Cognition and Audiences of Visual Language in Display Design

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Abstract

The audiences' browsing and reading on environmental information of exhibition space are actually one kind of cognitive activity, which is done mainly through understanding on visual language and associative activities. Therefore, studies on cognition of visual language of display design and on audiences of exhibition activities will make great contributions to propagation of display design and exhibition information, as well as to realizing the exhibition effects. This paper conducts studies mainly in terms of exhibition visual language cognition, visual observation and experience mode analysis, audiences in the exhibition visual environment, the audiences' media participation, etc..

Key words: Display design; Visual language; Cognition; Studies on audiences

1. COGNITION ON VISUAL LANGUAGE OF DISPLAY DESIGN

The audiences' browsing and reading on environmental information of exhibition space are actually one kind of cognitive activity, which is done mainly through understanding on visual language and associative activities. As we know, the people visit exhibitions with the purpose of acquiring the required information.

In orthodox theory of modernism, it is believed that the acquired information when receivers feel the constitution of things is exactly the meaning. Then how do the people acquire information in display and how are meanings generated? From the perspective of viewers, the people must acquire information through sensory perception first of all.

The acquisition of information in exhibition activities is started via the sensory stimuli on people by display signals. It is claimed by psychologists that the sensation will be generated after the information of objective environment acts on human senses, then via nerve conduction to the corresponding sector of brain. In daily dissemination activities, the texts can only act on one sense at a time whether we listening, speaking or reading out them from prints. The actions of exhibition activities on human senses are obviously comprehensive and all-around, involving human senses of sight, hearing and touch in the meantime, as well as smell sometimes, and not to mention the sensation concerning equilibrium and unspeaking ones felt during motion of our muscle and joint. However, it is such feeling incurred by interests initiated through sensory stimuli rendering us the existence of information and to proceed with acceptance and treatment of information gradually.

2. VISUAL OBSERVATION AND EXPERIENCE MODE ANALYSIS

By "visual experience", we mean that the cognitive activities conducted by the people in a certain visual way and with usage of methods of observation, thinking, analyzing and testing via "sight" in a specific way for attaining some "cognition goals". As "visual experience" is connected to "formal expression", hence, the mode and method adopted by different philosophies and objectives vary. The "visual experience" is not only related to

concrete objects involved in the problem to be solved, but also related to the theoretical knowledge grasped via "sight", as well as to certain view of philosophy and methodology.

In display design, the contents to be discussed on visual experience are of analyzing the various perspectives involved in visual observation and estimation carried out by the human in domain of display visual form, and sorting out the tomographic meanings of visual analysis. In display, we can summarize the methods of sight pr visual experience into three levels: (a) Observation and feeling, namely, to find elements and language of visual form in general things and to perceive phenomenon, elements and expression means of visual value via sight sense. This is the basic cognitive phenomenon of audiences in display activities. It pays attention on nothing but the cognition perceived from superficial image of object, including that on basic outline of form and on color. (b) Impression and perception, namely, to focus on the general description of object image, with concrete performance lying in cognition on theory of scientific techniques, on integral observation survey, and on transplantation of perceivable objects in 3D space, and visual hallucination replacement and methods in display. Through browsing, the audiences can analyze and cognize visual elements involving light and shade, and structural relations, construction principle, ergonomics, etc.. (c) Visual schema, by taking the experiment in visual way and formal analysis and abstraction as the starting point, to conduct multidimensional visual analysis from various perspectives, and interpret the corresponding formal expressions, that is, the cognition and analysis of general law and statement rule in display design.

In addition, we should know that action of "sight" renders the complex psychological activities and cultural reflection, as well as a part of human behavior. Different methods, guided by specific epistemology, will directly result in different effects of visual information propagation, and the language expression in visual form is just the result gained in a certain perspective of sight and with experience analysis methods. For this reason, there are different display modes and various product arrangement methods, as well as propagation of displayed information, in concrete display design. Therefore, innovation of display form is required in display design basing on elements like the audiences' psychological analysis and observation methods, visual experience analysis, and so on.

