

### [WDO Event: World Industrial Design Day Design Dialogue Vol.3]

Attendees:

Tadayuki Yakushi [General Manager, Design Group, Technology Planning Office, Global Product Planning Dept., R&D Center, TOYOTA Material Handling Company]

Tama Art University: Moe Iwaguma, Shinya Kita, Amane Saita

Chiba University: Shinji Yamanaka, Marie Maruyama, You Kato

Musashino Art University: Kenou Kanai, Chihiro Shimada, Sakura Togami

Moderator: Akiko Watanabe (Senior manager, Japan Institute of Design Promotion)

**Watanabe:** Thank you everyone for joining the WDO Japan Member Design Dialogue today. The World Design Organization (WDO) is an international industrial design organization with 180 member organizations from about 40 countries and regions around the world. There five members from Japan are Tama Art University, Chiba University, Musashino Art University, the Japan Industrial Design Association, and the Japan Institute of Design Promotion.

Today, June 29th, is the anniversary of the establishment of the WDO, and this day has been designated as World Industrial Design Day, and various events will be held around the world to celebrate the anniversary under a common theme. This year's shared theme is "Leadership," and in Japan, this theme has been replaced with the question, "What kind of leadership should designers take?" We try to think about the future prospects through a dialogue between professional designers and students from the three member universities in Japan.

**Yakushi:** Good evening, my name is Tadayuki Yakushi, I graduated from Musashino Art University in 1996 and started working in car design at Toyota Industries Corporation, then moved to a forklift truck and industrial vehicle design more than ten years ago. As for what kind of person I am, I like new things and things related to cars. I have been involved in extracurricular activities within the company, such as developing compressed air cars. I have also participated in a speed challenge with that car and obtained a Guinness World Record. I volunteered to move here because we have a large share of the industrial vehicle market, and I felt that it would be worthwhile. Thanks to this, as a team, we have won the GOOD DESIGN AWARD BEST 100 and GOLD AWARD, as well as the German iF Design Award, the Red Dot Design Award, and the DIA, an international design award in China. I am a person who enjoys industrial vehicle design.

Regarding the theme of this issue, I decided to focus on products as in Let's talk about "products" of the future. It has been nearly ten years since the saying "Experiences are more important than products," but in many cases, experiences cannot happen without products, and I felt, relatively speaking, that Monodzukuri (manufacturing) was being neglected, which is what prompted me to raise this issue this time. In reality, Japan exports mostly industrial products, and manufacturing

is essential for the economy to function. Industrial vehicle designers such as ourselves are not only designing the exterior of forklifts, but are also involved in a wide range of areas, including UI/UX and content creation such as video. In such a situation, what kind of leadership can industrial designers take once again in “Monozukuri (manufacturing) Japan?” How can we become a manufacturing powerhouse again? And how can we become a manufacturing superpower again? I would like to discuss these and other issues together.

- **Leadership for industrial designers in dealing with social issues**

**Shimada, Musashino Art University:** There are major issues that need to be addressed if Japan is to thrive as a manufacturing powerhouse. These include environmental issues, marine plastics, and an aging population. The future leaders are the young people who have studied the SDGs, but will they follow the idea of making Japan a manufacturing superpower? What we can do as designers are being able to present exciting solutions. It is the role of industrial designers to present interesting and exciting solutions, not a bad future. To achieve this, we believe it is necessary to review the challenges to current production routes and other problems and create a new foundation.

**Yakushi:** I like your words “exciting solutions.” What is the story that people who have studied the SDGs do not follow manufacturing?

**Shimada:** The young people of today have in mind the responsibility to use and create. If designers or corporations continue to create new things and focus only on the competition for sales, the two sides will clash.

**Yakushi:** Our designers' concept of monozukuri is rather to aim for good things, including the SDGs. I am a business person myself, so perhaps this is what I feel, but I still have the viewpoint that the economy is important. That is why we cannot talk only about dreams. We, industrial designers, aim to create and realize excitement.

**Iwaguma, Tama Art University:** The urgency of mass production leading to environmental destruction is only actively so because we are interested in design and in that industry. Even if the problem of ocean pollution is mentioned on TV, people still buy plastic bags in real life; even if they know that using items sold at 100-yen stores will prevent the real design from being created, they still buy and use them because they are convenient. The number of people who think about and buy things is limited. Therefore, the ideal situation would be one in which products chosen without much thought by people outside the design industry end up being environmentally conscious and well thought-out. We believe that the role of designers in the future will be to translate issues and incorporate them into products.

**Yakushi:** It may be true that if the awareness of the volume zone is not changed, only some people

will change. Of course, there will be a ripple effect from that, but if everything sold in 100-yen stores is made entirely of recycled plastic or recycled-based materials, surely the impact will be great, and it would be nice to be able to play a role in such a field. Taking leadership without feeling leadership is a kind of ideal design.

#### - **How to motivate people to create and leverage their individual strengths**

**Maruyama, Chiba University:** Manufacturing will not disappear in the future. I believe that making things and music are similar in some ways. Music has existed since ancient times, and its styles and fashions vary from era to era, and what people like depends on the person. Similarly, there are countless demands for products.

