

Introducing sustainability into High fashion through PRADA

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INTRODUCTION

There is no doubt that the fashion industry is a leading cause of the pollution and it is also a given that there will have to be some massive changes if we really want to make a difference. Although sustainability is growing in popularity in the business world for some reason it is seen as the red headed step child in the fashion industry. Somehow along the way it has managed to completely stray off from the course and separated itself from the rest of the fashion world. If companies do decide to acknowledge sustainability it seems to be done in a completely isolated venture from the rest of their collections and productions.

For sustainability to really succeed it is going to have to be embraced wholeheartedly into every aspect of the company and its value chains. The idea is that sustainability will be an afterthought to the products and not the main selling point. Good quality, stunning designs that just happen to be completely sustainability and/or Cradle2Cradle.

Therefore we are going to set a leading example by working with Prada as they stand for anonymous luxury and intelligent fashion which we can easily combine with sustainability and C2C.

In general, it often seems to be a case of either C2C or sustainability. What we want to achieve is merging the two into Prada's value chain. Thus, some areas will contain sustainable approaches whereas other will rely to the C2C philosophy.

PRADA

Prada is a leading trendsetter for the industry. The Prada look has certainly evolved over the years, and Miuccia Prada is credited with many innovations in fabric and design. She has added everything from mirror fragments to beaded latex to her garments, and experimented with new concepts. However, the caliber of the finished product has never wavered within all this experimentation. A huge part to the philosophy of Prada is the quiet elegance and unstated presence of the logo.

Looking for something of higher value, Prada customers find great aesthetics, eternity, and sometimes even intangibility in their clothes.

"And aesthetics are important to sustainability because they act as a great social attractor, an outlet for ideas, a dorm of cross-referencing and an agent of change. Ezio Manzini suggests that aesthetics give direction to the choices of great number of individuals. It follows from this that by making the sustainable alternative more attractive to people, we can encourage them to willingly embrace it."

As a luxury brand, Prada can already be viewed in a sustainable manner as the high quality products are made to last and the high price means that people do not discard the garments as easily as they would with high street fashion.

From our research we have found that consumers value the subtle luxury of Prada items. They view Prada as being highly innovative yet classic at them same time. Therefore we feel that the Prada consumer will embrace a subtle introduction of the new sustainability philosophies.

Sustainable Fashion and Textiles by Kate Fletcher, 2008, p.126

PROBLEM STATEMENT

Luxury brands are usually big companies which make their profit due to certain hallmarks. Their customers buy the products because they get a certain style, quality and/or name. Prada stands for anonymous luxury, classic elegance and innovation. We want to include sustainability and cradle to cradle within all Prada products as a standard. Not changing the Prada designs but the products' ingredients and way of production, there is no need for Prada to advertise this. Our future products will all be build up on the eco-friendly philosophies, it is going to be Prada's standard.

So, we might face some problems in terms of keeping the designs while changing the ,construction of the Prada items.

Moreover, Prada's target group stays the same. Thus, the change within Prada products shouldn't be visible to our customers either.

CONCEPTS

Within the timeframe we have right now, we are going to focus on sustainability within the value chain and also incorporating C2C into our current product designs and our future systems. We will focus a lot on the C2C methods but we will also be looking at increasing sustainability by way of biodiversity for other areas of our value chain where we cannot implement the C2C methods at present. Our idea is to start applying sustainable ideas and solutions right away, but more importantly to think about the strategy of how to develop the company towards being C2C in every aspect.

We are going to implement our C2C ideas simultaneously with sustainable innovations.

CRADLE2CRADLE

Our approach is to introduce C2C products step by step and then expand and unfold bigger and more interwoven plans as time goes by. We propose to begin with a popular item, such as the iconic backpack. Then, bit by bit, we want to change the components to C2C with a view to eventually being able to have all of our production C2C certified.

NYLON RUCKSACK

The infamous Prada backpack which was made from simple black nylon became a massive success when it was first launched in 1985. The fact that a luxury brand could work with such a non-luxurious material and still command a high fashion price tag, proves that Prada is able to dictate what is fashionable in the market. We are going to start off by replacing the nylon with eco-intelligent polyester, which is a certified C2C material. We are confident that updating this classic design brings the rucksack into the 21st century. Prada will be able to pull off this change with relative ease.

