The Social Purpose of Design Activity

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Abstract: The topic of paper is the relation between design and society. Analyzing from two points of human needs and design itself, On the one hand, This paper analyzes the person’s needs mainly through a household survey. On the other hand, It analyzes why design can serve the human society from design itself and design practical activities. People feel that they have needs, but they are unable to articulate their specific needs and ways to meet demand. It is characterized by fuzziness on demand; Design has two attributes, guides and perception. Design not only serves the society by solving the problem but also by creating new things. Focusing on social purpose of design can not only make it possible that design better serves mankind from the point of guide, but also improve product innovation of enterprise.

Keywords: design activity, social purpose, product, guide, perception.

1. Introduction

Design is a kind of purposeful creative activity of human beings, which is not only to meet the needs of mankind itself, but also including the service to society, for people belong to the society, and the organic entity consisting of a certain connection and interdependence is called as the society, therefore, how design to serve the community has become a hot topic of discussion today.

Design has been in society in the way of "solving the problem". When encountered new problems, human beings will use innate creativity and design talent to create and change the world around, the designer is regarded as a problem solver, "design" is linked to “solving the problem" (Dorst, K., & Cross, N., 2001; Galle, P., & Kroes, P., 2014; Rodgers, P., 2012). At first, the service of design to the society is an unconscious and subconscious behavior, especially in the early human society, because the design is the development of human beings from the focus of their own survival. With the continuous development of society, the relationship between design and society has been further strengthened.

The development of human society depend on the material basis, and human can not escape from the dependence on resources, the human survival rule is considered as the allocation of resources, modern economics thinks that the market is a relatively fair distribution of resources at present, but it is the result of mutual competition, competition and accelerate human activities continuous expansion of human activities is established on the basis of the material, which naturally also accelerates the consumption of resources and competition. With the continuous development of
society, people are more aware of the complexity of human and natural systems, as well as the threat to society and nature brought by the constant expansion of human activities.

The following questions constitute the main content of this paper, What is a kind of relation between design and society? and in what kind of way, why design can serve the society?. This paper mainly discusses its from human needs, product and design behavior, and design practice of modern enterprises.

2. Human needs analysis

Human is the main body of the design service, the demand of the person directly constitutes the most original and the most direct design basis.

There are many scholars who studied on human needs, the most representative among these people there are two, One is Abraham H. Maslow who established the humanistic psychology in UAS, he explained the human needs from need categories and its relationship (Maslow, A. H., 1999). The other is a professor of behavioral science research in France Joseph Nuttin, who explained the human needs through explaining the driving force of generation of need (Joseph Nuttin, 1984). Although they had their own research background, from their research we also learn that the need of people already exists before new product is designed, the human needs come from people themselves. Person is active, so the need is not a response to external stimuli or the result of a conditioned reflex. Do people know their needs and describe them clearly?

In order to further understand the needs of people, this paper has conducted a family home experiment, the main focus on the needs of people, the experiment is mainly carried out in the way of dialogue and observation. The direct question of the research is "where do you usually place the vegetables that you have bought? And is there an inconvenience or other problems if placing the vegetables like this?"

According to the research, People can feel their demands, but they can't describe its clearly. At the same time, People don't know exactly how to meet their demands. In this respect, we can see that people have ambiguity about their needs. The ambiguity of needs is about professional knowledge. In the survey, 80% families usually place the vegetables bought directly into the refrigerator keeping fresh area (See Table1), the main place for buying vegetables is a vegetable market near the community, and compared to the supermarket, the hygiene conditions of vegetable market are poor, the cleanliness of vegetables is lower than that of supermarket packaged vegetables (See Figure1). People often put some foods, vegetables and the unpacked food together in the refrigerator, although all kinds food may be placed in different layer, people do not realize that the unsanitary vegetables are easy to bring unclean things and microbial substances into the refrigerator. Bacterium will breed if the condition are right. They will put vegetables directly into the refrigerator, to a certain extent, it can reflect the lack of professional knowledge and fuzzy. In addition, in the data statistics of the frequency and location of the user to buy vegetables, some families usually buy 2-3 days of vegetables, there are very few families will buy a week of vegetables once time (See Table2), then these vegetables will be placed directly on the kitchen floor until they finish. There may be many reasons for the current results, but the data can be shown in a way that the user is fuzzy about the nutritional loss of vegetables and the healthy diet.
Of course, the professional here not only refers to the professional of a technology, but also including the perspective and understanding of things, such as the thinking about the future home, even the happy life styles, all these constitute the study on product design.

