The Incomplete Beauty of Visual Language

Ying Liu¹, Yi Chen², Xiaojing Liu¹*

¹ Department of Architecture and Art, Central South University, Changsha City, Hunan Province, 410012, China
² Hunan Park Educational Consulting Co., Ltd, Changsha City, Hunan Province, 410083, China

Email: 81413450@qq.com, 48316365@qq.com, 1037303749@qq.com, 12856385@qq.com

* Corresponding Author: Xiaojing Liu; email: 12856385@qq.com; tel:+86-18974968823

Abstract: The beauty of incompleteness in design is a kind of theory and a sublimation of incompleteness in cognition. It is a beauty that is opposite to perfection. It is a reversal of order and runs counter to the good wishes of people. But it can produce a strong visual and psychological impact, impressing people deeply. This paper illustrates the influence of incomplete design on visual perception through case studies, and discusses its application in the vocabulary, structure and pragmatics of visual language. Owing to the unique charm of the incomplete beauty in visual language, it can be concluded that the use of the incomplete design can achieve effective visual communication.

1. Introduction
As the Chinese saying goes, "men have sorrow and joy; they part or meet again; the moon is bright or dim and she may wax or wane". The incompleteness is a natural phenomenon, and it is the imperfectness that gives a lingering aftertaste. Venus de Milo with broken arms, the Roman Colosseum with crumbling fences and dilapidated walls, and the ruins of the stone carvings in Western Mansions area of The Old Summer Palace (known in Chinese as Yuanming Yuan) all showed a kind of residual beauty of defect. For contemporary design, this kind of incitement caused by the incompleteness cannot be replaced by perfection, and it is also a kind of spiritual realm constantly pursued by designers.

2. Visual language and visual psychology

2.1 Visual Language
Visual language is a set of norms or symbolic systems that convey meaning by two parts: visual basic elements and design principles. Among them, the basic elements include: lines, shapes, light and dark, color, texture, and space. They are the basis of a work and equal to the bricks, tiles, cement, steel and so on needed to build a house. It is also like characters and words in a written language. Design
principles include: layout, contrast, rhythm, balance, and unity. They are the principles and methods that artists use to organize and apply basic elements to convey meaning.

2.2 Visual perception and visual thinking
We often say "I saw something", or "I saw the world around me". What is the meaning of "seeing" here? For practical purposes in everyday life, to see or to watch is only the basic means of guiding the direction of practice. And Rudolf Arnheim explains it as a kind of elementary activity of confirming that something is in a certain location by one's eyes, which is what most people understand about "seeing". But then Arnheim puts forward that the content of "seeing" is more than that. What exactly does "seeing" include? Through numerous scientific experiments, Arnheim revealed the fact that vision is not only an activity of watching, but also a process of rational thinking. To this end, Arnheim proposes a concept that overturns traditional philosophy and general psychology: visual thinking. In traditional psychology, the distinction and boundary between perception and thinking have always been very clear. It is believed in traditional psychology that perception, belonging to the category of perceptual knowledge, is a direct reflection of an objective stimulus, a low-level cognitive psychological phenomenon of human psychological process. While thinking, belonging to the category of rational cognition, is an indirect reflection of objective things, a high-level cognitive psychological phenomenon in the psychological process with the characteristics of generality and abstractness. The concept of visual thinking put forward by Arnheim breaks the strict boundary between perception and thinking. He points out that perception, especially visual perception, has all the skills of thinking, and visual activity is completely a kind of positive activity, which can simplify, combine, abstract, and separate art and visual perception. It is not only selective, but also succinct and durable. In fact, in our daily life we have such experience: when we look at a three-dimensional sphere, the back of which is invisible to our eyes, we will still perceive it as a complete ball, that is the hidden back of the ball can still be "seen" by us; when we look at someone's face, even the hair flowing down his or her back becomes part of the overall picture we receive. It can be seen that human vision is by no means the same device as a camera with mechanical self-made parts. Because it is not a passive acceptance activity like a camera and the image of the outside world is not simply printed as accepted. Another famous contemporary psychologist, Sir E.H. Josef Gombrich of the United Kingdom points out that seeing is not recording, but the reaction of the whole body to those light patterns that stimulate our eyes. There is no unbiased eye in the world. Seeing is the explanation. The visual organs do not exist for the sake of understanding, but have evolved for survival. The result of this evolution leads to the special tendency of thinking when recognizing things. Visual activity is a creative activity of the human spirit.

