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Experience and Cognition: A Study on “Experiential” Design in Exhibitions

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Abstract

The experience economy boosts the development of experience design, which, as a new form of design, has become a hot spot in studies on exhibition design. This article probes into the experiences and experience design in exhibition design, primarily in aspects such as the definition of experience, the reasons why the experience is stressed in exhibition design, misunderstanding about experience and factors that constitute experience. The analysis of the above questions forms the basis for the experience theory in exhibition design. This article aims to provide theoretical guidance on development of exhibition design practices, and serves to finally achieve the purposes of exhibition design.

Key words: Exhibition design; Experience design; Cognition

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1. DEFINITION OF “EXPERIENCE”

Experience is a kind of psychological need. In the experience economy era, the consumer psychology has changed from material consumption to spiritual consumption. Experience has become one of consumer’s

pursuits. A. H Maslow divides, in *A Theory of Human Motivation*, the human needs into five levels, i.e. Physiological needs, safety needs, Love and belonging, Esteem and Self-actualization. The value of experiences lies in that they satisfy people’s psychological needs of higher levels such as physical and mental pleasure, social identity and self-actualization.

Experience design is a design process which starts after people have had psychological or behavioral experiences, and it is based on such experiences. It aims to attract the customers and guide consumption through specific design objects. As a new form of design, experience design has been gradually applied to various industries. In exhibition design, the experiential design is built in two aspects: the product itself, and its exhibition environment. However, the consumers’ experiences of the product are inseparable from the specific exhibition environment. The exhibition environment plays an important role in stimulating, setting off and exaggerating, and is an important factor giving rise to experiences. The exhibition environment and experience design are analyzed in two aspects: psychological experience, i.e. inner feelings, and action in person, i.e. behavioral experience.

In exhibition, the “Experience” differs from “Experience design”. “Experience design” stresses a system, while “Experience” only focuses on perceiving a certain object, stressing the process of deepening people’s understanding and awareness of this object through experiencing.

In fact, experience design is nothing new. This form of design had existed since ancient times. For example, activities such as offering sacrifice to gods or ancestors and theatrical performance. However, experience design, in the modern sense, is a kind of design language that comes into existence in the experience economy. It has been formally established as a definition, and begun on its way of self-realization as a design philosophy. The renowned scholar, Ngthan Shdroff, had defined, in his

Experience Design, “Experience design” as “a process in which the consumers’ participating is included in the design, and in which the enterprise view services as a “stage”, products as “stage properties”, and environment as “stage settings”, and the consumers have wonderful experiences in commercial activities (Shedroff, 2004). Experiences are inner, of an individual’s inner life, and are the earnings from the participating of a man’s body, feeling and knowledge, and its major features can be summarized into: subjective initiative, emotional assimilation, creativity, immateriality, etc.. The current experience design involves almost all fields of design and communication. As an advanced stage of design, this integrated, systematic design behavior has exhibited immense room for development due to its complex form of design, and certain complexity and uncertainty under cross impacts of multiple factors; therefore, there are still many blank spots in theories and methods that remain to be studied further.

2. THE REASONS WHY “EXPERIENCE” IS STRESSED IN EXHIBITIONS

Firstly, the richness of items on exhibition makes the deep understanding of items on exhibition can only be realized through means of “Experiencing”. Over approximately 50 years in the past, the society has undergone enormous changes. In the past, it was really amazing to see business showcase in business street. In ages when materials were rather scare, the limited objects on exhibition were naturally attractive to the spectators, and therefore were relatively easy to understand. After reform and opening-up, the age rich in materials was coming. Conventions and exhibitions such as “Canton Fair” are prosperous. In various conventions and exhibitions, propaganda materials are piled up high or scattered everywhere on the ground. Under such circumstances, it is harder for the traditional means of the exhibition to attract the attention of spectators. Therefore, new forms of exhibition are in urgent need.