3. AUDIENCES IN DISPLAY VISUAL ENVIRONMENT

Study on audiences in display space environment is one of the key points of studies on commercial exhibition information propagation. In general, the study on audiences involves many contents, including the human "aesthetic physiological-psychological mechanism", attitude of enjoying, the audiences' psychological characteristics and others. The audiences' psychological characteristics vary from each other, and we should deem all of them as positive, leaving space for audiences to image and select, and letting them actively participate in understanding of design idea during enjoying. In addition, choices of free development should be given to them to a certain extent, as well as certain space of recreation. All of these are approaches to remove the audiences to participate in actively. The study on audiences in display environment should also consider studies on psychological feelings and psychological characteristics of audiences, the information factors of audiences, information receiving and feedback of audiences, etc..

3.1 Psychological Feeling of Audiences on Display Visual Environment

The object of display environment and information design is the human, who can not exist away from the society and environment. In addition, the audience is the "destination" of display design, and studies on audiences will determine the amount of information accepted by audiences and the effects of propagation. The human behavior is determined by the environment and interrelations between human beings, therefore, human psychological phenomenon and behavior characteristics are required to be studied for display design. Study on psychological feelings of the human in display space environment should involve analysis from three aspects: first, analyze the cognition of display visual space environment to find the optimal stimulating point, and then adjust and improve space environment basing on the psychological need of the audiences. But cognition of the human on environment can not be separated from the development of society, different growth stages of the human, and some objective conditions owned by the environment. Therefore, in display design, it is necessary to determine and analyze the attribute of sensation of target audiences and the effects of various psychological factors on cognition. Second, the spatial attribute of environment. The utilization and usage of space are related to the user, and also influenced by information communication and feelings. For this reason, it is necessary to study what kind of spatial patterns and space image exist in the display space environment, as well as the psychological trend of audiences in such space. Third, the concerns are related to how to perceive the environment and to make comprehensive evaluation on the environment.

The display space environment acts as site, background and medium in relations between human beings. A Japanese architect, Tange Kenzō, has said that "The so-called space in modern civilized society is exactly the site where human beings associate with each other. Therefore, along with the development of communication, the space

continuously develops towards a more advanced and organic direction." Just like the architectural environment, the psychological "site" of display space environment emphasizes the perception, emotion and behavior of human beings in the site as well. This is certainly related to the needs of human beings in display space environment. Definite the needs of audiences, based on which the display space environmental conditions are adjusted so as to consciously guide the cognitive orientation of the human, thus improving perceptibility of the human in the environment, adjusting human emotion of viewing and inducing human behavior. In display space environment design, only creating a reasonable environment for behaviors and emotions by centering on the human can improve the propagation speed and force of information.

For display space environment design, it is necessary to understand and experience needs of human beings, determine forms of site, space and architectural environment with usage of design experience methods, and explore human space perception and living purpose. With human-centered design concept, and importance attached to the relations between the human and behavior environment, such display space environment design is effective.

3.2 Psychological Characteristics of Audiences in Display Visual Environment

For display design, not only the display purpose and requirements of merchants should be fully comprehended, but also analysis and studies on audiences participating in the exhibition and their psychological characteristics should be carried out. Studies on audiences can not only provide effective guidance for display design, promoting the formation of display design philosophy, but also serve the purpose of attracting audiences, enhancing interaction between enterprises and audiences, so as to attract customers to the maximum extent, convey information and realize the commercial purpose of display.

Studies on audiences initially proceed from differences of psychological structure. In general, the psychological characteristics of audiences involve six aspects including cognitive psychology, curious psychology, group psychology, performance psychology, psychology of transference, and aggressive psychology. If the said are well grasped in display design and applied into design proactively, then unexpected results will be attained. It can facilitate the effective conversion of display concept and let the design form charming. Now we make a brief introduction to the application of cognitive psychology and curious psychology in display design.

Cognitive psychology is a kind of prevalent psychological phenomenon existing in audiences for seeking information. Everyone has a thirst for knowledge, hoping to understand new environment, attaining new information resources and verifying the

acquired information. The display design is to organize and produce some information to convey to audiences through reasonable design, and such information to be conveyed should not only be new selling points required by enterprises to be displayed, but also satisfy cognitive requirements of audiences to some extent. In display environment, if the information to be conveyed cannot provide audiences with the required experience and knowledge, or the information are false, which will contribute nothing for audiences to improving their effectiveness of cognitive behavior, and will be dodged or refused by the audiences. Therefore, for display design, it is necessary to produce information conforming to information requirements of audiences or meeting their experience and knowledge reserve, and guarantee the authenticity and reliability of information itself in the meantime.