2.3 The aesthetic principle of Gestalt psychology
According to Gestalt psychology, what is perceived is greater than what our eyes see; the conscious experience must be considered globally because the nature of the mind demands that each component, with its own characteristics, should be considered as part of a system of dynamic relationships. Thus, when an incomplete form is presented to people, incomplete individual elements will depend on the overall characteristics, causing a strong tendency in the vision to pursue perfection, symmetry, harmony and simplicity. In other words, it will provoke an impulse to supplement or restore individual elements to the complete state that they should have, thus greatly increasing the level of excitement of perception. This stimulating process of visual perception achieves the enhancement of visual language, which leads to the aesthetic sense of visual thinking.

3. The incomplete beauty

3.1 The definition of incomplete beauty
To ask what is incomplete beauty, we must first know what is beauty. British aesthetician Bernard Bosanquet wrote the definition of the beautiful in the first chapter of his book A History of Aesthetic:
"That which has characteristic or individual expressiveness for sense-perception or imagination, subject to the conditions of general or abstract expressiveness in the same medium." Alexander Gottlieb Baumgarte, a German philosopher and aesthete, believes that sensory knowledge, namely, the completeness of perception or feeling, is called beauty. Although the definition of beauty among these ancient Western aestheticians are different, it is certain that beauty is the sensory feeling of human beings. Therefore, beauty is the process of human perception through thinking and the subjective feeling of the audience.

In Shuowen Jiezi (an early-2nd-century Chinese dictionary from the Han Dynasty), it wrote that "can" (a Chinese character), literally cruel injury, followed the meaning of its left lateral radical and phonetically resembled its right lateral radical; "que" (a Chinese character), literally the breach of a container, followed the meaning of its left lateral radical and phonetically resembled its right lateral radical. In the Chinese Dictionary, "canque" means "missing of limbs or organs caused by disability, etc.; incomplete or partially missing". Thus, "canque", or incompleteness, is a derogatory term, as opposed to perfectness. It is the destruction or imperfection of the appearance of materials, the destruction of things, the reversal of the order, and the psychological treason. The incompleteness in design refers to the defects, irregularities, oldness, involving the physical properties of the image's shape and contour, and textur. Interestingly, when incompleteness is applied to the art field, its imperfection has been greatly improved through the completeness resulted from human subjective experience.

Incomplete beauty can be divided into two types in the art field: narrowly defined incompleteness and generalized incompleteness. The narrowly defined incompleteness is the non-human or unintentional defects recognized by most people. The generalized incompleteness is the beauty of the incompleteness, that is, whether it is the incomplete part or the incomplete whole, it can be regarded as the beauty of incompleteness. It is the incomplete beauty referred to in this article.

3.2 The reasons behind the incomplete beauty
In daily life, people are often reluctant to see the fly in the ointment and are unwilling to experience things that are contrary to good ideals. But when people see the phenomenon of defect or experience imperfection, it is certain to cause imbalance of the mind, create conflicts, and trigger a strong physiological reaction. Therefore, the form of the incompleteness is likely to cause visual attention, which is more intense, prominent, and cohesive. At this point, the form of the incompleteness is not only the opposite of perfection, but a beauty that is shocking and awakening. This is why perfect things are easy to forget, but the incompleteness can make people unable to let go for a long time. Incompleteness can always cause people's compassion, and sometimes it is reflected on themselves.

In design, many defects do not affect our understanding. On the contrary, it is incompleteness that gives people a new visual experience. Human visual perception, a kind of visual thinking, has the initiative and gestalt consciousness. Although the graphics itself is incomplete, it can still obtain a complete perceptual object. Thus, the incomplete beauty becomes the beauty of artistic conception, quality, truth and imagination. The incomplete beauty of the design often uses this psychological impact on the viewer's innermost depths. Moreover, it is often the incomplete form that expresses more visual language and produces more visual feelings, resulting in a visual aesthetic, that is, the beauty of incompleteness.

