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THE COMMUNICATION BETWEEN DESIGNER AND DESIGN RECEIVER: THE IMPRESSION IN PRODUCT DESIGN

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ABSTRACT

When people think about a product, the first impression always mainly influences the result. Product is the medium of communication between designer and designer receiver. Because both of them have varied different experience and background, the information would be biased during the transferring process. The common symbols which can be recognized by both of designer and receiver are the key tools for communication. In some case, the same symbol in one product would be leads to different receiver impression. Generally, impression includes 3 aspects: aesthetics, function, and emotion. Designer needs to create an attractive and accurate impression in product from these 3 aspects. For facing the dilemma of communication, some experimental approaches can help designer deal with unique and diversity situations. Solving the detail problem in each step could keep the original meaning of designer.

KEYWORDS:

Design receiver, Impression, Experimental design

1. INTRODUCTION

When customers buy a product, the first impression is a crucial factor that influences the choice of buying. Understanding users can always be a goal for a product developer. So, the first showing of a product is one of the most important opportunities for catching customer interest and telling them that the designer thought from a user's point of view, this product is designed for you. Unfortunately, it is not an easy task. How to understand a customer is a basic dilemma, and it can't be avoid that, from designer to customer, the meaning of impression will be changed. Designer

should find out what kind of impression he wants to express, and then select or create a way to express and store this impression in his design work. We can see that the design works are similar to literature works. It can be evaluated from different perspective and lead to different impression.

The people who use or think the design works could be: end user, customer, reseller, clients, jury, examiner, journalist, and common people. Their knowledge and background makes them get different feeling and impression to one product, and it decides the way of their thinking. With one design it is hard to satisfy two people who have opposite basic points. When people look at and judge a design work, several outside factors will influence them also, including the context of thinking, advertisement he watched, using experience from others, or the dilemma he met before. Designer can try to catch more opportunities to explain their idea, to convince customer, and to build a better impression that is closer to the customer's taste.

In this paper I will analyze the process of impression transferring through a case of a car design competition, and what kinds of aspects are included in a product impression. Followed with the answer of these questions and based on my design experience, I will give a proposal of some effective ways for efficiently transferring the information in a design process and present process. It will contribute to construct a better communication between designer and people who think about design.

2. CAR DESIGN COMPETITION

2.1 Balanced Impression for Varied Judges

The topic of my car design competition is solving some problem for metropolitans. The judging committee included different people who come from different countries and continents. Both of western and eastern culture will be considered in. They also have different knowledge backgrounds and work experience. Some of them work as an engineer director in a company, and some of them are director of environment department in a university. There is also a noted individual car designer in the judge group and a business manager from a car selling company. These were seen as the design receiver of our car.

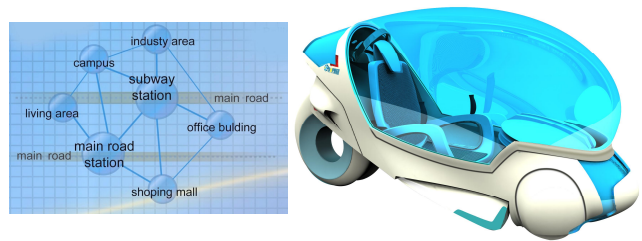


2.2 Function and Impression

I defined the goal of my design as that of a relief of the traffic burden by the traffic system. For fulfilling the rationality of function, we did a lot of research and investigation to analyze the current situation and find out our problem object. Some published statistics in report helped us choose the direction, and some user study gave us opinions about what real citizens want and prefer. Our concept is to optimize the space of car, make it narrow, and try to design an expandable single car. This design aim for solving the problem of that one people drives a large space car. And working based on a vehicle sharing system.