In addition, we find that every housewife (husband) will be subject to the limitations of the individual, when asked a question, they often make answer on their own situation and their own living habits, such as they will discuss on the kitchen cabinet and the problem of space conditions, it is hard for them to stand on a higher level or view to look at the problem, such as shortage of resources, environmental protection, urban food supply and health, etc..

There are two level divisions of personal and social division in human needs. The professor Joseph Nuttin, who engaged in human behavioral science research, and divided human needs into two parts, one was from human's own, and the other part came from the interaction between the person and his environment (Joseph Nuttin, 1984). Because of human being situating in the relationship with the outside world, there is an relationship between them, by which the physiological needs of people are often affected, for example dressing and dinner belong to human instinct needs, as a man in society, there are different requirements for dressing, this also lets the simple human needs become complicated, and brings some difficulties to the cognition on needs. If only knowing the demand from the individual level, it will lead to expansion of the material or excessive hedonism.

*Table1: the statistics of vegetable storage place of every family*
It is the statistics of vegetable storage place of every family, the question is where do you usually place the vegetables that you have bought for storage.

| Family | The floor of kitchen | Refrigerator | Kitchen table | Dining-Table |
|--------|----------------------|--------------|---------------|--------------|
| 1      | ●                    | ●            | ●             | ●            |
| 2      | ●                    | ●            | ●             | ●            |
| 3      | ●                    | ●            | ●             | ●            |
| 4      | ●                    | ●            | ●             | ●            |
| 5      | ●                    | ●            | ●             | ●            |
| 6      | ●                    | ●            | ●             | ●            |
| 7      | ●                    | ●            | ●             | ●            |
| 8      | ●                    | ●            | ●             | ●            |
| 9      | ●                    | ●            | ●             | ●            |
| 10     | ●                    | ●            | ●             | ●            |
| 11     | ●                    | ●            | ●             | ●            |
| 12     | ●                    | ●            | ●             | ●            |
| 13     | ●                    | ●            | ●             | ●            |
| 14     | ●                    | ●            | ●             | ●            |
| 15     | ●                    | ●            | ●             | ●            |
| 16     | ●                    | ●            | ●             | ●            |
| 17     | ●                    | ●            | ●             | ●            |
| 18     | ●                    | ●            | ●             | ●            |
| 19     | ●                    | ●            | ●             | ●            |
| 20     | ●                    | ●            | ●             | ●            |
| 21     | ●                    | ●            | ●             | ●            |
| 22     | ●                    | ●            | ●             | ●            |
| 23     | ●                    | ●            | ●             | ●            |
| 24     | ●                    | ●            | ●             | ●            |
| 25     | ●                    | ●            | ●             | ●            |
| 26     | ●                    | ●            | ●             | ●            |
| 27     | ●                    | ●            | ●             | ●            |
| 28     | ●                    | ●            | ●             | ●            |
| 29     | ●                    | ●            | ●             | ●            |
| 30     | ●                    | ●            | ●             | ●            |
Table 2: The times of buying vegetable for one week

| Purchase frequency (times/week) | The number of family |
|--------------------------------|----------------------|
| 1                              | 10                   |
| 2                              | 12                   |
| 3                              | 8                    |
| 4                              | 6                    |
| 5                              | 4                    |
| 6                              | 2                    |
| 7                              | 0                    |

Figure 1: Vegetable markets near the community

(There are seven vegetable markets in figure 1, some are outdoor markets, the others are indoor markets.)
3. Product and design analysis

Design has the potential of guiding society, reflecting in the two aspects of the product itself and design behavior. Therefore, the guide power of design for society is analyzed through the analysis of product and design itself.

