of China, makes students more deeply understand the design art. With the rising of interior design, composition theory has been integrated into social construction and become an irreplaceable part of urban planning.

#### (a) Three-dimensional elements

In three-dimensional elements, the basic elements are point, line and surface. In formal composition design, designers should make subjective innovation present dynamic visual effects, integrating formal beauty into figures.

Point element: Although point is the smallest item in visual elements, it is irreplaceable in formal design. Because the irregular points can produce different visual effects. Observed from a far, points present regular; near, irregular distribution. So designers should make use of point's comparing effect in design. The smaller point is the more simple and clear the formal design is; the expanding of point would create surface. If designers can flexibly operate the change from point to surface, they can create figures, disordered but full of visual regularity.

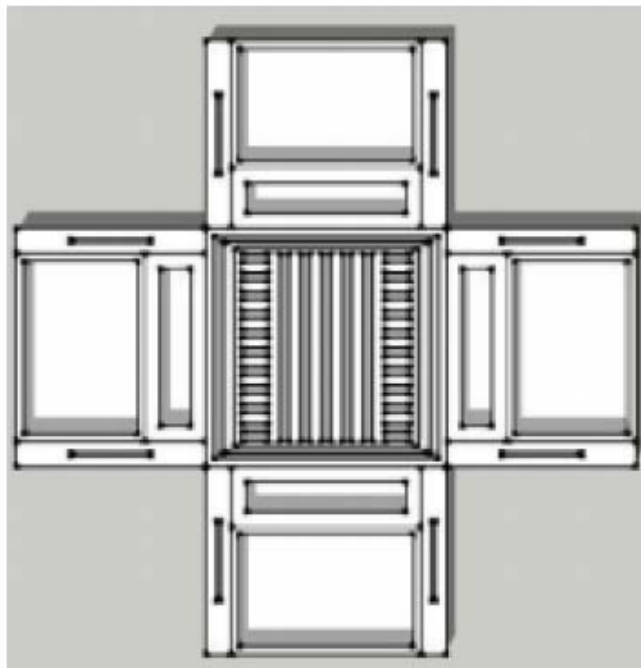


Figure 2: The study of surface

**Line element:** Line element refers to two-dimension line. The changing of line is presented through the changing of its thick, thin, length or shortness. The continuous changing of line element can show different visual effects, and after being endowed with vitality line can show some emotion under the influence of design style.

**Surface element:** Surface element takes a large proportion of a picture and plays an important role in picture. In figure design, the whole scale decides surface's length and width. Because surface is usually presented by the formation of points and lines, so designers should flexibly use the elements of point, line and surface to create a thoughtful design. Although compared with point and line, surface composition is less flexible, it can fully show design structure. Influenced by partition effect of surface, designs can be sensible (Figure 2 shows the study of surface).

### **(b)The presence of three-dimensional composition**

Two and half dimensional composition's form is involved some elements of plane and three-dimensional design. The visual effect is in the transformation from tow-dimensional plane to three-dimensional plane. Through processing two-dimensional materials, it always presents in low relief. But because low relief is concave-convex from observing perspective, so objects cannot be three-dimensional.

The more common form is three-dimensional line, which as the basic element of interior design, highlights interior design's beauty through using line material's characteristics. Trough the efficient applying of line material's dynamics and direction-sense, the structure of formal composition can be reflected, making people feel happy.

The application of line materials mainly refers to the use of formal line materials and functional line materials. Formal line materials can be use in the organization of wall, floor and ceiling. The changing decorative lines make interior decoration more dynamic and rhythm, creating a wonderful artistic space. Functional line materials focus on interior function and mainly is responsible for conduct structure design, construction function and structure weight.