Curious psychology: the people are always ready to accept abnormal, novel and rare information for purpose of attaining a larger amount of information. As the production and impacts of curious psychology principle are of significant features, and can impress the human profoundly in a short time, thus it is widely applied in the progress of design and propagation, which is also the pursuit of display designers. The designers always strive to make display design eye-catching, and let the display with unforgettable effects on the premise of taking information propagation as the purport and maintaining their taste of design. In display design, such design of novelty does not involve the novel and peculiar contents of information, but all the linguistic elements of information like means of presentation, structure, material, color and so on, so as to satisfy the expectation of audiences on information. The application of such principle in display design can adopt the variation techniques, such as changes of proportions, reverse application of perspective rules, variant, exaggeration and repeating gradients of single object, etc..

The curious psychology can give rise to strong peculiar feeling of audiences, which is very important for display. The purpose of commercial display is to convey information of commodity or enterprises to audiences, and it is just an approach to understand and apply the curious psychology, aiming at well creating an information propagation environment meeting needs of audiences and possessing intense visual soliciting effect, thus to realize the maximum propagation of information. Therefore, it is necessary to pay attention to the accuracy of propagated information, and to preventing from ignoring the accurate propagation of information due to pursuing the peculiarity in activities of display design and information propagation with usage of curious psychology.

3.3 Information Factors of Audiences in Display Visual Environment

The information communication system in display is composed of the exhibits on display, display space

environment, and the human. In display design, the human, as a complex system with subjectivity, whose behaviors have a lot of uncertainties, which increases the complicacy of the whole communication system, but also possess a law. Therefore, analyzing and studying audiences' information factors will contribute great significance to creating good communication environment and propagating product information to the maximum. Particularly in the background of ever-increasing development of information technology and multimedia technology at present, it is becoming more important to discuss psychological need of audiences and its development trend from a new perspective.

3.3.1 Impacts of Hierarchy of Information Needs of Audiences on Display Design

The relation between audiences and the exhibits on display, and that between audiences and the display space include physical relation and psychological relation. The information need status of audiences can be divided into three layers: in the first layer, the status presenting audiences' basic needs on information, involving conscious and unconscious needs, are determined by objective factors like audiences' environment and knowledge. In the second layer, the status presenting cognition and evocation of audiences' needs, including the information need recognized by audiences themselves and that evoked by external excitation. In the third layer, it is a kind of need status shown after information need is recognized or evoked.

In course of designers collecting and organizing display information, the displayed information should be made meeting the development status of audiences' need hierarchy from various needs of audiences. Take automobile show for an example, the display space created by designers should make audiences to attain the basic information of commodity at first, that is, to have a basic understanding of functions of automobiles. Second, it is necessary to evoke higher need status of audiences by heightening the quality and cultural connotation of automobile through artistic and humanized environment design. At last, caring for people can be felt via firsthand experience of audiences. This does not fully realize the effective delivery of information, but also deepen the memory and impression of audiences, evoking the buying inclination of audiences and rendering one successful display.

3.3.2 Impacts of Information Need Behavior Characteristics of Audiences on Display Design

There are various characteristics of information need of audiences, the shaping of which is related to behavior psychology and habits of audiences to a certain extent, and also is closely related to the external environment where audiences locate in and the audiences' own quality. In general, they can be summarized as psychological characteristics and reliability characteristics. The psychological characteristics find an expression in that the audiences expect to obtain the most appropriate information with the least cost. The reliability characteristics refer to that the audiences expect to obtain information integrating accuracy and innovation.

The designers should take the above points into full consideration in course of organizing the display information so as to express information as much as possible with the least visual language, reduce unnecessary or possibly misleading information to make the display conveying information accurately, and also provide innovation points to display design, bringing feeling of freshness to audiences. A successful display should be approachable, natural and simple without traces of design. Therefore, the designers should not design simply for pursuing the sense of beauty of form, but achieve the aim or solve problems with the most concise method basing on needs and expectation of the audiences.