The aim is to make the eco-intelligent rucksack so identical to usual one that you will only be able to tell the difference if you look up the material on the care label.

C2C RESEARCH LABATORY

We propose that Prada invest in a Research Laboratory in conjunction with educational institutes and relevant industry experts to expand their work with innovating new materials. Furthermore, Prada could increase the number of C2C fabrics that can be used in the future. The research labatory itself would be build by architects who stick to the C2C philosophy in order to achieve the most efficient structure to house all potential. It will be inspiring for the people working towards C2C to be surrounded by a fully functioning example. Moreover, it will also be of economical benefit to harness all the rewards that have been proven to come from these designs.

Possible cooperation within the industry could for instance be made with the molecular cuisine by Ferrian Adria. Furthermore, we want to work with educational institutions. Center for Sustainable Fashion, London College of Fashion' or 'Massachusetts Institute of Technology' are partners we can imagine to work with. It would not only be the fashion related organisations and students that would be encouraged to work at the labatory. The most interesting results may stem from collaborations with completely unrelated fields such as science, engineering, technology etc. For instance, biomimicry textiles would take biological understanding to yield the most efficient results. It will also promote the sharing of knowledge which is fundamental for C2C to grow and prosper.

BIODIVERSITY

When we look at the variety in nature we call it biodiversity. It refers to all aspects of the different ecosystems, species and genes and the ecological processes that support them.

In our laboratory, new materials will be researched. As these new materials need skills and crafts, Prada will promote local craftsmanship within its laboratory. For instance, salmons' skin is a by-product of the fish which is sourced in Chile. Using the skin as leather could be a possible new material for Prada. In order to get the best possible leather we need Chilean skills. Thus, we would not only support the fishermen's business and use innovative material, but also promote Chilean knowledge.



MATERIALS

At this point in time, cotton and polyester make up 80% of the fabric used in the garment industry. Even if you switched to organic cotton, you are still putting a strain on the planet in terms of resources needed to produce that amount of one fibre. We are encouraging the use of a diverse range of biodegradable natural fibres and C2C synthetic fabrics. In the natural world this will ease the burden of demand in some areas. Spreading the workload to other geographical regions might enable them to grow different plants/animals and create employment in the local area.

We have come up with a list of possible materials that Prada can start to implement in their collections ¹.

C2C FLAGSHIP STORE

Our flagship store will be build within the C2C philosophy, as our research laboratory was. We also want to have all the fixtures and fittings in the store made C2C. The database for exciting new products is constantly expanding. To name but a few of the options that we are looking at for the interior: Carbon Negative Cement², construction panels made from cow manure and other recycled content² or air-purifying wallpaper².

While we are making provisions for all the future collections with C2C we also want to acknowledge the products that have already been created and try to include them under the sustainability umbrella. For this, we have decided to have a type of swap shop which we are calling Pradatto (Prada + Baratto(Italian for to swap). The idea is to offer Prada customers a place where they can swap their Prada items for an alternative Prada vintage piece. We think that a lot of Prada consumers would appreciate this kind of shop, as it offers the possibility of getting hold of models that are no longer in production. Moreover, we want to introduce a repair service for customers who are not ready to part with their Prada handbag.

SATELLITE COLLECTION

As a continuation of the 'Made In' collection that Prada presented recently, we propose to introduce a diffusion line named 'Satellite Collection'. Each season, a new area from around the world is highlighted and paid homage to.

The promotion of making small limited collections from around the world will not only draw attention to cultural traditions and crafts from around the world, but will also encourage diversity within the fashion world and highlight custom made skills that are synonymous with the luxury brands.

These limited collections will be sourced and produced in various countries around the world, one at a time. Even though it will only be one off production processes for Prada, it will still be a benefit to the regions that are chosen to participate. An example of this could be to use Australian Aborigine craftspeople to customise items with their traditional dot art, which would have been made from kangaroo leather locally.

The labels of the satellite collections will contain a code about the longitude and latitude of the region where the product were made/sourced. So the customer who wants to know more about his valued item can look the code up and find out more about the product.

To give an example, the Prada eyewear would be made within the C2C metabolism.

The frames and hinges could be either a technical or biological nutrient and designed for easy disassembly. For frames, bio-plastics could be used as technical nutrients. For example, bio/renewable sourced polymer derived from castor oil.

