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Inspiration from My Three-month Stay for the Designer in Residence Program in Germany

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I. Jogging Diary: *Design Consciousness: Small Things with Big Heart*

During the three-month Designer in Residence program, I've managed to put together a little book, *Design Consciousness: Small Things with Big Heart*, recording my life here with photos. I got the idea in my jogging along the riverside park in Pforzheim, a regular 30-minute exercise I've been doing at 7 a.m. three times a week. I saw the sport at first as purely my way of workout for keeping healthy, like what I had been doing while living in Shanghai. I would take the wireless headset, sunglasses for sports, and the keys with me while jogging.



Fig 1 – Prototype for the book *Design Consciousness: Small Things with Big Heart*

(Source: Sheng-Hung Lee)

You will not jog in a new city without surprising discoveries. Carrying my iPhone with me all the time, I've captured every moment with pictures. Alternate paths for jogging, such as the riverside trail in natural surroundings, city streets across crowded shop stores, university campus and tourist attractions present different spectacles for appreciation. In a word, jogging makes me more observant of and sympathized with the city.

This photo was taken in the children’s playground in the city square, where an open-ended red bookshelf was frequented by both the elderly and young people in the community. They would stop at the bookshelf and choose the books they feel like borrowing, as well as contribute some of their books to the bookshelf. After asking around, I knew from the local residents that it was a bookshelf for public use. People may take books away from the bookshelf to read back at home and also donate some of theirs. Isn’t this the best example of localization for sharing economy?



Fig 2 – Community public bookshelf that reflects the concept of sharing economy
(Source: Sheng-Hung Lee)

Another interesting story I’d like to share is about the trash can. I remember one day when I was jogging and got intrigued by a trash can along the street. I was asking myself, “why the lock on the trash can?” The trash wouldn’t be worth much on one hand, and putting a lock on the trash may made it more difficult to throw away the trash on the other, which violates the human-centered principle of design. Ten minutes of hard thinking by myself hasn’t solved this puzzle. And it was unraveled only after my colleague told me that trash in Germany is charged by its amount and weight, and people tend to lock their trash cans to prevent others from throwing their trash in them which may cause extra fees.



Fig 3 – Locked trash can in the street
(Source: Sheng-Hung Lee)

These lifestyles and cultures reflected therein have offered fresh insights for me as an eastern designer. It is my wish to draw conclusions from the everyday trivial matters people take for granted, and explore possibilities for innovation. In this photo dairy,

I've put what I saw and heard during the three-month stay in Germany on record with pictures, each of which is analyzed adopting the simple three-part structure: context-consideration-concept. As creative professionals, what is required of us is not only seeing what is there to be seen on the surface. This is just the first level of observation – “To See”, a reflection of the object under the sun. Moving toward the second level – “To Understand”, we should get to know the product and the story behind it, in order to connect the content with the form of the product. The highest level – “To See Through” requires unique perspectives and insightful points of view towards a matter or a product, which is what true understanding is about. Readers that are interested with the book can learn more about it on <https://www.smallthingswithbigheart.com/>.

II. When 3D Printing Meets Traditional Industries – a One-Week Design Sprint with a Century-Old Seal Shop

The three-month Designer in Residence program in Pforzheim has offered me plenty of time to interact with local residents, communities and universities. In between, I had a short-term collaboration in design with the century-old seal shop Weeber. Not long after arriving here, I was immediately intrigued by the window display of the shop while loitering in the city center with two other colleagues of mine. Opened in 1912, the shop has evolved from selling traditional seals made of metal and wood to designing and manufacturing large installations, such as posters, curtains, shop signs, indicator lamps, corporate seals for commercial use, or customized seals for individual use, owing to its development over the past century.

The person that contacted me was Mr. Sebastian Hermann, the fourth-generation successor of the seal shop. He graduated from the Department of Market Management of Hochschule Pforzheim University. He and I hit it off at our first meet. He was skillfully arranging the seals while discussing with me about the pattern design on the seals. I could not help but wonder why he had not chosen a major concerning jewelry or design for the university. He gave me a simple answer that he would like to try some other areas since design existed in his everyday life and work already.



Fig 4 – Seal shop owner Mr. Sebastian Hermann working together with me in designing seal handles

(Source: Sheng-Hung Lee)

When I undertook the project with Mr. Sebastian Hermann, I planned to spend about a week working mainly with 3D printing machines to improve the design of seal handles, based on which Mr. Hermann would tweak the seal patterns accordingly. After some observations and discussions between us, I noticed that the existing seal handles made it rather difficult for their users to align the seals and apply them to the paper properly. I wondered what if the seal handles were designed to help users align with the paper, which would be not only aesthetically appealing but functionally useful.