4. The incomplete beauty in design

4.1 The incomplete form: a beauty of supplement
Regarding to many excellent graphic design works, we often find that some works are very prominent and compelling compared with other works. In fact, these works are finished based on breaking the organizational structure and visual perception in the general experience. This kind of graphics are not the most regular (symmetric, unified, or harmonious) shapes, but have their own unique tendencies
and laws. They may not look like perfect standard shapes, but they can produce intense excitement in the cerebral cortex through visual stimulation.

For example, in the second "Kan Tai-keung Design Award", the poster "Circle" (figure 1), which won the "Future Designer Award", is such a success of incomplete beauty. The theme of this poster is the reunification between both two sides of the Taiwan Straits. At the center of the white picture is a green jade bracelet. But the author He Shiyang has opened a small breach, representing Taiwan, on this perfect bracelet. This breach has become the visual center of the picture, quickly attracting our attention and triggering our thinking. People cannot help wondering why there is such a regrettable flaw on the perfect jade bracelet. Consequently, the atmosphere of patriotism has been heightened.

If figure 2 is three complete cubes, it will inevitably make people feel rigid and uninteresting. By subtracting a part of the shape, although the logo looks incomplete, it leaves a space for imagination. On the surface, it seems to be a kind of reduction, but it is an increase for the viewer, deepening the contrast among shapes.

In figure 3, the poster of "Fusion" by Yuan Youmin, an associate professor of the Department of Visual Communication Design at the Central Academy of Fine Arts, is a fragmented image formed by heterogeneous isomorphism. At the center of the picture is the image of an animal giraffe, but if you look carefully, you will find that the giraffe is the incomplete "Mona Lisa" of the famous Italian painter Leonardo da Vinci. This kind of incompleteness impresses a fresh feeling on the viewer. The fragmentation formed by this isomorphism produces a novel visual experience and strengthens the artistic conception of the picture.

As shown in the above examples, the stronger the visual impact, the higher level of attention and memory index. Practice has proved that the incomplete image is more likely to attract visual attention. If applied reasonably, the defect can effectively enhance the attention of the vision, highlight the essence of objects, and expand the space of imagination.

4.2 The incomplete expression: a beauty of imagination

Paul Klee once said: "Art is not to depict something visible, but to create something invisible." This sentence shows that the real realm of art lies in the "invisible". In fact, as long as we pay attention, we will find that the "invisible" can be reflected in many art forms. For example, in traditional Chinese painting, there is an idea of "liubai", literally intended blank. In Chinese painting, we often find that only one theme is at the center of the painting, leaving a large space. In fact, this is a unique technique of traditional Chinese painting called "liubai".

Kan Tai-keung, the great designer in Hong Kong, is adept at using the technique of traditional Chinese painting, "liubai". With a grounding color of white, most of his posters (figure 4) inherit the sense of space of Chinese paintings, such as virtual reality and intended blank. There are not many
elements in the whole picture, and rich and appropriate blurring is applied in some parts of the poster. It has reached a realm of "leaving enough space for viewers to imagine" and "producing limitless aesthetic enjoyment by limited ink paint" in traditional Chinese paintings. Whether it is tangible or intangible, virtual or real, it is all for the sake of accurately reflecting the artistic charm and ideological intention of the work.

![Figure 4](image)

Figure 4

Figure 5 is the poster with the theme of "the return of Macao" designed by Li Shaobo, director of the design department of School of fine arts at Hunan Normal University. The incompleteness of the dragon pattern on the plate stimulates people's senses to complete the pattern. It is this complement that skillfully reflects the historic event of Macao's return to the Chinese mainland. To some extent, the imperfection of the plate is the utmost perfection of the inner idea.