In terms of enriching the economy, the larger the scale, the more people are involved. I think it is important for everyone to exert their utmost efforts, but I find it difficult to keep everyone motivated.

**Yakushi:** Are the products and music similar? I thought frankly. It is interesting that you think differently than I do. Did you have any inspiration?

**Maruyama:** We can live without it, but if we have it, it enriches our minds. I think that products have two kinds of value. One is the functional value that is indispensable, and the other is the extra value. In other words, like the reason for choosing the same kind of thing. Those are the parts that you don't need to have but are enriched when you have them.

**Yakushi:** We designers are supposed to add extra value, such as ease of use while keeping the functionally indispensable parts in mind. your point of view is that these parts are not necessary. I can sympathize with your point of view, that is, to sharpen the essence of the primitive products by eliminating the parts that are not necessary.

As for motivation, as I mentioned in several design awards, one person can never do it alone. Generally speaking, if there is a clear vision, everyone can move toward it. If we can only see the near, each of us will lose motivation. Ideally, the leader should set a clear and exciting goal in the distance, and each person should work toward it. This is the power of design and designers, so please try your best.

#### - **Leadership for diversification**

**Saita, Tama Art University:** I majored in car design in college, so I focused my report on the automotive industry. I think that industrial designers of the future should take leadership for diversification by gradating the distinction between things. There are various global issues, but what Japan must tackle more seriously now is the aging of the population. In the realm of mobility, there are many problems, such as designs based on the assumption that people are physically fit, and the distinction between the able-bodied and the handicapped. The sense of discrimination

caused by the distinction and the fact that they are forced to show something they do not want to show openly are major problems. Possible solutions to these psychological problems include gradating the genre and looking to develop it as walking aid mobility that can be used by able-bodied people and young people. As products become more common, people inevitably lose their curiosity. Sometimes products communicate better than words. This is an opportunity to redesign the hearts and minds of people through Japanese industrial design.

**Yakushi:** You said opportunity, and I feel the same way. As a country that is aging ahead of the rest of the world and is capable of manufacturing, Japan can be a benchmark for the rest of the world. It has the potential to experiment with various things. I thought the expression "gradation" was interesting. Does it mean a greater variety of products?

**Saita:** When we make a distinction, the possibility of discrimination arises. I wondered if we could make it seamless.

**Yakushi:** The balance between dedicated and general-purpose products is quite difficult. Whether to provide many types of exclusive products or general-purpose products could be an issue for gradation. One of the ideals may be something like date glasses. Eyeglasses, which are supposed to be corrective devices, have become fashionable, and wearing them has become a positive experience. The performance of prosthetic legs for the disabled is improving, and people are becoming envious of them. Human body augmentation may become one of the keywords to enrich the world.

**Yamanaka, Chiba University:** It is based on the assumption that everyone operates on their own. What if we assume a world of automation? However, there is a part of me that wonders if everyone needs personal mobility.

**Yakushi:** When the era of fully automated driving comes, even social issues will change dramatically.

#### - **Shaping the lifestyles of the future**

**Kita, Tama Art University:** I think that designers need to create a new generation of norms and establish these norms in our daily lives. In the product industry, there are many initiatives to recycle and use recycled materials with an eye toward a recycling-oriented society. For the sake of the future earth, we need to reduce waste materials and recycle them using limited resources. However, many of the products currently on the market as eco-friendly are more difficult to use than virgin materials and are only eco-friendly, but on the other hand, many of them cause users to have negative feelings. Because people now take state-of-the-art technology for granted, people are also sensitive to inconveniences. It is necessary to create products that are not temporary but established. I would like to create products not only to achieve product sales and goals but also with experiences that will help create the norm in the future.

**Yakushi:** It is very difficult to make a certain product establish itself in the daily lives of users, isn't

it? That's a good point of view. For example, forklift trucks are made of steel, so the recycling rate is nearly 99%. In other words, the image of appearance and kindness to the earth and people are not necessarily synchronized. In traditional industrial design, we tend to focus on the look and feel of new product launches, but always having the perspective of making things take root is a way of thinking that will lead to a perspective on how products should be 20 or 30 years from now and will be to your advantage.

**Kanai, Musashino Art University:** Japan was once known as a manufacturing powerhouse because of the industrial products on sale that displayed a high level of Japanese technology. Before people began to think in terms of “experiences” rather than “products,” people used to buy things because they admired their quality and luxury of them. Today, many people buy products based on whether or not they can get closer to their ideal lifestyles and views on life. They are emphasizing bringing their lifestyles and values closer to their ideals through products. It is not only about high quality and luxury, but also about manufacturing that is unique to Japan, where a culture of respecting the other person permeates the market. It is an advantage to provide exactly what the other person wants and ideal values. It would be possible to create products that can only be made in Japan by taking advantage of the quality and the Japanese culture.

**Yakushi:** When differences are seen as originality and uniqueness, they become value. I would like everyone to have a perspective of reality. Without idealism and the perspective of reality as Kool-Eye, it will lack persuasiveness.

