

Cumulus Mumbai 2015:

In a planet of our own - a vision of sustainability with focus on water http://www.cumulusmumbai2015.org/

Design for Arctic

Juliette Ospina Bernal, Universidad de los Andes, Bogota, Colombia, j.ospina117@uniandes.edu.co María de los Ángeles González Pérez, Universidad de los Andes, Bogota, Colombia, marigonz@uniandes.edu.co

Abstract: Sustainability in design has been generally approached through the life cycle logic. Often focusing on designing products and services that can reduce our impact on the environment. Or focusing on helping communities, address their needs in ways that are socially and environmentally sustainable. Though these approaches allow us to think about how product development impacts the future of our planet, they have focused on daily practices and overlooked the socio-cultural aspects of design. That is, what leads the designer to approach sustainability from an idea-oriented perspective, as opposed to strictly technological and market oriented ones. This article presents the results from a critical academic exercise where, through designing daily use products, students address issues related to oil drilling in the Arctic region and its effects on water.

Key words: Critical objects, Critical design, Arctic, Sustainability, Idea-oriented design.

1. Introduction

Contemporary design has made consumers the protagonists of product development and use. However, how can we design taking the socio-cultural dimension into consideration in a world where boundaries between politics, economics, and aesthetics have become blurred? Thinking about design from a cultural perspective fosters an understanding of the contexts we work in and helps us see its potential for critical reflection beyond economics. Design can bring visibility to worldwide problems, including environmental ones.

Consequently, design can support the work of organizations operating outside of strictly market driven production logics.

The concept of innovation in design and business is deeply rooted in notions of progress understood as comfort and material wealth. Therefore, design has focused on improving individual life standards, relegating political and social reflection to the background. The course "Product Culture" from Universidad de Los Andes' Design program aims to develop student's critical thinking about the role of design in shaping the behaviors, social norms, attitudes and ideas that reflect and affect the societies they exist in.

2. Starting point

Consumerist societies have developed around market driven capitalism as an economic model. Market driven capitalism sustains demands through the frame of consumers' unstable desires (Baudrillard, 1970). As a consequence, consumers move within a liquid environment where products, experiences, services, and desires are continuously renewed. Disposing of things is inherent to a consumer culture where detachment is prevalent (Bauman, 2007). Emotional detachment reigns supreme: none one wants to commit to anything or anybody. In such situation, political beliefs lose their value. Contemporary consumers consider global problems that might affect future generation unimportant (Lipovetsky, 1983). The outcome is a process of cultural banalization where all spheres of society are defined by hedonism; constantly seeking pleasure and avoiding pain and concern (Lipovetsky, 1983).

Leisure is mandatory and institutionalize, not as a right or as pleasure, but as a citizen's duty (Baudrillard, 1970). This type of citizen exercises control over their right to consumer but not over the consequences of their decisions. This is a citizen who is entirely entitled to choice and protected as a consumer and not aware of their duties and responsibility to society and the planet (Cortina, 2002).

In this scenario, the foundations of an effective citizenship should be: developing consumption ethics and taking responsibility; understanding the seriousness of the environmental and societal problems we are facing as a generation; and taking a critical stance on how we model our behaviors, ideas, and habits in daily life. Here, solidarity becomes a key point of citizen/designer's participation and the projection of their actions towards the future. Designers must be active citizens, designing not only for the sake of rights but also for the sake of responsibility. Designers should build values and reflections that empower others to make decisions around dynamics within economic, political, and social fields that affect them. A society creates ethical forms of solidarity by ensuring even a minimum of justice towards its members -including nature-, which will in turn allow them to live with dignity without entirely depending on market dynamics.

We cannot deny that aesthetics have penetrated every sphere of capitalism, which had up until that moment revolved around instrumental rationalism. Hypermodernity (Lipovetsky, 2013) presents a paradox: the more prevalent calculative rationalism becomes, the more important the creative, intuitive, and emotional aspects. Therefore, design moves between the economic and the aesthetics; industry and style; fashion and art; commercialism and creativity; and mass and high culture. A postmodern perspective celebrates the penetration of aesthetics into daily life and values image and appearance and effect/surface over depth. Postmodernity aims to erase the boundaries between image and reality and has a marked preference for camp, nostalgia, *Kitsch*, and pastiche (Hall, 1989).