We know the key to the success in the competitions to give a right impression to the judges. So we defined the impression in our design as effective, safe, easy to use. It should like a natural part of a city, and the common citizen can offer it. And then, we found out more adjective words for making the meaning more accurate, such as technical, intimacy, dynamic, harmony, energy saving, environmental,

effective, and flexible, etc. I got some existed symbols to describe these adjective words that include pictures, audios, products, art works, and movie clips. These symbols influenced and reminded my main feeling during the design process. I was also investigating existing cars, and analyzing the connection between style and impression. Based on these feeling and impressions, I designed the main style and detail function. I used a dynamic dolphin body shape to express the feeling of a flexible, and designed only one wheel at the rear end to keep a smaller size.



2.3 Different Impressions from Judges

The comments from the director of the environment and energy department of a university were that: It is an efficient car, because he thought I studied the style from a nature animal. It used a way of bionics and got the advantage from the shape of a dolphin body. He thought our concept is a visionary idea, if it will be implemented, more improvement and practical issue should be considered. Anyway the impression of the design made him believe it is an efficient way.

At the same time, Individual car designer gave me the feedback like: It is an inefficient car. This comment came from his 20 years experience of car design. He thought that 2-persons car is more efficiency than single. The style of the dolphin is special for 1 people. For improving our design, we'd better keep the length, and design it wider.

About the efficient problem, my decision was based on a rational analysis. I can convince them by calculative result and situation examples. This car was not designed for a high way. It would deal with

many varied road situation, and reach to some special destination. A wider car could make full use of road. However, my goal was focusing on an individual traffic task. Anyway, when back to the first impression, the style of the car gave this seasoned designer an in-efficient impression.

2.4 For More Accurate Impression

Because the judges are more like my potential clients or customers, and the vote seminar is my exclusive opportunity to convince them and get feedback. So, we explained the system structure on another poster and made a system model beside the car model as a complementary. We tried to use this extra information to influence the judges to get a better impression. Fortunately, judges were very interested in our system model, and paid a lot of attention on it. My extra model told them the concept of sharing system. It shows the competency and scenario of driving, parking, and changing the car. Some of the judges told me, they think the system model is as informative as our car model. Our models can explain and support each other well. For example, they can see that, because the car works for a unique individual task, so it needs more flexible design. And the 3 wheels design can save more parking place.



3. Transfer Impression

3.1 The Process of Impression Transferring

Through my car design case, we can see, the impression transferring process can be divided into 4 steps: designer generates impression for receiver; designer expresses impression by product; receiver receives the impression from product, and designer corrects impression. Moreover, the process of my

project can also show that, design is an dynamic process. For dealing with unique and varied situation, change the method and explore new approaches always can result to a surprise gain.

3.1.1 Generating

The diversity is a natural property of design receivers. It is hard to find out a common impression to entertain everybody by one product. Moreover, average needs always leads to a common result, but some projects like car design, need high level innovation to attract customer. The individual designer can fulfill the need of being entertained or charmed. Impressive and truly innovative designs always come from a strong vision of a designer. In my project, I was trying to express an attractive and appropriate impression to catch the eye of judges, but the result is hard to predict. I didn't do a real research about different cultures, and didn't see the different between designer experience and engineer background. We made judgments from our design team perspective and imagined what impression a common person can get from our design. So, I assume that the generating of impression is depended on designer's experience and personal perspective, and it should be based on the investigation about the design receiver. Meanwhile the vision from designer about which impression should be expressed becomes clearer during the design process.

3.1.2 Expressing

The process of expressing the impression would be based on the definition of the goal. My goal in this project is get more efficiency in big city traffic. I need to balance my design decision and the impression to judges. The member of our design group forces us to find out a mediated decision between rational and emotional. And then, a right symbol is the key to a successful communication with design receiver. The symbol could be color, curve, form, material, and dynamic transformation. They are used to recall the memory and stimulate

the exciting point of design receiver. The process of comparing these symbols is more like an impression measuring. I think the impression measuring can be wide spread in design field to help more designer create impression.