**Yamanaka:** Does race matter in design? To be honest, I cannot tell which country people designed which piece by looking at the finished work. The same goes for design taste, and it would not be the case if non-Japanese could not take care of it. Are the Japanese meticulous and is that their strength in design? If it is, then they are not losing to Tesla and Apple.

**Yakushi:** True. That is why it is important to know how to produce difference and originality. For example, it is France that is good at this, and French products can be sold at a high price even though they should be no different from others. What is different is the coordination and branding. Branding is not just about advertising. In the category of manufacturing, a brand should be established in terms of continuity and commitment to quality.

**Kanai:** When designers are creating, the environment and lifestyle in which they have lived up to now will naturally be reflected in what they design, no matter how hard they try. Even if you are not conscious of it, your past life will bleed through. It is not all about making something better than Tesla or Apple. There are fields in which the Japanese are suited, and I think it is possible to create a character in other areas.

**Yakushi:** We must and should look at products globally. Let's go abroad to know what it is to be Japanese. I can emotionally sympathize with Mr. Kanai's statement. That is why I would like you

to go abroad to know what is uniquely Japanese and try to create specific products and phenomena. It will become your unique and solid originality.

**Togami, Musashino Art University:** Future manufacturing should be tailored to future lifestyles. Shopping, learning, and work are becoming increasingly online and automated. Not only will digitalization progress in the future, but we will not be able to completely return to the situation before the COVID-19 pandemic. Industrial designers always design from the standpoint of the user and are in a position to create a new normal. I think that industrial design should build designs in line with the new normal.

**Yakushi:** I am glad you focused on the fundamentals of industrial design. It is the opinion of industrial designers of yesteryear that the leadership of an industrial designer is to design each item he or she is involved in. For example, when I use a Sori Yanagi kettle in my daily life, I feel that it is well thought out. It is easy to use and can be used for a long time. This can be achieved by simply doing the basics of what is called industrial design.

#### - **Design and leadership from the perspective of the manufacturing system**

**Yamanaka, Chiba University:** I think there is a possibility of bottom-up production as if the user makes the product, rather than a top-down form of providing the product to the consumer. I am not positive about product consumption. Consumers are becoming more conscious of how they spend their time, and they tend to spend money on experiences and things that return as investments. As designers, we need to create things that can become experiences, rather than the dualism of products and experiences. Things that allow users to reflect on themselves through them. For example, instead of providing tableware, we should design “Rokuro,” or a potter's wheel, to create opportunities for the whole of Japan to engage in small craftsmanship and regain a sense of humanity.

**Yakushi:** DtoC and CtoC are closer to bottom-up. Manufacturing, which develops away from corporate activities, will become even freer in the future. Until now, it has been the norm to hide everything until the launch of a new product, but there are ways to be more open. He suggested another approach where industrial designers can ask users directly instead of developing by playing the role of a user. Platforms that systematize are strong.

**Saita:** There is a growing movement of people working together to grow something that is still in its infancy, such as crowdfunding and YouTube Super Chat.

**Yakushi:** Open operating systems are becoming the norm, and there is a movement among major companies to collect technologies widely in the form of open innovation. In such an open environment, industrial designers would like to take a leadership role.

**Kato, Chiba University:** Manufacturing will never disappear. Therefore, what we can devise as

designers is to create a system or product that allows one product to be used for a long time. Industrial designers will come up with mechanisms that add value, such as software that can be updated, recyclable, and so on. Especially in Japan, there has been such a culture since the Edo period, and it is said that almost everything in Edo was recycled. Kintsugi\*, for example, is not only repairing broken vessels but also upcycling them into something better than before. As an industrial designer, I think it is important to create an overall system that can be used for a long time.

\*Kintsugi (金継ぎ) is a traditional Japanese art form, where broken porcelain or earthenware is repaired using resin or lacquer mixed with powdered and liquid gold, silver, or platinum.

**Yakushi:** He gave us a business perspective. It is important to think about designing for feasibility as an economy, not just a nice future because it is designed. It is a difficult task just to draw a dream, which of course should be respected, but to make it a reality is several times more difficult. It is only by making it a business that it will reach the consumer, and without reaching that point, the influence of industrial designers will not be felt. A design approach that considers business is a very good point of view.

**Kato:** Japan's "mottainai" culture is essentially also a part of its weakness: Japan is a resource-poor country. The movement to conserve because of the lack of resources has been able to turn this into a strength.

#### - Conclusion

**Yakushi:** I am sure that you are looking at various "products" daily, but I would like you to broaden your perspective and look beyond the media and Japan. However, BtoB information is not readily available even if you go to get it. The advantageous parts of Japanese industrial products, such as sensors and materials, are becoming harder and harder to find information and performance. For industrial designers to lead Japanese manufacturing, I would like you to continue to gather information and look at not only the final products but also the technical aspects.

Finally, as a designer who makes products, I would like to reiterate that I do not want you to stop just dreaming. It is important to have dream, and it is tough to develop a concept. However, I would like you to think about what you need to do to give shape to your design in the end. Thank you very much for your time today.