Secondly, the scientific development creates new bottleneck in accomplishing the task of exhibiting. In ages when electric lamps were still unpopular in China. A bright lamp plus simple sound or supplemented by certain colored image-text would leave deep impression on the spectators (when the camera technique was still in the age of black and white). However, nowadays when the computer and network technology are popular and digital contents in various media are impacting people’s eyeballs without intermittence, and gorgeous, rich videos are unfamiliar to most people.

For the above two reasons, along with the coming era of experiment economy, “Experience” has become

an important point of reflection to explain the items on exhibition, and “Experience” has become a buzzword in this era. However, what can be deemed as “Experience” in the exhibition is a question that should be carefully considered.

3. MISUNDERSTANDINGS OF “EXPERIENCE” IN EXHIBITION DESIGN

Firstly, multimedia is equated with experience. Around the 1990s, the computer technology had undergone rapid development. Various emerging multimedia, through ordinary PC, can be produced. People have been in wide contact with various emerging media and perceived such intense sensory stimulation. It differs greatly from the form of exhibition which was mainly featured by figure-text. “Under such circumstances, it is natural for people to view this type of digital multimedia, which has never been existed before, as Experience”. Along with further development and popularizing of technology, newer objects begin to appear, and that is interaction.

Secondly, interaction technology is equated with experience. The appearance of interactive technology has brought new stimulation in using, etc.. The new stimulation, ranging from simple media interaction (represented by the popularity of multimedia software and various simulation games) to touch-screen technology. The touch-sensitive experiences brought by touch-screen technology have far outpaced the sensation of indirect control through a mouse. In only a few years, the touch-screen technology has almost reached perfection in operational sensitivity and visual effects. Therefore, some people think that, compared with the multimedia technology in the past, this is real “Experience”. Yet at the same time the emerging exhibition technique (3D) begins to come into existence.

Finally, 3D exhibition technique is equated with experience. Compared with traditional films, 3D exhibition technique can really bring people with more intense sense of the scene. Haman’s needs are powerful impetus to development of technology. Therefore, within a few years, the 3d exhibition technique continues to heat up. From 3D films equipped with 3D glasses to 3d technique with naked eyes, new techniques come out one after the other, and scales have been enlarging gradually. Currently, the latest video terminal products such as 3D TV have come true from concepts. 3D technology comes along the way accompanied by “experience” and is nothing surprising to be equated as “Experience”. At the same time, the improved 4D and 5d concept have been carried out on the basis of 3D technology. And the core in experience is still to stress the sense of reality to the scene.

4. REALIZATION OF “EXPERIENCE” IN EXHIBITION DESIGN

The exhibition events as well as the entire process of experiencing are dynamic. Therefore, experience is considered continuous, multistage and multidimensional. These dimensions include awareness, cognition, emotion and behavior. The awareness experience is the most basic and most common form of experience, and is the perception stereotype about something which the host has developed. Husserl had proposed, in his Logical Research, initial idea for the essential structure of awareness, that awareness is intentional. When people enter into an exhibition environment, first, they will form a pure, inherent and vague impression on superficial information such as layout, shape, color, sound and light. And such vague impression is aware, which is not only related to aesthetic level of the environment itself, but also to people’s experiences and habits in the past. These vague impressions can be converted into emotional experiences of different attitudes, according to varied understandings of various men. Awareness is playing an important role in these processes of psychological experiencing. Therefore, the exhibition designers are exploring the activities, which are purely intentional and pure, and using them as a basis for design. This has great significance in boosting the design of exhibition space.

The audiences’ experiences on exhibition space could be divided into two types: cognitive experience and behavioral experience. Cognitive experience is the starting point and first stage of experiencing process of the subject, as well as a basic mental mechanism of human behavior. The process of subject’s cognition of the object is not simplex or instantaneous psychological activity. Yet it is done jointly through sensory stimulation which is visual, audio, tactile, gustatory and olfactory. In exhibition environment, factors such as shaping of exhibition equipment, collocation of item on exhibition and lighting configuration are able to activate people’s emotions, allowing them to have a complete experiencing of space environment. Cognitive experience intertwines cognitive phenomena such as attention, sense, perception, memory and thinking. It is a process when the items on exhibition and information transferred is processes and finished, screened off the dross and the false. On this basis a complete, correct cognition of the items on the exhibition can be reached.

