MX Design Conference 2009
Impacto Social del Diseño

Tercer congreso Internacional de Diseño
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MX Design Conference 2007
Forma + Deseo: El potencial de los <Proyectos Vinculados>

MX Design Conference 2005
Perspectivas del Diseño: Visualizando al diseño del siglo XXI

Departamento de Diseño
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Prólogo

El MX Design Conference es un congreso internacional de diseño que se realiza cada dos años en Ciudad de México, por parte del Departamento de Diseño de la Universidad Iberoamericana. Su objetivo principal es reflexionar en torno a un tema central que es escogido por el colegio de académicos de tiempo del departamento y que amerita especial interés para los planes de desarrollo del mismo. Igualmente procura integrar todas las disciplinas del diseño, así como atraer reflexiones tanto teóricas como prácticas.

En su primera versión, en 2005, se centró en la prospectiva del diseño pretendiendo acercarse a distintas visiones del diseño para el siglo XXI. En 2007, el tema central fue la vinculación entre el ámbito profesional y académico con distintos sectores de la sociedad a través del desarrollo de proyectos de diseño, y de esta forma detectar las posibles motivaciones que subyacen en esta relación. Para 2009 el colegio de académicos del departamento, manifestó una profunda preocupación por la convergencia de distintas crisis que afectan directamente a toda la humanidad.

Es así como basados en los fundamentos de la sostenibilidad y la consecuente búsqueda de un equilibrio ecológico, social y económico, se formula el tema central *Impacto Social del Diseño*, redactado de la siguiente forma:

> *Teniendo en cuenta los apremiantes cambios mundiales, como la crisis económica, el calentamiento global, o la creciente desigualdad social, se hacen más necesarias que nunca acciones y visiones encaminadas a encontrar un equilibrio entre la amplia diversidad social y cultural, el medio ambiente, y las formas de progreso que sigue la humanidad. Por esta razón, el MX Design Conference 2009 estará centrado en reflexionar y aprender de aquella teoría y práctica de cualquier área del diseño, que busca equilibrar los ámbitos social, ecológico y económico para contribuir a un desarrollo sostenible de la sociedad.*

A este se añadieron algunos conceptos como: diversidad cultural, activismo social, ética profesional, responsabilidad social, diseño universal, slow design, diseño social, diseño para todos, y las siguientes cuatro propuestas guía con las cuales se abrió la convocatoria para presentar artículos.

- Impacto del diseño en la economía global y local, y su repercusión en la equidad social
- Impacto del diseño en la problemática ambiental y la viabilidad económica de los proyectos
- Impacto del diseño en el desarrollo de comunidades y la reducción de su huella ambiental
- Impacto de la educación en diseño, y su efecto en la responsabilidad social

Se recibieron un total de 50 ponencias las cuales fueron evaluadas por académicos del Departamento de Diseño de manera individual y sin conocimiento de los datos del autor. A partir de estas evaluaciones se realizó una preselección, solicitando la ponencia completa y una versión del material audiovisual a utilizar durante su presentación. Con base en el material enviado se realizó una nueva evaluación para escoger las ponencias a presentarse durante el evento.

Este proceso de selección, dio como resultado 29 artículos seleccionados, de los cuales 24 se presentan públicamente del 28 al 30 de octubre de 2009, en conjunto con 3 conferencias magistrales, que dan inicio a las sesiones de cada día del evento. El total de presentaciones públicas ha sido impreso en este libro, para contribuir a su difusión y el reconocimiento de sus autores. De la misma forma, el total de artículos seleccionados (29) se encuentran publicados en el sitio web del evento, el cual vincula aplicaciones que permiten la interacción y discusión entre los ponentes, asistentes e interesados en el tema. *www.dis.uia.mx/conference/2009/*

Finalmente, agradecemos la colaboración de los académicos, alumnos, voluntarios y empleados de la universidad para la realización del MX Design Conference 2009: Impacto social del diseño.

Mtro. Edward Bermúdez Macías
Coordinador del congreso

Preface

The MX Design Conference is an international design conference held every two years in Mexico City. It is organized by the Department of Design at the Universidad Iberoamericana. Its main goal is to reflect around a central theme chosen by the faculty that deserves special interest for the design community and its purposes. The Conference also seeks to integrate all design disciplines and attract both theoretical and practical reflections.

Its first event (2005) focused on prospective design, basically trying to approach the design visions for the twenty-first century. In 2007, the central theme was the link between the professional and academic design activity with other sectors of society through the development of design projects, thus identifying possible motivations in this relationship. By 2009 the faculty expressed deep concern about the convergence of various crises that directly affect all humanity.

Therefore based on fundamentals of sustainability and the consequent search for a balance ecological, social and economic development, the central theme, this time, is the *Social Impact of Design*, expressed as follows:

> *Taking into account the pressing global changes such as the economic crisis, the global warming, and the growing social inequality, it is urgent to search for new visions and actions that can balance the broad social and cultural diversity, environmental issues and the course of progress that humanity is facing. For this reason, the MX Design Conference 2009 will focus on reflection and learning from that theory and practice of any area of design, which seeks to balance the social, ecological and economic development of the world to contribute to a sustainable society.*

Some other concepts such as cultural diversity, social activism, professional ethics, social responsibility, universal design, slow design, social design, were added. This resulted in a four proposals points, which opened the call for submission of articles .