With this in mind, I quickly printed out three kinds of seals. The first design is created by chamfering the four sides of the handle so that the user can make flexible alignments from any side. The second takes the directivity of the seal into consideration and chamfers only one side to make sure that the user can apply the seal from the right direction. The last one is made with a brand new approach by hollowing out the handle into a waterdrop shape that allows the user to use his forefinger to apply force. The hollowed-out seal uses less materials and can double as a desk sculpture.



Fig 5 – Three different designs of seal handles

(Source: Sheng-Hung Lee)

The three types of design concepts have been completed in one week. Though pressed for time, I had managed to experience and design the seal handles through different perspectives. As I told Mr. Hermann, the three design outcomes were produced using available resources within limited timeframes, and may not be the best or optimal solutions. What I consider the most important is how collaboration can be carried out with local residents with various cultural backgrounds in communication. I enjoy it the most when I utilize modern design methods and 3D technology in integration with conventional ways of manufacturing and thinking adopted by the traditional shop owners, creating more room for imagination and possibilities for the future seal design.



Fig 6 – Taking a photo with Mr. Sebastian Hermann

(Source: Sheng-Hung Lee)

III. Product Defects Are a Blessing in Disguise – an Encounter with FREITAG in Munich

I ran into an outlet of the Swiss brand FREITAG during a family trip in Munich. It so happened the zipper of my laptop shoulder bag broke down, therefore I stopped by and asked about how to have it repaired. I also explained I would only stay for another month in Germany and that there might not be enough time to have it repaired in Switzerland. The store associates there were very nice, and after a careful and thorough check of my laptop bag they put a rush order on this to make sure I could get it back before leaving Germany at the end of June. They also gave me a substitute bag of the same type to use before they took away my shoulder bag. It was very considerate and reminded me of a similar episode in Amsterdam when Claudia, the manager of the FRIGTA store there, helped me figure out when and where to send back my repaired bag after carefully inquiring about my situation.



Fig 7 – The shop associate of FREITAG in Munich carefully checking on the part that needs repairing of my laptop shoulder bag
(Source: Sheng-Hung Lee)

I did not take it that I happened to come across two considerate and kind FREITAG shop managers, but that this brand demanded a high level of service delivery from its employees. And it was not a first-time repair for the bag. Therefore I believe it was indeed a flawed product, especially the design of zipper. However, I as the product user was grateful for the flaw, which offered me a chance to experience its customer-centered services and get a better knowledge of the brand of FREITAG.

Once I heard an anecdote about FREITAG from a friend of mine. Last year, two founders of brand, who were brothers, came to attend the opening ceremony of the brand's store in Shanghai. And the first question from them immediately out of the airport was how they could ride a bicycle from the airport to the store. This was an excellent case of the principle of recycling and environmental friendliness the brand had been upholding. They lead by examples instead of just shouting empty slogans.

The brand has been extending from manufacturing bags made from recycled cloths for various functions to costume design now. After a careful reading of their recently released journal *On The Road to F-abric* taken from their store, I was quite impressed by how they convey in a clear and vividly narrative manner to the customers about their new cloth materials and manufacturing method. Compared with traditional cloth production, FREITAG clothes have saved much more carbon footprint and cost in labor and materials. The brand value is often fulfilled in these details, which interact with each other.

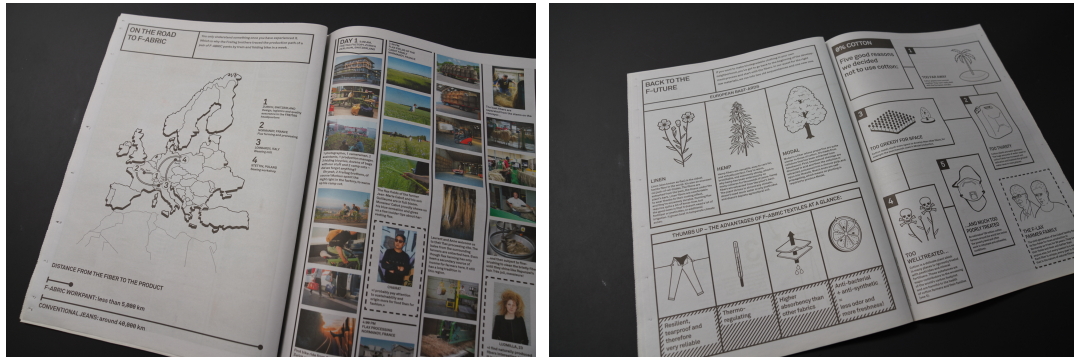


Fig 8 – A FREITAG journal with pictures and texts, explaining its clothes’ impact on the environment