We often see the slogan like "if you were her... " or " if you were here... ". Designers do not tell a story, but use a short half sentence with a sense of incompleteness to express thousands of possibilities, giving the audience enough space of imagination to put themselves in it. In ancient times, there was an old saying that "it is better to leave enough space for a writer when expressing his thoughts", which means that one should leave more leeway for writing and speaking, and leave space for the receiver's imagination and perception. As shown in figure 6, the same is true for the expression of visual language in design, which needs not to be perfect.
4.3 Summary

The form of incompleteness in visual art, as an art media, or as a linguistic feature, can satisfy the conditions of aesthetic pleasure. It is a concise but varied trace, a mixture of complexity and richness that implies a simplified trend and tension. It is an important visual element that is organic, seemingly random, but regulative. The texture of music is to put a simple theme into a rich, complex, various, repetitive movement, with a dense or elegant tune; while the texture of the art can be understood as the simplified structure or composition of the picture, with special processing, expansion, and variation of the media language to make it rich and colorful. The form of incompleteness, as one of the components of this texture, plays a role of deepening the theme in the communication of visual language.

5. The incomplete beauty in visual language

5.1 The design of visual grammar

5.1.1 Visual vocabulary in incomplete design

The vocabulary refers to the sum of words, that is, the aggregation of linguistic signs. From this, the visual vocabulary is derived, which is the basic elements of the visual language, like graphic patterns, colors, words, and so on.

Gombrich believes that regarding to the design elements, patterns that are easily perceived by people are tedious. When the expected pattern comes to sight, people's attention is not drawn to it. In information communication, the degree of surprise directly affects the memory of the audience. Thus, the simplification or even imperfection of the pattern naturally generate a kind of individual visual experience, which is against people's aesthetic will, so it can better attract the attention of the audience.

The aesthetician Kurt Beidirt interprets art as "the most intelligent organizational means that is based on the essence of insight. This essence is the essence of everything else that belongs to it". Therefore, in the case of grasping the essence of things, no matter how simplified, "the traces of the form of incompleteness contain rich connotation, which is the external manifestation of the 'intrinsic' simplified principle", in order to make better use of the incompleteness of the representation. Incorporating ideas into it, giving new meaning to the incomplete, and letting the incomplete image get the sublimation of art, thus creatively completing the concept and information communication. For example (figure 7), the designer skillfully uses the incomplete design to simplify the Chinese characters "gong" (literally national interests in Chinese) and "si" (literally personal interests in Chinese), with the lower lateral radical of "gong" removed to the right part of the character "si". And its copywriting of " it is glorious to honestly perform one's official duties but disgraceful to harm the interests of the country and the people" has profoundly revealed the theme of honesty and integrity.
5.1.2 visual language structure in incomplete design
Study of the structure of a language refers to the combination and arrangement of signs and symbols. The structure of visual language is not only the mechanical addition and subtraction of design elements, but also the expression of deeper connotation through the combination of various elements.

The change of composition can make the graphics incomplete and convey the visual language better than the complete graphics in the design. It is impossible for a picture of specified size to present all the images, and the choice itself is the design. The author must discard the superfluous elements according to the needs of the theme, and focus on the performance of some objectives. Thus, the imperfection of local graphics becomes inevitable.

The composition of a picture is a noun at present, but in the Southern Dynasty, Xie He (the first Chinese painting theorist) called it "jinyingweizhi" (literally rules, composition and layout of a painting in Chinese). In the process of poster creation, designers should arrange the picture elements according to the needs, namely, what to show and what to give up.

For example, the poster of the ballet Swan Lake (figure 8) designed by German graphic designer Matthies Holger shows an incomplete image of a swan, whose head is a foot of a ballerina if viewed upside down. Other parts of ballerina's body are omitted for the reason of composition. The imperfection caused by this composition makes the visual impact of the figure stronger and the picture appears simpler and more concise.

5.2 The law of incomplete beauty of visual semantics

5.2.1 to highlight the subject as the fundamental
The subject of visual language is the main element and the main figure of design, which is the appeal point of poster itself. Once the semantics (theme) have been determined, the designer should focus on the subject. At this moment, semantic communication is particularly important, and all parts of the design should at the service of semantics. Any detail of the design must serve the design body and the design intention. And the main figure of design has the primary and secondary sequence, with some details. In order to be prominent in the ocean of information and attract the attention of the audience, it is necessary to highlight the important part of the main figure, so as to highlight the theme, namely, semantic communication. The incomplete design of the main graphics is one of the methods. The purpose is to highlight the focus and serve the main body, which is a clever incomplete on the overall effect, so that the audience can accept and remember the idea conveyed by the design.