- Impact of design on local and global economy and their impact on social equity
- Impact of design on environmental issues and economic viability of projects
- Impact of design in community development and reducing its environmental footprint
- Impact of education in design, and its effect on social responsibility

A total of 50 papers were evaluated by faculty members without the knowledge of the author's data. A shortlist was elaborated from this assessment and full papers were requested as well as audiovisual requirements for the presentations. Based on the material submitted a new evaluation was conducted to select the final papers to be presented during the MX Design Conference.

This selection process resulted in 29 articles, 24 of which will be publicly presented from the 28 to the 30th of October 2009, together with 3 Guest Conferences that will be starting our activities each day. The total number of public presentations will be printed in a special catalogue aiming to contribute to the diffusion and recognition of both authors and contents relating Design to Social Impact. These will also be available on our website. Our website is equipped with links and applications that will allow interaction and discussion between speakers, attendees and people interested in the topic. www.dis.uia.mx/conference/2009/

Finally, we want to thank the collaboration of faculty, volunteers and university employees to carry out the MX Design Conference 2009: Social impact of design.

Mtro. Edward Bermúdez Macías
Congress Coordinator

Índice

Adding value to the territory's resources through design: the imperial topaz in the region of Ouro Preto, Brasil

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Abstract

The only production of Imperial Topaz in commercial scale is located at the city of Ouro Preto, Brasil. Most of these rocks is exported as raw-material to jewelry production to the rest of the world and few of these resource is used in the local production. The objective of this study is to show the necessity of to develop a strategic design project, focused in the evaluation of the rocks and its territory of origin, aiming at the promotion of sustainable to the environment, social and economic value chains. The sight of the design aims at, therefore, the territory economic dimension promotion based on the existing local resources and on the partnerships development.

Keywords

Value Chain, Gems, Jewelry, Territory, Strategy.

Introduction

In over 500 years of history, much has been said of the Brazilian economic potential, due to its great territorial size and the consequent variety of raw materials. Indeed, it's possible to see that the centuries to which Brazil was submitted to exploration of the Portuguese crown still reflects in the collective imaginary and the business practices adopted by governments over the nearly two hundred years of independence, insisting on the export of products in natura , preventing, this way, that it's origin territory to develop around products that add value to raw materials, according to a socio-economic and cultural, regional and national levels.

In this context, the gems can be highlighted, these are produced in abundance and variety, especially in the state of Minas Gerais, the main producer of colored gems in Brazil, and one of the major poles of global production, but most of these rocks leave the country in the raw state. This fact, besides causing a deficit in what could be collected if the stones were cutted , which would be an about ten times greater value, or even already applied in jewelry, which would increase the value around twenty times, it's also responsible for preventing that a major part of the productive chain of these gems happen in their own territory, creating employment and income, having in sight that, such Imperial Topaz as many other varieties of stones that leaves the country to supply jewel shop throughout the world, or even the national market, do not bring with itself no reference to their origin territory, witch difficult that it's product or community develop it selves with these wealth.

There is thus a great paradox, because in such rich in natural resources regions wanted by the world, a sad scenario of poverty and low human development is normally found..

In this issue, researches that aim the deep understanding are necessary, from a systemic view of this sector and the design strategies to emphasize the importance of benefiting local communities around the productive chain of gems, promoting the economic, social and cultural development.

Brief history of gems in Brazil

Many stories surrounds the imagery around the discovery of precious stones in Brazil, the only certainty is that they, with precious metals like gold and silver were the main responsible for the Entradas and the Bandeiras, which cleared the interior of the country, to find true treasures and to create new villages around them. After the arrival of the first caravels to Brazil, the letter of Pero Vaz de Caminha already showed the intentions of the Crown in relation to new lands: "So far we can not know if there is gold or silver in it, or something else in metal, or iron; we haven't seen it. But the land itself is very good, fresh and temperate air. " (TEIXEIRA, 2002).

Few decades after the arrival of the Portuguese to Brazil, in the sixteenth century, can be founded references on the discoveries of Emeralds. As GANDAVO (1980) says "To this Captainship of Porto Seguro will some Indians come from the hinterlands give some news of green rocks that were in a mountain range many miles away, and some of them brought some rocks per sample, some of them were

emeralds, but not much expensive ones ". However, it was with the discovery of the diamond and with the gold cycle in the eighteenth century that the history and production of precious stones has taken that proportions that are as much reported in the history books, by the highest bid and also the policies that led to riots and to the inconfidentes confabulation.