A diversified selection of luxury woods such as Mahogany or Eben could be used in the biological cycle which would eventually biodegrade. It could be sourced and crafted from different locations around the world. If we decide to make a frame for one of the satellite collections, local crafts people would be hired to custom the frames which may be made from wood native to that region. The lenses will follow the technical cycle – after life lenses will go back into the industrial cycle, materials could be valuable for same or other high-quality products such as cameras or binoculars.



Images from top to bottom:

- 1. Estonian design and craft with Hazelnut tree wood
- 2. Austrian craft with Oak tree wood
- 3. Italian craft with Ash tree wood

CULTURAL DIVERSITY

Europe was once famous for its lace but has been dwindling since 1920's. Prada decided to make their 2008 collection primarily from custom made swiss lace. All the lace companies left profited from this collection, as it influenced several other designers and created more need of the lace industry.

CONCLUSION

Being aware of the efforts and investments this project will bring within, we are still convinced of the long-term profit Prada will make. If people continue producing, consuming and wasting as they do now, we are going to face serious problems in the future. For instance, vanished resources or pollution that keeps us from living on planet earth. Thus, people's lifestyle HAS to change. Therefore, we want to be the first ones setting an example in the industry.

Moreover, this project is very much within Prada's DNA, as they have always been innovating and forecasting how products will look like in the future. If Prada wants to sustain the values it is known for, this project is the right way to do it, thinking of the economical changes that will definitely come.

So all in all, there is a need of a change in the industry, and we are convinced that Prada is the right company to start this.

APPENDIX

1-MATERIAL ALTERNATIVES

IN ORDER TO REPLACE MATERIALS IN EXISTING PRODUCTS

renewable materials are being used instead of conventional ones.

These fit in either into technical cycle or biological cycle

Technical metabolism: 100% Eco Intelligent Polyester (Cradle to Cradle Certification Gold)

Biological metabolism: Salmon leather, certificated ecological wool, certificated ecological silk

100% Eco Intelligent Polyester (Cradle to Cradle Certification Gold)

textile designed to be a technical nutrient

no limits in colour choice

can be woven into any design

100% environmentally friendly as it is in the technical circle

Salmon leather

as alternative leather could be sourced in Chile and Iceland at the moment for example,

It could be sourced as by—product of fishing or fish farming.

Prada can cooperate with different organizations that promote sustaining and developing crafts- for example in Chile there is Chilemakers.com who provide different crafts.

Material description:

The salmon leather-in addition to the aesthetic characteristics that are suitable for using in fashion on account of its beauty and exquisiteness - also has an excellent mechanical strength. A versatile material, the fish leather is scentless and resistant to the attack of microorganisms, lasting indefinitely. Available in quilts pressed to 1.00 m by 0.60 cm.

Colors: variables

Social-environmental Characteristics: The salmon is a fish mostly used for eating and, in most cases, has as sub-product the commercialization of its offal for animal food. Its skin is not exploited, and it's usually discarded, causing organic pollution. Its use prevents the generation of this type of waste.

The processing of the salmon leather employs clean technologies and toxic free products. In his tanning are used vegetable and synthetic tannin, and other devices with low pollution replacing the highly toxic salts of chromium. In the leather business he organic material is called "bio leather," organic leather, chrome "free" and white.

The trade of salmon leather also contributes to the improvement of the quality of life of fishermen since it becomes a source of additional income. To encourage the formation of associations of small colonies of fishermen, and therefore social inclusion.

The salmon catch is made consciously and non-predatory, with respect to environmental laws and the period of procreation. Salmon could be also farmed.

http://www.e-fabrics.com.br/

Eco certificated wool

sourc f. ex U.S, Canada, Australia

Material description:

The ecologic wool has a rustic aspect from its manual process and carding, threading e weaving, which gives the lines and its products a unique aesthetic aligned to the concept of a handcraft origin, natural and ecological.

Social-environmental characteristics:

The wool is ecological because there's no use of pesticides in grazing or animals. Unlike the conventional methods, bleach is not used to in the wool of the sheep, and all the dyeing is made with local plants, avoiding the synthetic dyeing and the consequent contamination of the ground water. Besides, inducting hormones are not used in the growth of wool. And the number of sheep is limited by area, avoiding stress situations to the animal.

Important parameters are changing, as the wool is a largely used material in the fashion industry, and its conventional production is causing a negative impact to the environment.