For example, Japanese graphic designer Ikko Tanaka designed the poster of "the 27th Sankei Kanze Noh" (figure 9), in which the designer took the "Noh mask" as the main body and arranged it in the center of the poster. In order to highlight the main body of the picture, the author removed the secondary part, the white hat. After that, only the incomplete mask, namely the triangle in the center of the poster, was left, reaching a level of simplicity and refinement and producing a strong visual impact. It is just the integration of the white hat and the grounding color of white that makes the image of Noh become more vivid, prominent.
5.2.2 for the purpose of enhancing semantics

The meaning of design is to plan, regulate and visualize. That is to say, the purpose of design is to convey design ideas. Therefore, how to strengthen the communication of visual language is the goal of design activities.

For objective things, each person has an impression in his mind according to his own understanding. This is the "Gestalt" in everyone's mind. When the shape of an object we see is the same as the "Gestalt" in our mind, it will be too normal to be ignored. When the shape of an object we see conflicts with the "Gestalt" in our mind, it will cause visual attention. In principle, the stronger the conflict, the greater the degree of attention, and the higher the memory index. Thus, the audience always compares their predictions of changing external events with their inherent information framework. If these external events are consistent with their predictions, they will no longer be interested in it; if not, they will estimate the situation at that time.

The incompleteness itself is not beautiful, but it is precisely this kind of incompleteness that breaks some of the "Gestalt" in people's minds. It arouses people's visual vigilance and mobilizes brain activities, thereby rendering people to analyze why this object is illegal and incomplete. The biggest characteristic of the incomplete image is that it is easy to attract the attention of the vision, which is a highly fast, powerful and prominent process. If properly applied, it can achieve a shocking effect and produces aesthetic feeling at the same time.
Therefore, smart designers use the above-mentioned principle and apply it to the graphic design with his keen perceptive. They have better practiced the incomplete design of Chinese characters and enriched the expression and connotation of the works. For example (figure 10), the two points of the left lateral radical of the Chinese character "you" (literally oil in Chinese) are omitted, which constitutes the incomplete character. The information stored in the brain can be utilized by the viewer to form a complete character. This has greatly mobilized the viewer's interest and highlights the appeal theme of the advertisement.

5.2.3 with the intension of incomplete form but rich meaning
In visual language, the incompleteness of design elements does not represent the absence of semantics. On the contrary, the conscious incompleteness is aimed to produce a new meaning, having a clearer interpretation of the incomplete appearance of the subject figure and the inner thoughts that the designer wants to convey. This design process refers to the intension of incomplete form but rich meaning, that is, the author uses the incompleteness of the visual image to convey a perfect idea or a kind of unique emotion. The incomplete appearance is typically designed for the aim of incompleteness, but the perfect unity of perceptual knowledge and rational understanding, form and content. Under the incomplete external form, there is a perfect idea that matches it.

Professor Chen Fang designed a poster of victory (figure 11). There is no language in the picture but a broken hand with two figures made into the shape of V. It is the incompleteness of these three fingers that reminds people that victory is a painful price. A strong visual impact strikes people's heart and makes people feel desolate and bitter, prompting people to reflect on their own behavior.

5.3 The incompleteness of visual pragmatics

5.3.1 the breadth of incomplete design
In the design of fonts, modern design works with Chinese characters as the theme elements have begun to take shape and gradually developed, among which the incomplete design of Chinese characters is quite representative. From ancient times to today, the incomplete Chinese characters have left countless missing parts for people to guess and complete. Today's designers have found beauty in incompleteness and found rich design connotations. The incomplete design of Chinese characters not only reveals its formal beauty, but also is widely applied to graphic design, allowing viewers to feel the psychological collision of objective incompleteness and subjective pursuit of perfection.

In graphic design, there are many different degrees of incompleteness in terms of the main figure of the poster. Graphic, with the original meaning of illustration, now refers to the illustrative visual carrier by means of painting, writing, engraving, printing, etc., and a way of information communication which can be copied. The main body in the poster has the characteristics of symbol, which means anything that can be used to deliberately replace another thing. Symbol has a clear and
simple connotation, so it has a universal sense of identity in the cognitive psychology. Similarly, the incomplete poster is also symbolic. After the intentional lack of the main body of the poster, its appearance has undergone partial or fundamental changes, and presented new visual effects with deepened language of design.