Even with the end of this cycle, Brazil kept in detach in the production of metals and precious stones, especially with the discoveries of colored stones in the country territory, largely concentrated in the east of Minas Gerais. In the nineteenth century important gemological discovery occurred in Minas Gerais, which produced hundreds of kilograms of tourmaline from various colors, among other stones such as Imperial Topaz and Marine Water. This event called the attention of Jews in the wars period, that running away of the Nazis, have settled in the region and invested in cutting of stones, but with the lack of incentives for the sector and the creation of the state of Israel, they chose to create, in the newly created country, a cutting pole that has become widely recognized, leaving Brazil at the mercy of outdated techniques of this practice until the present day, weakening the country chances to develop significantly in the cutting sector.

Characterization of the sector and the value chain

The gems are part of the consumption dream of most women, since it was associated as adornment for the human being. Their financial value is high and recognized in all parts of the world and is considered as a "currency" due to the opportunity to exchange them for cash anywhere in the world where technicians are able to evaluate them. In Brazil these high values are also responsible for the ambition of some people to generate wealth for them selves, smuggling stones to the outside, occurring scandalous cases related to politicians, police and business sector names, involved in this illegal practice. Another factor that contributes to not change this table are the tax laws involving the gems that have not changed since the days of the colony, where the fifth (a tax), caused riots and was the great responsible for Inconfidência Mineira (greet riot), is half the charge today, which represents the vision of conservative government in the sector and lack of initiatives to support the process improving the area producer of gems. In Brazil these high values are also responsible for the ambition of some people to generate wealth for them, smuggling stones to the outside, occurring scandalous cases related to politicians, police and business sector names, involved in this illegal practice. Another factor that contributes to not change this table are the tax laws involving the gems that have not changed since the days of the colony, where the fifth (a tax), caused riots and was the great responsible for Inconfidência Mineira (great riot), is half the charge today, which represents the vision of conservative government in the sector and lack of initiatives to support the process improving the area producer of gems.

The value-chain is a strategic tool to identify opportunities for innovation on several levels - from the added value to existing offerings, improving system performance, to the design of unknown offers. This analysis is enriched by the design perspective, which shows the role of the consumer, integrating the systems of production and consumption of goods and services (KRUCKEN, 2009).

The term "chain of value" was originally used by Michael Porter in the 80s. According to the author, "every company is a compilation of activities that are performed to design, produce, market, deliver and support its product" and "all these activities can be represented using the of a chain of values" (PORTER, 1985). Recently, we can cite the definition proposed by the German Agency for Technical Cooperation GTZ (2007): the value chain is "an economic system that is organized around a product," connecting different activities (production, processing, marketing, etc.) necessary to conceive and distribute a product or service to final consumers.

The flow of adding value begins from the raw materials and it consolidates in consumption, as represented in the example of the gems value chain (Figure 1).

The figure shows that the biggest problem of the chain is the fact that a large number of stones is exported in raw state, with many of them returning to Brazil cut already or implemented in jewelry. While the local production is minimal when compared to its potential.

Raggi (2004) evidences that the gems and jewelry managing incapacity in Brazil can arise from the ignorance of the sector intrinsic facts. A need to develop deep analysis, as the value chain is clearly detached.

The design prospect in gems value addition: Imperial Topaz

"The approach of the design applied to the area aims to benefit simultaneously the producers and consumers located in a particular geographic region", according to Krucken (2009, p. 49). This means that to plan actions that together value the territorial capital and social capital, in an enduring and sustainable long-term perspective, reinforce the author. The importance of the local identity elements that are embedded in the products is highlighted by Moraes (2006).

As the Imperial Topaz is an exclusive Brazilian rock, you can see the opportunity of creating Design strategies that can

turn into benefits for the local and national economy. There is an added value to its origin, as the stone is recognized worldwide as Brazilian; however, this value may be further aggravated if there is a concern with the entire value chain of the gem. One important action would be to include aspects of local culture in all cases, especially with regard to cutting and the manufacture of jewelry, investing in partnerships aimed at the enhancement of Imperial Topaz as an ally in the recognition of identity and local recovery.

As Mol (2000) says "The jewelry industry of the country could further strengthen it's sought as" Brazilian identity "with the use of national gems in different models of stoning." Santos, Mol and Teixeira (2007) accost the stones valuing by techniques of cutting, identifying how the processes and inputs determine the technical and formal aspects of gem stoned.

Designs initiatives can promote the development of the communities involved in the Topaz production, as it would create jobs and income in its surroundings, in the process of extraction of stoning, and in the application of such values in the local jewelry industry and the manufacture of jewelry craft.

The specific focus of this research, in progress at the study center, Theory, Culture and Research in Design at the University of Minas Gerais - UEMG, is the productions of jewelry in Santo Antonio do Leite, district of Ouro Preto. This region is known for its crafts in silver and Topaz of lower quality, according to experts. By this moment characteristics of the artifacts and the region were raised, witch could support the development of future actions for the design. This article, therefore, is part of a wider research.

The reason for the region selection was the fact that local production is still weak in front of its potential, having in sight that aggregating value of quality and cultural historical reference could develop even more that production, also moving trade and local tourism.