The process of ecological wool production is organized inside the logic of family agriculture, as an extra income, helping to improve the quality of life of the ones involved and keeping the members of the families in the countryside. Differently from the conventional wool, its handling doesn't damage the health of workers as the productive chain doesn't use toxic products.

The ecological wool is worked by handcraft means, regaining and preserving the traditional knowledge. Its transmission is made informally, as well as the knowledge about coloring and natural stabilizers. http://www.e-fabrics.com.br/

Eco certificated silk sourced in f. ex Thailand

Material description:

Silk is one of the oldest and noblest materials used in the fashion industry. And the organic silk is a "cross-over" of this fancy millenary classical with an artesian and organic process. The silk cloths are see-through, shiny and fitting, even when they are made through artesian and rough ways. They are mainly used on shirts, dresses, blouses, ties, shawl, gloves etc.

The silk used in the textile industry comes from silkworm cocoons from a process called sericulture. The fiber of natural silk is a continuous threading of a protein, produced by the caterpillar of certain kinds of moths. The caterpillars expel, through glands, the silk liquid (the fibroin) involved by a gum (the sericine) that solidifies immediately in contact with the air. And it becomes one of the most refined raw materials in the fashion universe.

The different form of silk processing designates a denomination, according to the texture and regularity. Measures in specific unities called Denier (Dn), which is the same as 9 thousand meters of lines per gram. Thus, following the texture and regularity of the cocoon process of threading, we have the following specifications of lines:

Social-environmental characteristics:

The artisan growth of cocoons from the ecological silk is made in plantations where there's no use of agrotoxics — unlike the production in industrial scale. Its residues are re-used in agricultural inputs and the cocoons rejected by the industry are used as raw-material to the threading of different width, also contributing to the reducing of wasting.

Regaining the artisan techniques, where the threading is made in natural forms, the process of making income to the producer families is easier. The silk production is in family, suited to the parameters of social responsibility and environmental respect.

The stage of dyeing is completely natural. Natural pigments from the Brazilian biodiversity are used, such as mulberry, sugar-cane, onion skin, coffee, mango leave, eucalyptus and urucum. Thanks to the artisan dyeing process the color shades become the product asked in a unique piece, exclusive and non-reproductive. http://www.e-fabrics.com.br/

ALTERNATIVE MATERIALS FOR SATELLITE COLLECTIONS

uses rare materials, but sets a control over it by meaning that certain amount of materials could be produced in certain time frame.

Biological cycle: Kangaroo leather, amazon natural latex over fabric, locomotiva canvas eco jute

Kangaroo leather- sourced in Australia

Kangaroos have long been important to the survival of Australia's Indigenous peoples, who have hunted kangaroos for tens of thousands of years for both the meat and the skins. However, kangaroo populations have increased dramatically since European settlement in these areas due to the introduction of European farming methods and, for this reason, carefully controlled harvesting is required.

Today, commercial harvesting of kangaroos is strictly controlled to protect these native animals. Only species present in sufficiently large numbers can be harvested, and the kangaroo industry is closely monitored. The kangaroo harvest is ecologically sustainable. The kangaroo industry is a great example of conservation in action. Most Australian states now sell kangaroo meat for human consumption.

The Australian Government controls the export of wildlife products and uses this authority and the latest population density information, to set a quota for each state specifying the number of kangaroos that can be commercially harvested each year. Kangaroo populations are estimated every year to determine a sustainable quota which is usually between 10-12% of total population. Annual quotas for each species are set. Only species which can sustain harvesting are allowed to be taken. The number that can be harvested will be reduced if monitoring of kangaroo populations reveals any natural or harvest-induced decline in kangaroo populations. The Royal Society for the Prevention of Cruelty to Animals (RSPCA) has independently monitored kangaroo harvesting. When harvesting kangaroos, animal welfare is a primary concern. Harvesters are required to use humane methods and abide by a nationally endorsed "Code of Practice" when hunting, or risk fines and losing their license which results in losing their source of income. Australian ecologists support the kangaroo industry. A wide range of professional conservation groups support the kangaroo, harvest believing that it delivers important environmental benefits.

http://kangarooleatherleads.info/blog/?page_id=153

Amazon natural latex over certificated fabric - as alternative leather- sourced in South-America Material description:

It's a material on natural latex from the native rubber trees of the Amazon forest and working according to the traditional methods of the rubber extractors in its placement.