(Source: Sheng-Hung Lee)

I received the bag in June after being repaired for two weeks. This experience had not only helped me regain a serviceable product, but known one or two FREITAG lovers through the process of consulting about repair, and appreciated all the more the brand whose inside is as good as its outside.

IV. Design Inspirations from within a Train Carriage: From Five Senses to Integrated Sense

On my way from Frankfurt to the Cube Museum in the Netherlands, I transferred to an Arriva-like train after crossing the border. After I put away my baggage, took a seat and spent about five minutes catching my breath, I looked around me but found nothing different from what I saw elsewhere. There were the spacious interior, large windows, comfortable seats and foldable tray tables – similar designs can be found in German trains.

Upon a closer look, however, some design details in the train grabbed my attention. One of the things I noticed was the embroidery over the covers of courtesy seating for elderly, pregnant or disabled people. Usually we would see two emboldened words or large signs placed next to these priority seats in case anyone didn’t notice it. Yet this design could achieve the same indicative effect without affecting the aesthetic integrity of the train interior. I didn’t spot this the first time I looked around as I was seated diagonally opposite these seats, but it caught my eye on a second look. It is indeed a very subtle and clever design. After all, people should give their seats to those who need them knowing it is the moral thing to do, not because there is a sign asking them to.



Fig 9 – An unobtrusive seat-cover embroidery indicating priority seating in the train

(Source: Sheng-Hung Lee)

Another detail I noticed was the trash cans in the train. I didn't find any word or picture on the trash cans but two simple geometrically-shaped holes indicating the type of trash that goes in each of them. The design is both intuitive and pleasing to the eye.



Fig 10 – Trash cans in the train using different geometric shapes for trash sorting

(Source: Sheng-Hung Lee)

I have been taking a fair amount of train rides in Germany recently. And it was during one of these rides I noticed after some careful observation that the handrail next to the train door was not exactly aligned to the center of the door, but instead made more room for the side next to the staircase. I liked this design detail very much. Why is that the handrail is always aligned to the center of the door? In any case, the handrail should be designed to meet human needs. With a stainless handrail, the designer has split the traffic flow into two – passengers that get on and those getting off. There is also enough room for passengers with large luggage to hold onto the handrail when getting on and off the train.



Fig 11 – A handrail not aligned to the center of the train door

(Source: Sheng-Hung Lee)

In the picture below is a distinctly visible sign that differs from the three implicit designs mentioned above. This indicative sign design on the train's exterior is also very much to my liking. The use of thick, white lines on transparent doors makes it easy to

know even from afar that this carriage is specially designed for passengers in wheelchairs or with bikes. Here the product's functionality is aptly conveyed through poignant visual impact and contrast.



Fig 12 – An exterior sign clearly indicating that the carriage is designed for passengers with bikes or limited physical mobility

(Source: Sheng-Hung Lee)

The design of door and light control devices near the doorframe is also clear enough. By turning the key to different positions, we can activate different functions. As long as we know what the numbers indicate beforehand, we will know how to use them correctly.



Fig 13 – Simply and clearly-designed control devices near the train door

(Source: Sheng-Hung Lee)

I think most designers know that design should fully utilize the five senses of human beings which include sight, hearing, smell, taste and touch, in order to enhance the effect of the experience of touch point. This is a good start for designs. Here I'd like to propose a design concept: the experience of integrated sense. Not entirely a new idea, integrated sense is a comprehensive concept. It is the designer's wish to seamlessly integrate the ingenuity of the design into the existing products and services before users know it. Most designers are desperate to stand out among competitors in the market where novelty and difference are sought after. The design concept of integrated sense does not clash with craze, however, as it pursues the kind of integration that meets users' basic needs. Leaving room for form and design, it should convey an approachable feeling on the whole.