3.1 Product guide power for society

Products have two typical characteristics: Useful and Usable, these two aspects also precisely reflect the guidance of product to human. Usefulness of the product itself, the product should have specific functions, such as storage, measurement, heating and cooling, etc. For users, it can help users to complete a thing, which is the main reason for the user to choose the product, such as people can drink with a cup, heat food with a microwave oven, and adjust the ambient temperature with air condition. Herbert Simon believed that, artificial object can be a real “object” only when it aims to reach specific objective by specific activities to solve specific problems (Herbert Simon, 1969).

The meaning of the product to people, which was reflected in the completion of a thing. For each product we see in addition to material, structure, physical color and shape, it also includes problem solving ideas and methods of carrying out things, from this point of view, the product gives people guidance of the methods and ideas to solve the problem, then meets the needs of some people.

The process of using the product is also the process of guiding the user to complete things, from this point of view, the product also has a guide role for human behavior, and this guide performs the specific behavior guide for users. Products must be available, with availability, usability is the premise and conditions of product usefulness. At the end of last century in 60s, with the emergence of electronic products, electronic products like a black box, the form could not follow the function any more, the rule of “form follows function” in the design also became powerless. Then with the advent of computer, network and digital products, it seemed to be more difficult through the design to make the product function be "transparent", the usability of products become more and more worse, the usability of products has gradually become the design problem to be solved, and with the proposal of product semiotics, product semantics and the interactive design today, their common focus is the relationship between the product and the people from availability perspective, and finally to solve the problem of product usability from the guidance on the behavior by cognitive and psychological aspects (Krippendorff, K., & Butter, R., 2007).

The usefulness and usability of the product are two important indicators of the product, the usefulness answers the question of why people choose and need it, while the usability answers the question of how people use it. Usefulness gives people guidance from the method of thinking, the usability gives people tips from the specific operational level. Our life is made by different products, the process of using a product is the process of living, therefore, whether in life or specific behavior, products congenitally have the property of guiding and regulating people behaviors, it is a natural and intangible process.

3.2 The perception of design

Design activities are known as problem solving in real life, the methods become the key of the solving problem process, and method depends on the perspective of problem analysis, this perspective is called cognitive style in cognitive psychology. Therefore design process is essentially a process of re examining and sorting out the cognitive style. From the design development process and and design practice of different schools in different periods, design is a kind of thinking and cognitive style in the society, different design schools represent the different design thinking and the
way to deal with the problem (Wang Shou-Zhi, 2012). British writer John Ruskin believed that “design is an art of honesty, design should imitate the nature in the decoration”, and Austria Architect Adolf Loos held that “decoration is evil, decoration should be canceled in design”. Italy Ettore Sottsass once said: “The design is not to give those cold industrial products to create a somewhat dull appearance, it is also a way of exploring the society, which explores the social, political, love, food and even the design itself...” American design theorist Victor Papanek thought that “Design for the real world” (Victor Papanek, 1971). In the design practice, such as the 1961 Canon Co of Japan launched the Cononet camera, it was the world’s first camera easy to operate, it was familiar with that of Leica M in form language, but it changed the photographic behavior and the meaning in people's minds, as long as the shutter can leave a beautiful moment of life, everyone can become a photographer, you can enjoy the leisure time, finally, Cononet camera contributed to the Canon company. (See figure 2). In addition, the Home appliance brand Haier, the Mini washing machine designed in the early 90s of last century, which made timely cleaning clothes to be achieved, especially in the summer, it was not necessary to keep enough clothes to wash together on the weekend, but bringing a new kind of laundry and hygiene habits, to get the favor of consumers. Thus it can be seen that design not only gives the specific solutions, but also gives a new perspective and a new cognitive style, which brings the innovation in concept, therefore, the design includes a kind of perception. (Xuesong Wu, Jianghong Zhao, 2012)

Figure2: Leicam M model & Canon Cononet (Wu zhen—Rong.Hu Min—Wei, Li Shao-Qi., 2012)

4. The proposal of social purpose of design

The purpose of the earlier design activity is more in order to meet the needs of human beings, while design to really participate in social management was from the beginning of twentieth Century, social purpose of design was proposed by the modern design movement.