Final Considerations

The existence of a potential and a demand for performance of the designer in improving the area surrounding the industry of gems and jewelry was identified developing this research. Systemic approaches, such as the analysis of the value chain, are essential to build possible visions and scenarios.

Many challenges for effective mechanisms to trigger the intervention design can be observed. This research focuses the promotion of a wider and transversal discussion about the theme and the integration of cross knowledge,

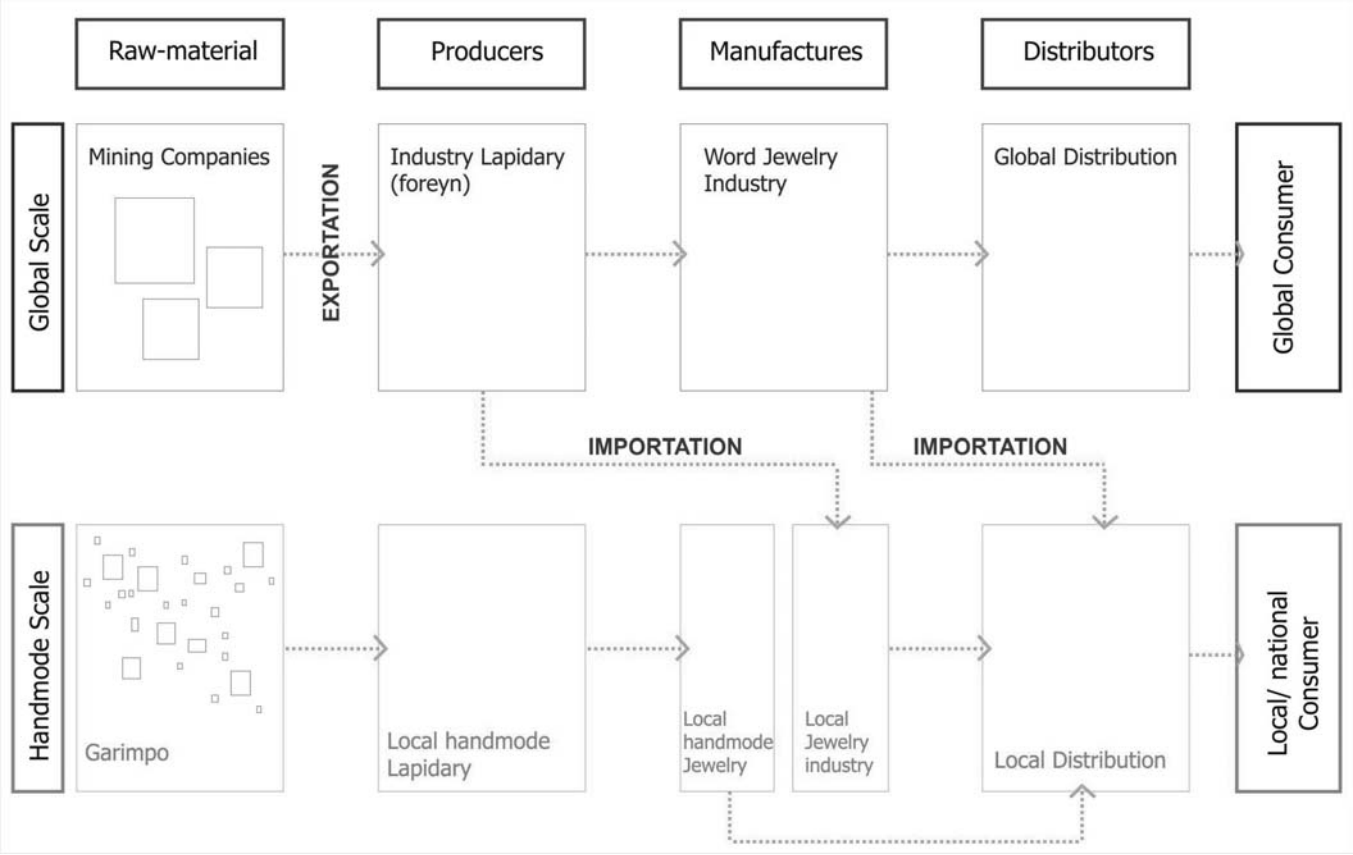

Figure 1. Analysis of the gems value chain: players of the industrial scale and handmade scale.

enabling a better understanding of the sector in order to contribute to sustainable development atl and national levels.

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Antecedentes y premisas de un diseño amigable con el medio ambiente

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Palabras clave

Diseño ecológico, desarrollo sustentable, desarrollo de productos

Resumen

El diseño industrial se identifica como una de las prácticas fundamentales para contribuir al llamado desarrollo sustentable. Su aportación es esencial para promover la evolución de las modalidades de consumo y con ello la reducción de desechos e introducción de productos más racionales desde el punto de vista ecológico. Los resultados obtenidos en un sondeo con estudiantes y profesionales del diseño, de alguna manera muestran que existe en ellos una cierta idea y consciencia del diseño sustentable o ecológico, sin embargo al solicitarles enunciar productos sustentables de uso cotidiano, se perciben escasos ejemplos de objetos amigables con el medio ambiente, así como prácticas cotidianas que contribuyan con el desarrollo sustentable de nuestro entorno. Bajo esta idea, el objetivo del presente documento es hacer una breve semblanza de los antecedentes y premisas que fundamentan al diseño sustentable, entendiéndolo como un primer paso necesario no sólo para orientar, sino también para motivar e inspirar a los actuales y futuros diseñadores sobre la necesidad inaplazable de atender los lineamientos ecológicos internacionales sobre el diseño de productos.