The five senses and integrated sense should coexist in many different environments. The aforementioned visual design in the train's exterior and the design of the device near the doorframe are both experiences emphasizing functions, aptly conveyed through

poignant visual impact and contrast on the side of users. The designs of seats, trash cans and handrails focus all the more on the integrated sense to provide easy access to information about and use of devices for passengers without causing harm to them.

V. A Museum Guide Doubles as an Experience Designer: from Achievement to Fulfillment

A while ago, I was fortunate enough to be invited to the Cube Design Museum in the Netherlands to share my ideas on Industry 4.0 topics. I also took this opportunity to see a design exhibit of mine there. After getting off the train and depositing my light luggage, I went straight to the museum to see the exhibition. The museum was about to close at five p.m., so there were not many visitors and I could just quietly tour around the place at my own pace. Presently a woman dressed all in black came to me and offered to guide me around, to which I nodded yes. While I could choose to see the exhibition by myself, I was very glad that someone volunteered to be my guide. And that someone was Ms. Marina Sjoer.

I knew from Ms. Marina Sjoer's thorough introductions that there were no text explanations at the NATURE - Collaborations in Design exhibition in the Cube Design Museum. But visitors could choose instead beautifully designed guidebooks or mobile voice guidance. The text-free approach creates a neat exhibition environment with consistent visual appeal. And most importantly, it allows the audience to focus on the experience by interacting and engaging more with the design works. I also learned that the carpets found in every section of the exhibition hall were made from materials like pulp, gravel and wood, and would be recycled rather than discarded after the exhibition. Careful design details like these are a nod to the theme of nature and sustainability.

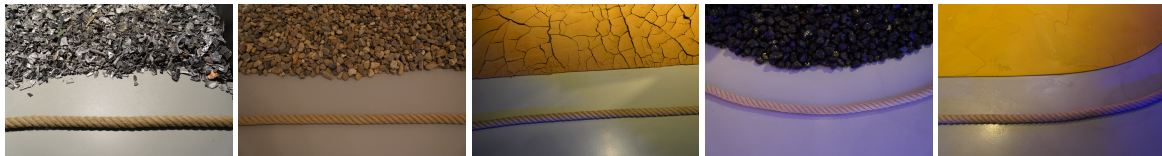


Fig 14 – Floors covered with carpets made from several recyclable materials

(Source: Sheng-Hung Lee)

For two days, Ms. Marina Sjoer guided me around the museum, took pictures of me and the exhibits, and accompanied me to explore other interesting places, like the theatre with 360-degree downward projections. She also explained the reasons behind her tour route design choices, and one story particularly stood out for me. There was a semi-open exhibition space in the second floor playing a film about an already-extinct species of rhinos whose sound could be heard no matter where you were in the exhibition hall. To filter out this background sound, she would take the visitors over in front of the space and asked them which animal made the sound. When everyone was discussing among themselves, she would slowly lead the crowd into the space where the film was played and revealed that the sound came from the already-extinct white rhinos. When visitors left the space, their brains would automatically filter out the sound not because the film itself was muted, but because their mind had understood and accepted the sound.



Fig 15 – Text-free exhibition spaces

(Source: Sheng-Hung Lee)

This story inspires some thinking of mine that Ms. Marina Sjoer, who is passionate about and devoted to work without doubt, wins my respect as a professional museum guide as well as a competent service experience designer. She's paid attention to every detail during the guiding process, such as filtering out the background sound for visitors. She also shares with me about the other advantage for the text-free approach in the exhibition – improvising the experience she'd like to convey to the audience as a guide at her own will. It is not her wish to impose the direct answer to or only one way of appreciating every piece of work on visitors. Instead, she wants to throw some open-ended questions concerning the works and their creators, thus inspiring thinking and discussion in this aspect.

After more talk with Ms. Marina Sjoer, I find that apart from participation in the guiding process, she joined the team since the start of the preparation meeting of the NATURE - Collaborations in Design exhibition which lasted for two years and a half. She was dedicated to getting to know every story behind the exhibition space, conducting full discussions with curators, and reading every designer's works. Then I realized the professionalism of the job as a museum guide, as well as the high value it represents. In the end, I took the initiative to take a picture of her with the poster of the exhibition, which would remind me of her pursuit of excellence at work and her professional attitude. Some get a job to bring home the bacon, some regard it as a responsibility that can bring a sense of achievement, while others see it as a platform where people can fulfill their mission.



Fig 16 – Ms. Marina Sjoer, guide of Cube Design Museum

(Source: Sheng-Hung Lee)



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