Drawing from the previous, the final Project for the "Product Culture" course takes this theoretical framework for the development of products. These products are meant to help reflect upon different problems. Amongst the problems we addressed was oil drilling in the Arctic and its impact on the environment.

3. What do we do with design?

Starting from a critical stance gives design a different perspective in relation to key current issues worldwide. Design must transcend its role as a "reader" of its context and make its impact in transforming said context more visible. Design cannot be limited to daily life activity and solving individual problems. Rather, it has the potential to transform how people think about life and their impact on the environment. Ideas circulate within use and consumption dynamics. Therefore, in order to change people's way of thinking, the designer is just as important as the consumer.

Design currently merges economic and cultural values in forms of expression that involve creativity, taste, symbolism, and other elements that are difficult to measure. From this perspective, creating social value becomes a challenge of moving beyond aesthetic sensibilities and harnessing those expressions into agents for social and environmental change.

The goal of the course's final project "Diseño Con-siente" (in Spanish this word play that means both "conscious design" and "design with feel") is for students to understand the high impact issues faced by contemporary societies and how design can present, through daily use objects, narratives that make these issues visible. With this goal, we divided the project into two phases: product development and developing a strategy for placing the product with an NGO working with the chosen issue.

In the first phase, we challenged students to design a daily use household product that shows a critical stance on a global issue. For this, they need to research a situation like

the Gaza conflict, migration from Central America to the US, or violence against women. This presentation focuses on projects related to oil drilling in the Arctic and their reflections on its impact on water and the environment. Once they have identified an issue, students propose a design based on an aesthetic that, following the theory of Lipovetsky, seeking to trivialize the problem. This aesthetic approach allows them to understand the problem from a more informal perspective and bring a global issue closer to daily life.

As a theoretical framework we draw from "The humor society" by Lipovetsky (1983). Lipoveysky understands trivialization as a contemporary cultural expression mediating communicative process, especially in youth culture. He argues that in a "humor society" the differences between the serious and the "light" are often blurred. A cool and relaxed environment dominates social relations, so people lose interest in issues that were previously of concern and motivated radical changes in society. We could say that this culture dominates almost all aspects of daily life, rendering political thinking and personal beliefs irrelevant.

The second phase of the exercise, students must develop a strategy to bring the product into the work of an NGO addressing their issue. The purpose is to validate the role of design in the field of critical thinking and consolidate specific contributions to global issues -for example, environmental sustainability- through dialogue with users who are interested in supporting the activities of NGOS in social struggles.

Therefore, design not only involves supporting areas facing social problems but it can also help change people's way of thinking. While creating products focusing on social issues does not necessarily solve problems, we can invite those who use them to reflect and change their way of thinking about and understanding their actions socially and environmentally. Additionally, if we understand daily life as a learning space, where society reproduces itself socially and culturally, we can see that it is in this dimension where people recognize and establish what is valuable.

4. Design for Arctic

Oil drilling in the Arctic emerges as an issue that affects worldwide weather systematically and transforms the local environments where it happens. We could think since this is a somewhat distant topic it might not have an impact in the daily lives of students. Or, that they can help stop it just through their design actions. However, through this activity students understood that design could intervene in such situation. Rather than trying to come up with end all solutions, students created products that contributed to the work of

two international organizations, The World Wildlife Foundation (WWF) and Greenpeace. These products support both organizations' goals and campaigns for Arctic conservation. Concerns over Arctic conservation emerged as a central topic in the global agenda in recent years. Hence, these conservationist organizations devote part of their efforts to the preservation of this crucial habitat for world climate regulation. According to WWF: "Oceans also have an enormous impact on us (...) they produce 70% of our oxygen, they absorb the heat and redistribute it around the world. This way, oceans regulate climate systems worldwide" (2015). The WWF focuses their effort on following the transformation of environment in the Arctic, especially ones associated to climate change caused by CO2 emissions:

"From the frozen oceans to the infinite ice deserts, polar bears' worlds are changing very fast. In order to understand how this affect polar bears, and make the right decisions for their preservation, WWF supports high tech scientific research (...) There is an extensive and complex network of life weaved around maritime ice: Arctic animals use ice for migration, reproduction, birthing... and for some people ice is also their livelihood. They hunt and fish on ice, and they also travel through ice." (WWF, 2015)

Just like WFF, *Greenpeace* is also leading initiatives that seek to lessen the impact of human beings in the Arctic. Drilling in maritime soil, shattering of ice, and the subsequent water pollution caused by oil drilling, have become central concerns for this organization:

"We are 7 million people inhabiting this planet and we all depend on the Arctic, it is necessary for climate balance. By forming a reflecting shield, ice regulates our climate and our means for sustenance (...) the increase in temperatures there (in the Arctic) is twice faster anywhere else in the world. The melting of the icecaps is under the radar for industries that lust after rich oil supplies. Oil, by the way, being also one of the most contaminating forms of energy and one of the biggest culprits for climate change." (Greenpeace, 2015)

From this perspective, students develop their proposals working with classmates with similar creative patters and shared values in their way of understanding design and the social role of their discipline. In this case, the "Saving" collective prompted the creation of six work groups under one manifesto:

"Design is our means of protest against a society focused only on economic and industrial ends. Design products can show us different realities and perspectives that can in turn have an impact on people who use them. Therefore, as a collective, we decided to critique through daily use products, making the message to consumers constant. Our products are representations of the possible consequences of uncontrolled exploitation of natural resources and the damage that great corporations are causing the environment."

Though every group maintained their creative autonomy, that is, they continued working on their personal design; their products shared the common feature of reflecting around

how oil drilling in the Arctic affects the environment. The following section presents three significant designs from the six proposed by the collective:

4.1 Polar fondue



Figure.1 Polar Fondue

The first design group proposes "Polar Fondue", a ceramic chocolate fondue set, supporting WWF. At the bottom of the pot there is a polar bear standing on a small chunk of ice. When filled with chocolate both the ice and the bear sink under it. This design is an analogy of the pollution resulting from oil drilling in fragile environments. Finding the bear at the bottom of the chocolate pot is an analogy of the assault that oil drilling represents for Arctic habitats.

The "Poplar Fondue" proposal was developed to support the World Wildlife Fund (WWF) in their initiatives related to fauna conservation around the world. The goal is for the organization to use the money they raise with this product to continue their work on protection. With this design, students hope to promote dialogue between different social spheres -private sector, academia, and consumers- and widen the impact of this organization's work.

Team: Carolina Dávila Ramirez, Maria González Cano, Paula Montaña Fernández y Zulendy Rodríguez Rodríguez.

4.2 Zagros Polar



Figure.2 Zagros Polar

The "Zagros Polar" project is a nozzle for red wine bottles. The nozzle is made of transparent biopolymer resin and shaped like a polar bears head. Wine goes through the nozzle and comes out of the bear's mouth. With continuous use, the resin will become stained, making the wine an analogy about oil drilled in the Arctic going through polar bears' mouths. This reflection focuses on understanding how oil drilling results in the sacrificing of local fauna: "the polar bear represents the Arctic, threatened by oil drilling". "Zagros polar" joins Greenpeace, supporting their efforts in conservation, mainly helping endangered animals. This product would help Greenpeace raise funds for their operations and, at the same time, raise awareness about the impact of human activity on the environment.

Team: Renzo Luzardo Franco, Carol Melo Franco, Ana Maria Posada González y Diana Salgado Yepes.

4.3 Polar Infuser



Figure.3 Polar Infuser

The third proposal, a tea infuser "Polar Infuser" aims to make hot water "contaminated" by tea in a matter of minutes. The infuser is shaped like a polar bear sitting in a small chunk of ice; his paws are placed upon what would be the cups border, representing the instability of their soil. This way, the gradual contamination of water presents a greater risk for the tumbling bear on the water. In this case, the reflection aims to show how oildrilling activities in the Arctic involve the contamination of this habitat's most important resource: water.