3.3.3 Impacts of Psychological Structure of Information on Display Design

In progress of design, the designers should fully consider the psychological structure of information. Analyzing from the perspective of audiences receiving information, the commercial display information is composed of three layers of psychological structure, that is, layer of rationality, layer of will, and layer of sensibility. The information of rationality layer is of objectivity. However, the information belonging to the layer of sensibility is influenced by various uncertainties, possessing variability and subjectivity. Yet it is the most touching information layer and is able to advance additional value of commodities best of all. Therefore, in progress of display design, it is necessary to consider the psychological structure of information comprehensively, and carefully analyze the different need layers and layers of psychological structure, which can play an important role in creating good display space environment and information propagation environment.

In progress of design, the most contents are related to decoding of information need of audiences. The decoding of information in display design depends on the need on functions of display itself, and also on the progress of cognition of audiences. The latter is completed during browsing by audiences.

4. AUDIENCES' MEDIUM PARTICIPATION

In display activities, studies on the audiences' medium participation mainly refer to that audiences contact with the medium due to medium luring or from their own motives so as to realize interaction between audiences and the medium, thus successfully finishing the information propagation. Such contact behavior itself is a kind of participatory behavior.

The audiences' medium participation does not only refer to the contact with the medium itself, or the contents

of medium, but mostly refer to the one-to-one "dialogue" formed between audiences and the medium, with full contact realized. Through such medium, the carrier, and the active interactions with the medium, more commercial information can be accepted by audiences with an easy and joyful psychological state. Such interactive information acceptance method mainly relies on the theme and contents of display and the commercial attributes of enterprises on display in actual display design, and draws support from the current advanced information technological means to realize the experience and interactivity of participation. It can intentionally create an appealing experience scenario, making audiences as if they were on the scene. Regardless of the means and design methods adopted, the audiences should attain information ultimately through contact with the medium, but such method further complies with the psychological need of audiences and facilitates the acceptance of information.

The audiences' medium participation behavior does not only attract audiences, but also realize the integral and effective propagation of information to a certain extent. Therefore, in display design, it is very important for information propagation to consciously design the participation space for contact between audiences and the medium, evoking the enthusiasm of participation of audiences.

5. AUDIENCES' INFORMATION FEEDBACK

The audiences' information feedback is one of significant links in display activities, and renders an important basis for exhibitors to conduct evaluation on exhibition effects. Through understanding audiences' feedback behavior and its functions, the bidirectional nature of human communication can be revealed. In the meantime, feedback is a main method for audiences to participate in propagation activities, highlighting the proactivity of audiences.

Studies on audiences' information feedback should be based on different information propagation environment and the adopted propagation type to consider the performance of feedback and methods of information collection. Through the audiences' information feedback, it can be known that the interests of audiences on display design, audiences' opinions on contents and form of display propagation, the effects of display design on enterprise image promotion and product information propagation, etc..

The mode and channel of audiences' feedback in display activities can be divided into the following two cases: first, it is the face-to-face communication between exhibitors and audiences; second, it is the audience investigation. In the progress of face-to-face communication, the feedback almost synchronizes with the progress of transmitter conveying information to audiences, and the transmitter can timely know the acceptance conditions of audiences on product information and various needs of audiences in the exhibition scene. In display design, the general approach is to separate one negotiation area from the display space so as to facilitate the face-to-face exchange and communication between merchants and audiences. However, the main methods adopted in audience investigation include inquiring by phone, questionnaires, on-line survey and SMS survey. No matter which kind of investigation approaches is adopted, the final purpose is to know advantages and disadvantages of display design and display information propagation, the understanding status of audiences on product information, the potential needs of audiences, etc.. through the attained information of audiences' feedback, so as to evaluate the effects of display and provide necessary references for subsequent display activities.

If the link of audiences' information feedback is ignored, it is impossible to fully and authentically know the audiences' information acquisition status, information delivery conditions of product, and the efficiency of display, which does not prevent from the effective evaluation of display transmitter on display purpose, but also go against the improvement of display design, planning and services. Hence, in the display activities, it is necessary to pay full attention to the audiences' information feedback, carrying the delivery of information to the end.

CONCLUSION

The final purpose of display design is to convey information effectively, and the audience is the object of effective conveying of information. Therefore, studies on audiences' visual language cognition, visual observation and experience mode, as well as on medium participation of audiences will certainly be related to the selection and innovation of display design methods, successful realizing of display effects and the effective propagation of display information. Studies on audiences in display design do not only influence the display visual language form and its information propagation, but also determine whether the display design and display activities can succeed or not.

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