The visual appearance always goes first when customer selects a product on the market. Designer needs to express effective information by this first impression. Receivers will examine and appraise the works from form and function. In my case, both advantages of the form and function are expressed by common symbol, e.g. simple lines and dynamic style makes the car have an impression of modern city. And the 3-wheel design can give the receiver an energy saving impression. I used my way to speak these meaning out. It could be different from other designers. More or less the final design would have bias from my original definition. When focusing on effective, energy saving, and a natural part of city, I am easier bias from the feeling of safety and if most people can afford to purchase.

3.1.3 Receiving

Norman divides design activity into 3 levels: visceral, behavioral, and reflective. The conflict could go among these three 3 levels. (Norman, 2004, p. 36). Diversity backgrounds of design receiver lead to different receiving result. The notable Individual designer and the director of environment department have their own way to analysis the impression. It is hard to say the exact reason. However, designer must realized this point. Information would be changed totally in some case. Some work for correct the impressions are necessary. In this step, the result of impression transferring influenced by context as well. During our car design competition, more than 50 design works were showed at the final session. Some design works was placed at an inconspicuous corner with less light. It is like singer competition, the order of browsing also influences the result. It is hard to keep absolutely fair.

3.1.4 Correcting

Norman awarded designer to against user's misunderstanding (Norman, 1990, p. 140). I could assume that designer also needs to avoid receiver get wrong impression. The impression comes from appearance, but that doesn't mean that it can really reach the meaning. Since the context would influence the impression, designer should take more opportunity to defend and introduce more. Some necessary instruction can help receiver get a real meaning of design. The visual impression is on the surface, and some deeper argument can convince receiver to agree with designer. I made the extra poster and models, which were aiming for making an explanation of rationality and possibility for our car concept design. They worked as 2nd level information which went after the first impression. The first impression came from appearance directly and quickly, but 2nd level information, which was expressed by pictures, text, diagram, and 3-dimensional models, needs much more time to be received and understood. If receiver didn't get interest after first impression, there will have less opportunity to allow them to receive 2nd level information. They can understand better how to use the car in a scenario, and can see the advantage of our design from a macro view. Moving away from the world, which is only covered by surface and impression, and from a practical view, the real solution and design should be the reason for customer choice.

4. Category of Impression

Design receivers always have different focus on design works. Reviewing the feedback which I got from my previous design case, I think the focus of design receiver can be categorized into 3 main aspects: aesthetics, function, and emotion.

The first impression of a product should be mainly depended on the visual appearance. The high quality and shiny color are easier to attract people to

see more detail. Customers always are welcome to a product that is similar to an artwork. A product that expresses rich impression of aesthetic has strong advantage on the market. Under most situations, less people would keep an ugly product in their home. The need for beauty is in the nature of human being. Aesthetics is expressed by color, curve, and style in product. They are the language of form design. Sometimes a designer works with artist together to create the “art part” for a product.

The issue of using is always the core point of contention. Whether the product can solve a practical problem? And whether it is easy to study and use? They are the questions that a common customer always needs to ask himself. Like the noted individual designer and the director of environment department. They are more focused on the efficiency result. Some other function concern could be whether the product is safe, comfortable, working for long time, saving energy, can be recycled, and has possibility of extension, etc. for solving functional issues, it always needs designer-engineer collaboration. Emotion can be expressed and stored in a product. It is more like a character of a product and includes different types. Person could like or dislike others and it depends on the type of people. Some people pay more attention towards family, some like cute and lovable things while others are fond of unique things. These characters and meaning can be showed by face expression, working process, or the interaction way. It is similar with talking and working with a person. You can find out, he does understand you, or you can trust the product because it has always helped you solve problems. People would have special emotion with a faithful tool, and when it is introduced to others, he could say: “this is my type!” Designer mainly provides this character and type of product.

5. DESIGN FOR BETTER IMPRESSION

Aim for providing an accurate and appropriate impression to the design receiver, there are some approaches that can be used to help the designer during the design process. The principle of these approaches is that: minimize the bias of original impression in each step, and using different ways to express the meaning.