Desarrollo

Hace ya más de 150 años, poco después de que se hiciera manifiesta la trascendencia de la Revolución Industrial, algunos investigadores y políticos alertaron sobre la necesidad de equilibrar el crecimiento económico e industrial con la conservación del medio ambiente. Sin embargo, para

que este tema apareciera de manera formal en el debate político, fue necesario que los países industrializados sufrieran una aguda crisis financiera y social durante la década de los años setenta debida, en gran parte, a la escasez de un recurso natural, el petróleo. Como resultado de esa experiencia, surgió la necesidad de reconducir el desarrollo económico hacia posturas más sustentables que propiciaran la transformación de la consciencia social, orientada a la procuración del equilibrio ecológico y humano del planeta, antes de que se produjeran nuevas crisis (Capuz, 2004; Blanch, 2006).

El término desarrollo sostenible o sustentable aparece por primera vez en el debate político internacional en 1980, introducido por el grupo de trabajo denominado "Estrategia para la Conservación del Planeta", dependiente del programa de las Naciones Unidas para el Medio Ambiente. Sin embargo, es hasta 1987 cuando llega a establecerse como un modelo de desarrollo universalmente aceptado gracias al informe titulado "Nuestro Futuro Común" que publicó la llamada Comisión Brundtland. En este documento se define al Desarrollo Sustentable como "aquel que satisface las necesidades actuales sin comprometer la capacidad de las generaciones futuras para satisfacer sus propias necesidades." (Capuz, 2004)

En términos generales, además de definir el concepto de sustentabilidad, el valor de este documento radica en el planteamiento que establece sobre el desafío que el modelo de desarrollo sustentable significa para la humanidad y que consiste en la construcción de un nuevo modelo de desarrollo que permita, simultáneamente, satisfacer las necesidades de calidad de vida de la población del planeta y conservar el medio ambiente.

Son muy numerosas las voces de científicos y políticos que de forma aislada o institucional han evidenciado y denunciado la insostenibilidad del crecimiento económico actual. Específicamente en México, Vega (2001) señala claramente que el desenvolvimiento económico del país siempre ha estado ligado a procesos de degradación ecológica y contaminación ambiental tanto en sus fases expansivas como recesivas.

Según Curiel (2003), parte del problema radica en que el deterioro ambiental surge a partir de una cierta importación de orden de los ecosistemas y exportación de desorden a lo que va quedando de ellos, con lo que se incrementa la entropía general del planeta. Además, según el autor, los sistemas naturales evolucionan hacia una creciente diversidad y complejidad mediante el reciclaje sin fin de los elementos, la interdependencia y los suaves flujos de materia y energía que circulan entre los diferentes componentes bióticos y abióticos de la biosfera, mientras que los sistemas artificiales procuran por el contrario la uniformidad, mayor facilidad de manipulación y el trazado de flujos desarticulados y unidireccionales, con lo cual se degradan tanto las fuentes como los sumideros de recursos. Bajo esta perspectiva, según Curiel, la médula del conflicto radica en que ambos sistemas, forzados a coexistir en un solo planeta, responden a esquemas de funcionamiento diametralmente opuestos, lo que compromete seriamente la viabilidad a futuro del sistema total, a menos que se tomen medidas al respecto. Esquemáticamente estaríamos hablando de un sistema cíclico de reciclaje sin fin y autosustentable y otro lineal, unidireccional y autodestructivo.

Para evitar que estos dos sistemas limiten el desarrollo sustentable del planeta, se requeriría, tal como lo señala Curiel (2003), una integración de los sistemas naturales y artificiales en la consecución de un importante objetivo común, el equilibrio dinámico del planeta en su conjunto. En este sentido, el autor afirma que la adopción de un concepto inclusivo, de una sola ecología planetaria integrada por los sistemas naturales y artificiales, en donde cada componente se haga responsable de la conservación, funcionamiento y renovación de los otros, permitiría conceptuar, por ejemplo, al paisaje como un sistema natural (el ecosistema), al cuerpo humano como un biosistema y a las tecnologías como sistemas artificiales de la interfase ecosistema/biosistema. Esto contribuiría al logro de un tratamiento más coherente de las interacciones y de los flujos de materia, energía e información que se dan al interior de cada sistema y en sus interfases.