Several trying were made to the improvement of vulcanization to cease the utilization of smoke that damaged the health of workers. In crude cotton cloth many latex layers are applied. After washed, the cloth is set on the sun or room temperature for some days – then the name Ecological leather. The lamina is wrapped and stored. Reached a result that may guarantee excellent quality, not only in resistance but also on the durability of the product, the ecological weather is used to manufacture clothing, bags, backpacks, jewelry, automobiles and others.

The Ecological weather is commercialized in laminas 1,60 x 1,00.

Social-environmental Characteristics:

The Ecological weather production is an economic alternative to rubber trees population, helping to value their traditional culture and to the preservation and the utilization of sustainable biodiversity to keep the trees which latex comes from untouched. The extraction of latex respect the timing, between January and august, but a reserve is always kept.

The commercialization of ecological leather helps the improvement of the rubber extractors and their permanence in the forest as well as makes the extraction an income and avoids the migration to the cities, awareness inspired by the work of the environmentalist Chico Mendes.

http://www.e-fabrics.com.br/

Locomotiva canvas Eco Jute

Material description:

This type of canvas has high added value because it combines the resistance of cotton and the benefits of jute. Another advantage of using jute fiber in fabrics is that this material decomposes easily when disposed of: jute decays in two years, while cotton takes 10 years and polyester may take 100 years to decompose.

Available in its natural color, 1.59 m width.

Social-environmental characteristics:

This is an environmentally friendly canvas because it was developed based on jute fiber, a typical raw material from the Amazon region. The plant is sown and harvested in harmony with the sustainable management of the forest. It helps to preserve the biodiversity of the Amazon region.

This fabric is manufactured in a factory which belongs to Alpargatas, which is concerned with the well-being of the workers and with sustainability. So much so that waste is carefully separated and there is a treatment facility for the water, which is returned to the effluent with higher quality than when it enters the factory.

2-CRADLE2CRADLE PRODUCTS

*Carbon Negative Cement (Novacem, United Kingdom) is a revolutionary solution to reducing carbon emissions in the cement industry. By replacing calcium carbonates used in cement formulation with magnesium silicates, and by using a low-temperature production process that employs biomass fuels, Novacem has achieved an alternative to poured concrete that offers the same performance and cost benefits as ordinary Portland cement but with a negative carbon footprint.

*ECOR, a line of low-weight, construction panels made with bovine processed fiber and post-consumer waste, offers an energy-efficient, sustainable means of producing furniture, displays, signage and numerous other products and designs.

*Aratech® Permasorb Wallpaper is an ingenious solution for combating air pollution in contaminated buildings. The durable covering removes toxins embedded in wall surfaces, like PCBs, PCP, pesticides and radon, and safely contains these chemicals over time.

ETHNORAID

Would You swap Your Prada&luxury item You own in exchange for another?

- a) Yes, if there is something I love more!
- b) Depends on the product. I would probably replace a worn-out product.
- c) Maybe for a better quality.
- d) I own a small clutch by Prada, from the iconic nylon collection. I love it. It's very handy and I wouldn't trade it for anything else.
- e) In exchange for something equivalent I would, especially items from older collections that you usually cannot buy anymore.

What does Prada stand for in Your opinion?

- a) Modern and stylish.
- b) In my opinion Prada stands for luxury design.
- c) Subtle, simple, classy, understatement.
- d) Prada to me stands for subtle luxury. It can be classy, but still be young and fresh.
- e) Innovative ways of combining tradition with modernity.

How does Prada stand out in comparison to other brands?

- a) Colorful and ever changing.
- b) It combines trend setting ideas with classics.
- c) Clean structure, fine designs.
- d) For me, Prada is like any other luxury brand to be honest. They are not as flashy as Versace but their items do not shock me on how new or innovative they are.
- e) Prada seems to be at the forefront of innovation every season.



Innovative C2C materials Innovation on appereal approach

C2C material and locally sourced sustainable material applications with local crafts

Research lab

Satellite collections

Product & Service Development

PRADA

C2C & Sustainability

Communication

C2C Flagship store

Prada Swap shop

Expanding customer awarness by personal approach Repairment of old Prada items Collecting back old Prada items by an exhange possiblity or when it is broken