Behavioral experiment is completely new physiological and behavioral experiences and lifestyle experiences after the subject has had certain experience. It is beyond the scope of emotion and cognition. Physiological and behavioral experiences are rooted in tangible experiences of body, while the lifestyle experiences are rooted in inherent concepts and experiences in life over long periods. The modern conventions and exhibitions are getting more and more closer to human life. Exhibitions

in a specific field can bring people new discoveries, new technology and new concepts. And each new element is able to boost people to restructure their lifestyles. Behavioral experience is a process when people are inspired to think about lifestyle anew, through form of exhibition and their perception on items on exhibition. Therefore, people have the chance to have unexpected experiences from a new lifestyle.

5. REALIZATION OF “EXPERIENCE” IN EXHIBITION DESIGN

The realization of experience means the process of influencing the sensory reactions of the audience, through overall system adjustment in several aspects such as the sense of sight, sense of hearing, sense of smell, sense of taste and sense of touch. It aims to evoke people’s potential sensory association and emotional resonance, and guides them to get involved and gain a full range of experiences from certain emotional atmosphere.

5.1 Sense of Sight

The visual art design in exhibition design in conventions and exhibitions means the process of organizing and coordinating, according to aesthetics law, the visual media such as graph, text, color and format, to satisfy people’s needs of pleasure, and at the same time achieve the goal of transferring business and cultural information. It has been showed by the law of man’s visual cognition that: among various exterior visual stimuli, those that have been organized or designed, i.e. the most clear and neat (symmetrical, uniform, harmonious) and concise visual images, can bring people the extreme pleasure, and meanwhile, are the easiest to be understood and memorized. It can be concluded that, in exhibition design practices in conventions and exhibitions, in order to have a better result, the visual elements should be simplified as soon as reasonable. For example, the layout of an exhibition should have concise graph and text, easy to read and memorize. And the more graphs, the better. And the signs should be featured by international, symbolic, convenient, readily identifiable, etc. All those help the audience to understand fully at a glance. In addition, the items on display should be selected, or too many items is easy to disorient people. In a few hours of visiting exhibition, people are receiving rich introduction, demonstration, infusion of the items on exhibition in dozens of booths, and therefore, they are subject to fatigue with excessive information. Therefore, studying on law of visual cognition of people and applying reason are of great importance for the most effective exhibition, transferring and communication.

5.2 Sense of Hearing

The sense of hearing is the sense people have when the sound wave acts on the hearing organ, excite its

permissive cells and give impulse to the auditory nerve to send the incoming information for analysis of various levels of the auditory center. The amount of information perceived by the auditory experience is merely second to that of the visual experience. As far as design of exhibition space is concerned, the background music will be a basic element that stirs up people's sensory experience. It plays an important role in heightening the environment and exaggerating the atmosphere for exhibition. In a crowded and noisy exhibition hall, a harmonious sound effect is amiable, alleviating people's hearing burden, and therefore is easy to arouse them to find the beauty in items on exhibition and have a pleasant association. During concrete design of exhibition environment, the provision and selection of background music should adapt to local conditions. The atmosphere created by the music should be in harmony and consistent with the subject on exhibition. And the volume, sound quality and tone should coordinate with the changes in the atmosphere of the exhibition. For example, the exhibition hall of Nagoya City in EXPO 2005 AICHI had masterly used people's sense of hearing as a sensory language. Melodious music floating around the hall is a wonderful music "played" by the wind on "musical instrument". There were three hand-made "musical instrument" that comprised white windmills below which xylophone and vibraphone were bond. Blown by natural wind which is suddenly strong and suddenly weak, the instrument was producing a melody with different syllables, letting people experiencing the bright and encircling sound of nature, relaxing and pleasing people physically and mentally.