Para autores como Nathan Shedroff[1], la crisis ambiental es una crisis del diseño que se ha originado, en gran medida, debido a una creencia epistemológica del diseño que pareciera encontrarse todavía atrapada en la desgastada metáfora de la máquina que origina una cierta incompatibilidad con la naturaleza. Sin embrago, a pesar de este aparente entrampamiento, las tendencias actuales del diseño ecológico, diseño sustentable, diseño socialmente responsable y diseño regenerativo son sólo nuevos intentos por responder a una aspiración que en realidad ha estado presente en el diseño, con sus altibajos y probablemente de manera poco sistematizada, desde hace más de tres décadas[2] . En forma más o menos explícita, la aspiración subyacente desde entonces ha sido la de lograr una relación simbiótica entre naturaleza y cultura, entre ecología y tecnología.

Bajo el concepto de "ecología planetaria" que propone Curiel, el diseño industrial aparecería dentro de lo que él denomina los sistemas artificiales. Siguiendo el modelo y objetivos del desarrollo sustentable, los principios del diseño en este nuevo esquema deben superar la idea del

1 Nathan Shedroff es autor del libro Design is the problem: The future of Design Must Be Sustainable

2 Así se aprecia, por ejemplo, en documentos como el libro "Diseño para el mundo real" de Victor Papanek quien en 1984 ya hacía referencia al diseño responsable y al diseño ambiental.

consumo de objetos en términos de necesidad o valor utilitario.[1] Así pues, tal como lo afirma Shedroff (2009), el diseño sustentable debe ser visto desde una perspectiva sistémica que incluye factores sociales, ambientales y financieros. En este sentido, Blanch (2006) señala que el diseño en este nuevo escenario mundial, no debe ser entendido únicamente como conceptualizador de productos, sino como parte de un sistema que lo convierte en un poderoso resorte de transformación del mundo.

Esta nueva noción del diseño se aprecia ya en varias propuestas concretas de desarrollo de productos como por ejemplo el llamado *lifestraw*, un dispositivo que permite beber agua contaminada sin peligro para la salud. Más allá de su función primaria, este producto surge con una clara intención de contribuir a un fenómeno mayor que consiste en reducir drásticamente los costos sanitarios y económicos del impacto de catástrofes que colapsan los sistemas de agua potable, logrando con ello incidir positivamente en aspectos tanto sociales como ambientales y financieros.

Curiel (2003) afirma que en países desarrollados en donde existe una cierta tendencia real de que las industrias extractivas e intensivas en el uso de combustibles estén decreciendo, mientras que otras basadas en el reciclaje y energías renovables están creciendo, refleja que los habitantes de ciertos países industrializados parecen estar en condiciones de disminuir sensiblemente el consumo de bienes lo que está generando un proceso que puede ser identificado como la des-materialización, la des-energización, la descarbonización y la des-intoxicación. Conceptos que seguramente se desarrollarán y aplicarán cada vez más en el ámbito del diseño, reconstruyendo la conceptualización de la propia disciplina.

Así pues, tenemos que existe ya un cierto camino recorrido en cuanto al establecimiento de lineamientos para la conservación del medio ambiente. Particularmente en el ámbito del diseño de productos, parece existir cada vez mayor información disponible sobre las implicaciones ecológicas en el desarrollo y comercialización de bienes de consumo y sobre las nuevas posturas que ante el deterioro ambiental pueden tomar los diseñadores. Sin embargo, un sondeo[2] que se realizó con un grupo de estudiantes y profesionales de diseño industrial, permite identificar que la definición que tienen sobre el diseño sustentable se centra en la conservación del medio ambiente a partir de los materiales, procesos utilizados y ciclo de vida de los productos, sin mencionar o tomar en consideración otros factores sociales y financieros que adquieren especial relevancia en el diseño sustentable.

Particularmente notorio resultó en este sondeo de opinión que al pedirles a los participantes que enunciaran algún objeto de su vida cotidiana que consideraran sustentable o ecológico, las respuestas fueron prácticamente nulas. De alguna manera esta situación puede ser indicativa de la escasa oferta de productos sustentables que todavía existen en nuestro contexto o bien de que la aparente información que los encuestados tienen sobre la sustentabilidad y la importancia de consumir productos amigables con el medio ambiente no es extensiva en su vida cotidiana. Al respecto Shedroff (2009) señala que para la mayoría de las personas la palabra sustentabilidad no tiene una conexión directa con sus vidas, es decir que no implica alguna emoción, valor o significado relevante. En este sentido, según el autor, el significado es lo más importante en la creación de productos ya que a partir de ello se crean valores y emociones que sin lugar a dudas se ubican en un nivel mucho más profundo de nuestra vida que el precio o la funcionalidad del producto.

Bajo esta perspectiva, según Shedroff, el reto de los diseñadores está en crear objetos que de alguna manera conecten a la gente con valores y significados que promuevan cambios de conductas orientadas hacia estilos de vida más sustentables. Aparentemente, por las respuestas de los encuestados, las características o valores ecológicos o sustentables en la gran mayoría de los objetos de uso cotidiano son prácticamente invisibles para los consumidores y justamente corresponde al diseñador hacerlos visibles y coincidentes con las emociones y valores más significativos para la gente.