From the perspective of color, the defect of color in design is also a form of expression. It is an important principle to express emotions with the incomplete color. Incomplete color is an objective object, and emotions are something spiritually or vitally reflected in the object. The incomplete color is displayed in the picture, and emotions are perceived from the picture. The incompleteness of color always presents a fluctuant change with a modulated rhythm, and contains rich historic meaning. For example, in the posters expressing the theme of warfare, gray color and asymmetrical forms are often used. This kind of deficiency often has some special meaning and psychological suggestion. The hint is the spirit, the feelings and the vitality. The mottled color and broken shape give a shocking visual impact and successfully reflect the spiritual connotation of the works. When the little girl in red dress in Schindler's List passes through a black-and-white crowd, not only an emotion of sympathy, but also the reflection of history and life are presented. The application of incomplete color in design is the sublimation of the spirit.

5.3.2 The depth of application for incomplete design
Incompleteness does not always mean beauty. Only the incompleteness that accords with an order can produce aesthetic feeling. Thus, the designer must master the degree of incompleteness and adjust it flexibly.

In incomplete design, why can we achieve the complete expression of ideas but with incomplete form? The reason behind is the grasp of the integrity of the design object. "Perception is the process of selecting, organizing, and interpreting sensory stimuli to make it a meaningful and coherent image. The final product of this process is the perception of a particular object, forming a complete image of the object. "In the case of grasping the essence of things, no matter how simplified, "the traces of the form of incompleteness contain rich connotation, which is the external manifestation of the 'intrinsic' simplified principle." The famous painter Eugen Delacroix once said that in order to draw an object, "before drawing, the painter must clearly understand the main lines of the object, and the main lines is not the actual contour line, but the line that constitutes the structural skeleton of the visual object in many cases." Through the structural skeleton, that is, the grasp of the main axis skeleton, when the design element is partially missing, the audience can better utilize the incompleteness of the design, and complete the design element by the main structural skeleton.

Secondly, the unique correspondence between different parts determined by the main axis skeleton is of great significance. The fact that the structural skeleton determines the characteristics of a pattern is high important. If the structural skeleton of an image is similar to the structural skeleton of the viewer, this image can be recognized by the viewer effortlessly. Therefore, the charm of the incomplete design is reflected in the incomplete form, and its default or incomplete parts are supplemented by graphical hints and psychological associations.

6.Conclusions
The incompleteness in design is opposite to gestalt. However, the proper use of the incompleteness does not affect our understanding of things. On the contrary, it is incompleteness that gives people a new visual experience and highlights the essential part of things. It stimulates the audience's aesthetic tension and visual desire, which gives them more space for imagination. The contrast caused by the incomplete design can effectively enhance the memory index. What kind of visual objects are more likely to attract people's attentions? As designers, we should pay attention to this problem and use more theories of psychology to analyze the application of incomplete beauty in design. It is sure that incompleteness does not always mean beauty. Only the incompleteness that accords with an order can highlight the main figure, trigger imagination, and retain memory. Therefore, the optimal expression
form of the Gestalt principle in visual language communication not only contains "incomplete shape, complete ideas", but also contains incomplete beauty.

Acknowledgement
This research was financially supported by Hunan Provincial Philosophy and Social Science Fund (Grant No.: 18YBA436)

References
[1] Arnheim, R. Art and Visual Perception[M]. Beijing: China Social Science Press, 1984
[2] Arnheim, R. Visual Thinking[M]. Beijing: Guangming Daily Press, 1986
[3] Zong, B. Artistic Conception[M]. Beijing: Peking University Press, 1987
[4] Teng, S. Aesthetics Design and Art Education. Sichuan People 's Publishing House, 1998
[5] Yin, D. An Introduction to Design. Hunan Science and Technology Press, 2004
[6] Wang, F. A study on the incomplete beauty in graphic design[J]. Popular Literature and Art, 2009