
DG 409

I attended DG409: Design for the environment this quartile. I attended the assignment because I wanted to widen my horizon on both a customer focussed and a societal level. In my design process the environment never played a prominent role and I felt I should explore this facet more. After all we do have to take care of this world we live in, and on the other side, environmentally friendly design can also be important when targeting a specific user base.

The assignment consisted of five tasks that I did in cooperation with Joep le Blanc, Marisa Zuk and Lorenzo Giunta. I will go through the tasks one by one and talk about what I learned from them in combination with the lecture that went with each of the tasks.

Task 1:

In this task I had my first encounter with eco- sustainable design as driving force of design, instead of an afterthought. Eco designing a product has to be a conscious choice from the start, or at least fairly early, because the sooner eco-thinking is applied in the process, the more impact it will have at the end.

After discovering and coming into contact with different strategies to make a product more sustainable we set out to find good and bad applications of three of these strategies. This resulted in a long talk with my group members about all things that are good and bad from an environmental point of view. The most important conclusion we got from this is that any choice made to favour the environment will nearly always have negative repercussions on another facet of the product. Luminescent light bulbs last longer and require less electricity compared to incandescent ones, but also require toxic chemicals for production.

Task 2:

This lecture focussed on the same design strategies as last task. The difference was that this time we got a more hands on approach. We started focussing on material choice and how an interaction can be engineered toward being less damaging to the environment.

When we started redesigning the sunshade we decided to pick a specific context, since we thought local production is crucial to a product being environmentally friendly. As some of the discussed examples proved, a radically different approach can have a big payoff. This led us to change the entire paradigm of the sunshade to a modular system in which some of the production is actually left to the user itself. I think that in its simplicity it went relatively unnoticed, but I do think it was a very effective way of reducing the footprint of a sunshade, especially in hindsight.

Task 3:

In the third lecture things got more technical. There was more focus on the actual impact of a single material and how this can have unexpected results, like how recycled aluminium isn't necessarily better than an oil based product like plastic. I also got introduced to actually calculating the impact a certain amount of a material can have, sadly the resources that were available were very limiting, but they provided some insight nonetheless.

For this task we decided to let the sunshade be for now and redesign a bench, but with the same approach: change the concept of a bench fundamentally, not change it as an afterthought. Which again resulted in an idea that in its simplicity caused massive environmental benefits at very little extra user effort. We looked at all the components a bench is made up of, like manufacturing, shipping, use and waste management. We got to calculate and go into detail on what the impact of a material is to actually be made, shipped and recycled and in this way were able to focus on a specific part of the bench which made a lot of impact, instead of on an overall picture which only made a tiny impact.

Task 4:

The final real task got into a dangerous territory for me, namely marketing. I'm always against making out a product for something it isn't or not entirely is. I can see and understand the importance of targeting a specific user group when wanting to boost a product's sales, even though I don't entirely agree that the population can be summed up in a potato graph. My focus point has always been having a product speak for itself, of course a user focus is important, but I prefer making the group realise they like something instead of making something they already like.

We set out to create a poster for our bench to market it towards a specific user group mentioned in the potato graph. We decided our product best fit the "progressive" groups (like post-materialists and hedonists) because conceptually it was very strong and it was very playful. The poster was made up of a playful title for the bench (trench bench) and put it in a colourful scene which the user could relate to.

Task 5:

My last task consisted of attending a lecture on "new materials". By far the most consumed material in the world is concrete and the talk was about how the changing standardization allows engineers to create entirely new materials within the same paradigm.

An interesting view on environmentally friendly design was raised; not recycling nor reusing is the solution, it is effectively using by-products. The production of a lot of materials have has a lot of "waste" which can be used to for example create concrete. So instead of using new expensive and wasteful aggregates and cement, the most used material in the world can environmentally minimize its impact.

Besides the production causing less damage to the environment, there were also ideas on how the concrete itself can be a benefactor. For example by not requiring any compacting when being cast or

even purifying the air! This way concrete actually has a positive outcome for the environment, measuring up against the negative one of production.

Reflection

This assignment got to the point really fast for me. It was a nice way to actually actively incorporate environmental thinking into a process really calling for it and making it the most important thing instead of an afterthought. Now realising that it is very important to include eco design early in a design if it is a spear point I can implement it into my own process.

But in my opinion the most important thing I learned was learning how to consciously improve towards the environment. I learned to use tools to choose the right phase of a design to improve on. To look and calculate at what part in the lifecycle of a product is the most wasteful. Then I also got to experience the next step. By reducing production cost (new materials), consciously choosing materials (sunshade, trench bench) and changing the entire paradigm of an idea to reduce environmental costs.

I certainly see the importance of an eco-design mind-set to provide products that ensure longevity and sustainability. I realise that a lot of the times this aspect is a bit overlooked on this study, since we make prototypes of concepts, which doesn't natively facilitate for a lot of conscious material choosing and definitely not for a sustainable production method. But just like a lot of techniques, the eco principle works best when applied early, preferably before a final prototype.

All in all, I think this assignment is a valuable and diverse contribution to my design process. It shines light on an important aspect of design and provides me with tools to deal with it.