Por otro lado, cuando se les preguntó a los participantes sobre las acciones que han tomado en su vida cotidiana para contribuir con la conservación del medio ambiente, las respuestas se centraron en cuidar el agua, no tirar basura y ahorrar energía apagando luces y empelando focos ahorradores. Si bien estas son acciones importantes, no pareciera existir un conocimiento y compromiso más serio y profundo sobre las prácticas que se pueden y deben tomar en nuestra vida cotidiana para contribuir de manera significativa con el desarrollo sustentable de nuestra entidad. Acciones tales como reducir el consumo, reciclar, reutilizar y arreglar o componer, son indicativas de un mayor compromiso de los individuos de una comunidad y todavía no parecen estar presentes entre los individuos encuestados.

Si bien el sondeo realizado nos permite únicamente establecer ciertos supuestos que tendrían que explorarse con mayor profundidad, también nos permite afirmar que, sin lugar a dudas, el concepto clave para el Desarrollo Sustentable no es únicamente la información, sino principalmente la responsabilidad. Para adoptar un nuevo

1 En este sentido autores como Barthes, Bourdieu y Baudrillard a partir de obras como La sociedad de consumo, El sistema de los objetos y La Economía política de los signos discuten las relaciones claras entre consumo y poder y proponen una superación del modelo de consumo tradicional

2 Este sondeo se realizó con un grupo de 50 estudiantes y profesionales de diseño industrial y no pretende ser estadísticamente significativo.

modelo de desarrollo todos los agentes implicados en la sociedad tienen que asumir una actitud responsable en sus acciones y los diseñadores no pueden ser la excepción. Los profesionales del diseño deben considerar las restricciones y condicionantes socioeconómicas, así como las consecuencias medioambientales de sus actos creativos. Aún más, deben reflejar en su vida cotidiana, un claro compromiso hacia el cuidado y conservación de nuestro entorno natural. A la larga, esto contribuirá a que poco a poco la ciudadanía conozca, respete y disfrute el medio ambiente y logre así una relación armónica con la naturaleza.

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Baby Bottle: the impact of an unsuspicious product

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Abstract

This article presents results of an investigation on the baby bottle and the consequences of it's being a mediator for the act of feeding babies. The article's main goal is to promote reflection on the problems generated by cultural practices molded by the use of inappropriate products, pointing out some paths and initiatives that mean to solve the issue.

Keywords

Baby bottle - industrial culture - professional ethics - social responsibility - sustainable design

Introduction

The unremitting use of some products consecrated by industrial culture has been causing severe impacts on the health and physical integrity of its users, as well as on the environment. One object in particular draws attention for the fact that it maintains its industrial and consumption escalade: the baby bottle. Widely and intensely used as means to feed babies, baby bottles share with formula the responsibility for a considerable part of premature weaning, child morbidity and mortality rates all over the world.

The scientific agreement on the risks and the inadequacy of the practice of giving formula to children, and the measures already taken in order to contain its disastrous effects indicate the urgency of efforts to reclaim the practice of breastfeeding and to develop appropriate utensils for the vital job of feeding babies.

The designer is one of the main professionals summoned for the fulfilling of those initiatives, for "design is not concerned with objects, but with the impact that those objects have on people" (Frascara, 2002).

Notes on the history of infant feeding

Archaeological records indicate that the baby bottle has been part of our material culture since the pre-Christian ages, and they illustrate that breastfeeding is not a purely natural biological process, but a culturized activity (Dettwyler, 1995) that has been modified by a wide variety of beliefs and replaced by other feeding practices.

The XVI century was a crucial stage on the dissemination of European mentality - which considered breastfeeding "undignified for a lady"[1] - on other continents and cultures. The Great Navigations era's notion of "civility" was in contrast to the "primitivism" on the discovered lands, in a way that it was incoherent to behave like a mammal.

In the 1880s, the "mummy's darling" bottle, produced in large scale, contributed for the high levels of child mortality of Victorian England, a time when just two out of ten children lived to be two years old

The Victorian bottle and the first north-American bottle, patented by Charles M. Windship, in 1841. The caps on both models are crossed by a straw, very narrow and practically impossible to clean.

The process of industrialization revolutionized the economy, the social relations and infant feeding. In 1867, began in Switzerland the production of infant formula. In 1873, 50.000 boxes of Nestle dairy food were sold in Europe, United States, Argentina, Mexico and Netherlands Indias. Many other companies were created, selling more and more alternatives to mother's milk. In the XIX century, the baby bottle became one of the symbols of modernity, being prescribed by medical doctors as the solution for any difficulty concerning infant feeding.

In 1974, the damages of artificial feeding through the bottle were loudly revealed by the book "The Baby Killer"[2]:

> "Babies in the Third World are dying because their mothers feed them in the western style, with formulas in bottles. Many of those who don't die enter a vicious circle of malnutrition and disease. The medicine is at everyone's reach, except for a small minority of mothers who are unable to breastfeed. That's because mother's milk is accepted by all as the best food possible for any baby under 6 months of age (...). The industry of child food is accused of promoting their products in communities that are unable to use them properly, of using propaganda, salespeople dressed as nurses, of distributing samples and donations to persuade mothers to abandon breastfeeding" (Muller, 1995: p.15-16).