5.1 Impressions for Design Receiver

As many design projects, designer should be clear about the object of their design. A clear target group is necessary to be defined first. The view of the design receiver should be the origin of design, and they need to be involved in early stage of the design process. This impression should be in accordance with the type of receiver. It is the ground for a better understanding. When the type of people is found, they may be easier to communicate to and get the real meaning. On another hand, designer should not lose his or her own vision, which is important to create a unique impression for attracting receiver.

5.2 Express by Symbol

Symbols finding and creating forms the basis of design language. Designer use that way to communicate with design receiver. The understanding is based on the knowing of symbols, an easier and common symbol can make more people get the meaning. Finding out more relevant symbols is crucial to create an accurate symbol. Keeping these symbols around designer as a statement to remain and influence the thinking, the main direction wouldn't be lost and it is much easier to inspire the designer.

Designer can try to use impression measuring, or impression analysis for providing guarantee to the agreement of user. The measuring needs a framework of category as a ground. It would be as what I assumed above, the category include three main classes: aesthetics, function, and emotion. Designer can try to fit the focus of receiver to these three classes, and based on research and investigation, to catch a more accurate position of

impression.

5.3 Impression Matching

From the receiving section, it shows that, the receivers have their own favorite type. The design works needs to match their type, and they will select out one which is the most attractive to see more information about. When people give feedback, they may combine some ideas from different design works together to build their own dream design object. This situation is much more like coordinating clothes.

Everybody is designer, have the feeling and need of aesthetics, and can be inspired and generate great idea. So, I assume that allowing receiver to design by a selection way could be an effective way to know what symbol can express a right impression. Designer can try to provide a workshop to organize a participatory design. The workshop should include necessary design symbols to select.

5.4 Influencing Explanations

In the last step, designer can get some opportunities to explain. The scenario is the most effective way for convincing. Many products use TV advertisement to show the scenario. In many case it is much easier than designing a complicated instruction book. I can't show an animation during my car design competition, but I was trying to use the system model to show some static situation scenes. It is very convincible and effective. In some other cases, designer can also use music, light, or even smell to create an atmosphere environment for the user to experience.

I am also suggesting that, the real meaning of rationality and possibility is the basic support for convincing. After receiver gets a favorable impression, they may need more practical information. To those extreme practical customers who even can skip the appearance and go directly to the instruction, rationality is the answer. If I propose

my concept to a government, both from the rational and emotional way it could influence the decision of the audience. Government or the officials are practical, and they also care about the impression of their decision to the public. It is necessary do well both on inside and outside.

6. CONCLUSIONS

One design work can lead to different impressions, and using some ways to understand user groups first is important to the success. Seeing the impression in a product from the aspects of aesthetic, function and emotion can give the understanding of the meaning from a more comprehensive perspective. For a better communication, the impression should be expressed more accurately in each step. To the maximum extent lowering down the bias of impression transferring, should be considered during a design process. During the steps, a flexible and experimental approach can contribute to deal with special problems. Product is the medium of the communication between a designer and the design receiver, and expresses the impression of its own character.

REFERENCES

- [1] Lloyd, P. (2004), The paradox of the average: Why users need designers but designers don't need users, Design philosophy papers, p. 3.
- [2] Buur J., Andreasen M.M., Design models in mechatronic product development, Design Studies, Vol. 10, 1989, p. 158.
- [3] Jacob & Thomas Binder (2006), User Centred Product Design. Mads Clausen Institute, University of Southern Denmark, p. 43 -p. 48.
- [4] Desmet, P. M. A. (2003), Measuring emotions. Funology: From Usability to Enjoyment. Kluwer, Dordrecht, the Netherlands.
- [5] Norman, D. A. (1990), The design of everyday things, New York: Doubleday, p. 140
- [6] Norman, D. A. (2004), Emotional design: why we love (or hate) everyday things, New York, Basic Books, p36
- [7] Schön, D. A. (1983), The reflective practitioner: how professionals think in action. New York, Basic Books, p. 78