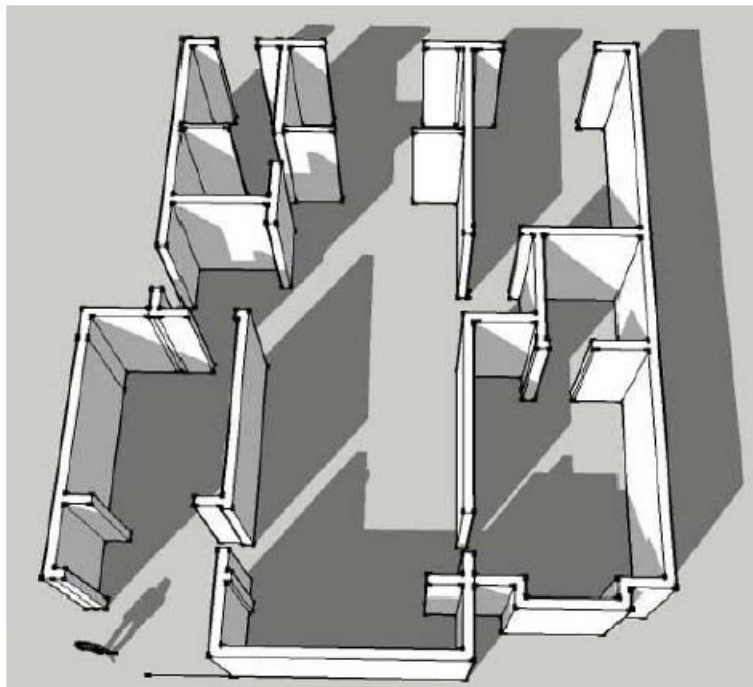
The dotted line in interior design is formed under the influence of sunshine. The changing in bright and dim of axis and symmetric line projected on objects present a wonderful visual effect.

Plane material's three-dimensional composition means that material formal characteristics are reflected by the difference in surface's length, width and weight. Plane material would mot give people a three-dimensional sense, but its flexible changing of visual effect. The visual weight of plane, combining with the function of line presented in its side, can play a function of space-partitioning, making people feel fullest.

## **FORMAL COMPOSITION'S APPLICATION IN INTERIOR DESIGN**

### **Space and three-dimensional composition**

The space-partition of a cube cannot meet modern interior design's demands for design. In order to get three-dimensional effect, designers can try to create a sunk space at level ground, or a vertical and staggered form, forming a staggered spacial effect and creating a staggered three-dimensional space. But interior structure is mainly designed into fixed space. Although space doesn't change any more, the stronger the interior space's function is the smaller living space is, limiting space's using function.(Figure 3 shows fixed interior space)



**Figure 3: Fixed interior space**

In modern space design, besides fixed space there is also changeable space, whose characteristics different from fixed space lie in the flexible composition of space, in which big space can be divided into several small spaces with changeable using functions. This distinct separate processing method not only presents a various spacial visual effects but also improves space's using functions. In order to obtain different using functions, designers can use many separating means such as walls, plants and furniture. Taking interior space design as an example, dining-room can share the same space with drawing-room, because the decorative cabinet behind sofa can make a distinct separation between two rooms.

### **Interface and three-dimensional composition**

Interior interface design mainly refers to that the composition of ceiling, wall and ground should accord with spacial functions. Designing interface, designers should firstly divide space and process entitles. The space interface design is usually done according to commons in shape factors, to produce different visual effects under the influence of sunshine on shape and color. For example, wood structure, as the main structure of interior ceiling, should meet demands for high quality, so that after being processed it would have a special appeal. Besides texture, the wood's quality and natural color, after being properly designed, would give people distinct psychological sense. Designers always integrate repetition into ceiling design and conduct a radioactive processing of ceiling structure.(Figure 4 shows wooden ceiling's appeal).



**Figure 4: Wooden ceiling's appeal**

Wall covering design mainly refers to design that treats wall-surface as the vertical background element, playing roles of separating interior space and deadening noise, keeping warm. Walls can be divided into load bearing wall and non-bearing wall. Load bearing wall's structure cannot be changed, but non-bearing wall's structure can. So wall's dividing, disintegrating and combining in interior design are all limited to do in non-bearing walls. If there are any needs for adding and combining, light gypsum board and block-board would be the best choice, which can enable designers to achieve their desirable design effects.

### **Furnishing and three-dimensional composition**

In interior space design, through integrating abstract ideas achieved from spacial entity factors into the replacing and processing of objective in a certain, designers can remain space's wholeness. For example, if sofa can be treated as a point; bed, a surface, all objectives can be abstracted into point, line or surface by designers and then be placed according to their own functions.

All relative small objective in room such as lightnings and decorates can be regarded as point. The full making use of lighting effect can highlight characteristics of decorates and sett up connection between points in interior space. After being abstracted to point, line or surface, furniture must be placed according to three-dimensional composition's rule to create a sense of stability and peace. The artistic style reflected by interior design should focuses on space's function value. Designers should create a beautiful and practical space, making people feel comfortable.

## CONCLUSION

In conclusion, in interior design, through efficiently making use of basic elements such as point, line and surface, designers can make three-dimension composition present different visual effect. With the developing of city, interior environment design has not just focused on space's function. Creating more comfortable leisure space has become another goal of designers, so designers should use design techniques to create a environment full of cultural and ecological atmosphere, completely playing the function of interior three-dimensional space and making people feel comfortable psychologically and physiologically.

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