If the design is seen as the process of giving form to artifact, The reform that modernism design pioneers engaged can be regarded as a kind of artistic transformation to adapt to the new
era, it constructs a new aesthetic system -machine aesthetics, emphasizing simplicity and standardization, and the dependence of the form on function, against unnecessary decoration (David Railman, 2010). But behind all this change there is the ideal of the design serving for the public. They emphasize the beauty of mechanization, and want to use its simple form to achieve the purpose of low producing cost, low cost, and can meet the mechanized mass production, so that the design can serve the whole society, especially the proletariat class with low income. Design content is mainly to emphasize the functional life products, because these are the urgent needs of low-income people, such as apartment style residential, home appliances, working lamp, steel tube furniture, etc..

Compared with the modernism art movement, Art Deco has the same social background as the time of the modernism design movement, they all emphasized on the beauty of mechanization, while if only from the shape of style, somewhat similar may be found in some products, but the emphasis on the characteristics of the geometric style of Art Deco more focuses on advocating the characteristics of industrialization era, its severing targets are still social elite, powerful and wealthy upper class, the design focuses on luxury and luxury products and art, such as jewelry, high-grade porcelain, furniture, interior decoration and sculpture, etc. (Duncan A., 2011).

We often tend to attribute the design orientation to the difference of the target group, but ignore the social situation at that time. The arrival of the industrial revolution, brought the city changes, new urbanization was accompanied by a series of new social problems, such as city population expansion, poor living conditions, social chaos, the crime rate increase and spread of infectious diseases. In the face of such social problems, the advanced intellectuals hoped to change the present situation and achieve the purpose of improving the society. The question of the worker class was the urgent problem need to be solved by the society, which was precisely what the concern of modernism design. The realization of the social purpose made the modernism design movement have a far-reaching influence on the later design. The purpose of the design behavior was also from the concern to the needs of a small number of people themselves to focus on social issues, Design serving the society was formally proposed and practiced by the modernism design movement. Modern design and decoration art movement design (See figure 3).
5. Design practice of modern enterprises

The product has passed several stages from self-produced self-sufficiency and bartering to today’s professional production of enterprise. Adam Smith pointed that the self-interest motive and exchange contributed to the generation of the market, with the social division of labor and in order to obtain a higher production efficiency, The professional cooperative organization gradually took place of the individual or family work way, this kind of professional cooperative organization is the known enterprise. As the main body of the market economy, enterprises naturally become the producers and designers to provide products.

The process of people's consumer products, is also the process of using the product, in a sense, the purpose of consumption is to meet the demand (Firat, A., Kutucuoglu, K. Y., Saltik, I. A., & Tuncel, O., 2013). From the above analysis, we know that customers are fuzzy on their own needs, especially the demand from the social level, If only by the way of solving problems to meet the needs of users, it will certainly bring excessive consumption, expansion of the material’s desire. From the analysis of the design itself, it can be seen that the design can be embedded in the goods and services to guide and regulate people’s behavior in the process of solving the problem for people, therefore in the process of social development, design can lead and adjust the society through leading and regulating the human behaviors. At the same time to meet the demand, design can give consumers Guide in concept, of course inappropriate design will also bring the society to the chaos, the disorder and unsustainable.

Therefore, The enterprise which is the main innovation subject should not just obey the the rules of serving the public, mass production, simple and standardized form and objecting decoration as design doctrine, nor simple finding the solution to problem in past perception, but put forward more
suitable solution to the problem of the present society on the basis of social status from the rethinking and change of perception.

If considering design from the social level, it is not to say that the ultimate service object of design is the society, but in order to make the design from a higher perspective, to explore the various possibilities of human lifestyle, so as to better serve the people, perhaps this is the good way of modern enterprise serving society, reflecting the social purpose of the design.

6. Conclusion

To make life more convenient is the direction of the design. People live in the reality of the social environment, whether the development of social is healthy or not is related to people's living conditions. Through the analysis of the design behavior, we can know that design has the natural characteristics of serving society, while thinking design from the service social purpose, it not only extends the design to social level from form, function and technology level in method, and also, it provides the possibility for the design of a real service to humanity from the point view of guide and strategic, and brings new ideas about product design for enterprise, thus, it can make people's living more happy and beautiful.

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