5.3 Sense of Touch

Same as the sense of sight, the sense of touch can help people form impressions and subjective experiences; yet the sense of touch does it in a more real and delicate way, and through which people are able to acquire more subtle experiences. One distinctive feature of modern exhibition in conventions and exhibitions lie in that it stresses the audience' interacting and participating, and breaks the monopolistic status of visual and auditory experience in conventional exhibition design. In design of exhibition environment in conventions and exhibitions, people's sense of touch is mainly reflected in materials. The difference in surface characteristic caused by varied stimulation of materials on touch organ decides the difference in tactile experience. People's fondness of sense of reality and fineness of material, shape and hardness comfortable sensation, as well as fondness of elasticity and tension, and reality association, etc. are all within the scope of tactile experience. It is because of the difference in these tactile experience that the space environment is given varied perceptual image, and therefore, people's potential association of tactile experience is aroused. For example, the hardness, fineness of metal, glass and marble can arouse people's longing for industrial machine,

modern urban life and future high technology. And the warmth and softness of wood can arouse people's pursuit of backing to nature and enjoying the rural life.

5.4 Sense of Taste and Sense of Smell

In recent years, people are more and more incorporating the two sensory languages, i.e. taste and smell into exhibition design, striving to build an exhibition environment which is real and natural, giving a completely new experience of being personally on the scene. The sense of taste mainly comes from the sense of smell. The sense of smell is caused mainly by gaseous substances acting on permissive cells in the nasal cavity. The sense of smell can bring people to the sense which is the most intense, acting physiologically and psychologically. Stimulation of smells can raise the level of excitement of limbic system, resulting in improving the memory effect. Certain familiar smell can bring us to a pleasant time and place, or arouse the deepest emotion in our memories, or evoke our memory of the childhood, or remind us of a special someone. The level of memory caused by the difference in smell, as well as its capacity of arousing unique association enables the sense of smell to be a tool for identifying among numerous items on exhibition. For example, in Expo 2010 Shanghai, the French Pavilion had not only arranged Michelin stars to open kitchen to inspire people's sense of taste, but also set up a smell experience zone, where the visitors can smell "cartoons that smell". In the cartoons, there are green grass, girls having bread and small street with cars passing by. As long as the visitors stop and stare at them, they are sure to have a sense of smells of green grass after the rain and of sweet bread with milk. In the virtual kitchen of German Pavilion, through small holes with notes, a rich flavor of cake suddenly attacked the visitors, bring them intimate, warm breath of life; while in the park pavilion, the smell of flowers and birds making the visitors being personally on the scene of a German city. The blending of smells and environment bring people direct sensory stimulation, capable of prolonging visitor's stay in a showroom to intensify the audience's impression on items on exhibition.

CONCLUSION

The introduction of experience design in modern exhibition design has changed the propagation mode of general exhibitions. As it stresses the need to involving the process of audience's cognition, through the experience environment which is interactive, analogizing and readily for participation provided in the exhibition space, in the their experiences of participating in games or entertainment in order to arouse, to the largest extent, the audience's perceptual potential. Therefore, in adapting to the changes in modern mode of propagation, it is undoubtedly the best way to transfer the subject contents of exhibition by means of "Experience" in exhibition

design; yet experience should be viewed as a complete system rather than merely the techniques. In the process of experience design, as a form/method, all techniques are equal. Today, with highly developed technology, in exhibitions the forms of real object and scene recovery that were once used in the past should be stressed again. Certainly, this does not suggest that the use of high-tech technology should be avoided or opposed. The core of the exhibition should be expressing the exhibition subjects rather than technology. And it is necessary to strengthen more the sense of “Experience” in exhibition, from the perspective of the audience’s emotion, and to finally transfer perfectly the items on exhibition as well as the subject concept.

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