This tea infuser would support Greenpeace's activities through fund raising: "It is a tea infuser created for a conscious person who wants to express their inconformity with the environmental damage caused in the Arctic. The social benefits of this will be ensuring biodiversity, engaging reflection through evidence of the negative effects man has on nature. This product is the faithful reflection of how man's unmeasured acts taint clean hydric resources of our planet."

Team: Valentina Cárdenas Echeverri, Juliana Maya Romero y Maria Paula Tamayo Morales.

5. Conclusions

In order to propose reflections, social critique in creative disciplines is based on an aesthetic and symbolic dimensions. Hence the critical design has yielded this ground to disciplines such as art and advertising. However, design has the potential for putting forward products that find the balance between the practical and the symbolic purpose to propose, with the same depth, reflections about problematic issues in contemporary societies.

Critical stances play a fundamental role in design practices, since it offers the chance to change consumers' way of thinking through daily life practices. Design can participate actively in fields not limited to market determinations, and bring forth ideas from spheres that procure social innovation from value systems perspectives. Design propels thinking that leads to action, with ideas that question how we understand our social actions and leads to new discourses and new ways of thinking about our daily life practices.

Political actions can and must approach ordinary citizens, raise their awareness, and invite them to participate more actively in addressing problems like climate change and the decay of the Arctic. Design is a mediating tool that can strengthen the capacity of conservationist organizations. For this reason, innovation here focused on overcoming the passivity of citizens towards situations that affect us on a global level.

In this scenario, designers must not only act as producers but they must also understand that their practice can also change people's thinking if they can create cultural, social, and political capital around awareness of our impact in the environment we live in. Our call is for this type of exercise transcends academia towards institutions like NGOS that can use the design as a tool for fostering reflection on the discourses and initiatives they are promoting. For this purpose, we must cultivate collaborative work that strengthens communities around social and environmental causes.

References

Baudrillard, J. (1970). La sociedad de consumo: Sus mitos y sus estructuras. [The consumer society: Its myths and structures]. Madrid, Siglo XXI, 2009.

Bauman, Z. (2002). La gran separación [The great separation]. En: La sociedad sitiada [In: Cornered Society]. Buenos Aires, Fondo de cultura económica, 2007.

--- (2007). Consumismo versus consume [Consumerism vs. Consumption]. En: Vida de consume [In: Consumer Living]. México D.F., Fondo de cultura económica.

Cortina, A. (2002). La ciudadanía del consumidor [Consumer Citizenship]. En: Por una ética del consume [In: Towards Consumer Ethics]. Buenos Aires, Santillana.

Greenpeace (2015). Salva el Ártico: 3 millones de personas por una zona en peligro [Save the Arctict: Three Million people for an endangered zone]. Retreived on September 10 of 2015 from: http://www.greenpeace.org/colombia/es/campanas/cambio-climatico/Campana-del-Arctico/

Hall, S. (1989). El significado de los nuevos tiempos [The meaning of new times]. En: Stuart Hall (2010). Sin garantías Trayectorias y problemáticas en Estudios Culturales [In: Stuart Hall (2010) Without Garantees: Trayectories and Problems in Cultural Studies]. Eduardo Restrepo, Catherine Walsh y Víctor Vich (editors). Popayán, Instituto de estudios sociales y culturales Pensar, Universidad Javeriana Instituto de Estudios Peruanos; Universidad Andina Simón Bolívar, Envión.

Lipovetsky, G. (1983). Narciso o la estrategia del vacío [Narcissus and the Strategy of Vacuum]. En: La era del vacío [In: The Age if Vacuum]. Barcelona, Anagrama, 2003.

--- (1983). La sociedad humorística [The Humor Society]. En: La era del vacío [In: The Age if Vacuum]. Barcelona, Anagrama, 2003.

Lipovetsky, G. y Serroy, J. (2013). La estetización del mundo: Vivir en una época del capitalismo artístico [The Aesthetization of the World: Living in the Age of Artistic Capitalism]. Barcelona: Anagrama, 2015.

World Wildlife Fundation (2015). Oso polar [Polar Bears]. Retreived September 10 of 2015 from: http://wwf.panda.org/es/nuestro_trabajo/cambio_climatico/oso_polar/