From then on, the baby bottle began to reveal its darker side. In the long list of problems pointed out by the report, were included the lack of sanitary conditions for the process of bottles hygienization; the difficulty of access to quality water for formula hydration; the lack of resources for the acquisition of new formula cans besides the donated ones. As a consequence, diarrhea, malnutrition and death.

In 1979 the acknowledgement of the superiority of mother's milk and of the benefits of breastfeeding to women's and babies' health, as well as of the dangers of artificial feeding advertising, by the World Health Organization (WHO) and UNICEF, generated a number of important actions for the protection, promotion and support of breastfeeding, as the Innocenti Declaration. The document was produced and adopted by participants at the policymakers' meeting "Breastfeeding in the 1990s: A Global Initiative", and determined, among other measures, that all countries would develop national politics for breastfeeding.

But despite so many efforts, the "bottle-feeding culture" persists. In several countries, public breastfeeding is a taboo[3]. For many women, breastfeeding affects social life and brings a sense of loss of freedom. Many others believed that breastfeeding resulted in droopy and saggy breasts. Among beliefs and lack of information, the formula industry keeps on modernizing and selling its products, regardless of the alarming periodic news, such as the melamine contaminated formula in China, in 2008.

Bottle usage impacts

Formal.
Bottles often have coils for the connection of its pieces. Another element found in models that mean to eliminate bubbles (and cramps) is a tube stuck to the cap, that goes all the way down in the bottle. These, among other formal aspects, demand highly strict cleaning processes which, when not fulfilled, cause the formation of bacteria colonies.

1 In Brazil's case, breastfeeding of the colonizer's children was an activity reserved for native women, then replaced by African slaves, to whom it was mandatory to quit breastfeeding their own children in order to breastfeed white ones. (Almeida, 1999: p.30)

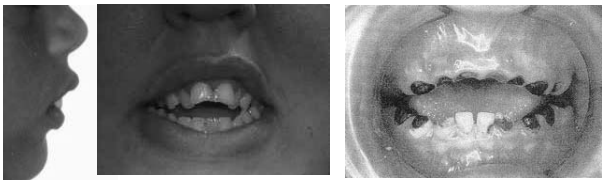
2 War on Want, one of many charity entities working for food and other products supply to Third World countries, decided to question the effects of their own work among those populations.

3 As well illustrate the cases of mothers banned from breastfeeding their children in Starbucks, Victoria's Secret and in Delta Airlines airplanes (www.aleitamento.org.br; www.usatoday.com).

The idea of replacing mother's milk with formula may be compared to the suggestion of replacing kidneys with dialysis equipment. Both, dialysis equipment and formula, may save lives, but using them instead of human's body original organs is a complete waste of resources (Radford, 1992: p.204).

Chemical . The organic compound BPA (bisphenol A), present in bottle production, when washed with detergents, or when put in contact with heated liquids, may liberate the BPA polymer beyond safe levels. Several effects in laboratory animals, such as prostate and breast cancer, early female puberty, diabetes and obesity were related to the exposure to BPA, which lead Canada to ban its use in bottle production[4].

Physiological . Breastfeeding allows suction - baby's first neurological reflex - to develop properly, preparing the child for chewing, for teeth eruption, a harmonic facial growth and a good articulation of phonemes. When breastfed, the child works all facial muscles and breaths through the nose. Their tongue develops movements that stimulate milk flow from the breast and the continuity of its production. The nipple fits the physiology of the baby's mouth, and milk flows as the baby demands. The entire process is altered when the bottle comes in scene. With it, the muscle efforts are smaller. The bottle drips, accelerating the baby's natural demand and altering the coordination between sucking and breathing. Because of that, respiratory alterations tend to appear[5], as well as infections, nasal septum deviation and mouth breathing. The bottle may also damage teeth eruption, brain oxygenation and the development of the dental arch (Cordeiro, 2002: p.68-69).



Left to right: profile and front views of mouth breathing patients and the effects of the sugar present in formulas on the dental arch of a baby.

Rhetoric . It's important to stand out that no product whatsoever can be compared to breastfeeding in physiological terms, on the contrary to what the speech of those interested in artificial feeding makes believe.

Ecological . Breastfeeding involves one of the few products "produced and liberated for consumption without any sort of pollution, unnecessary packaging or waste" (Radford, 1992: p. 204). And it is also a valuable renewable resource.

Breastfeeding requires no refrigeration, packaging, labeling, transport, storage or advertising. Considering the fact that most women don't have periods while breastfeeding, it also saves the consumption of a great volume of disposable pads and tampons that take years to decompose and which industrial production involves chemical substances and environmental pollution.

Statistics . In 2008, the WHO admitted the children growth board they have been distributing was overestimated, for the used curves, from 1977, had used babies fed with formula as a reference. However, it was verified that breastfed children gain less weight and height after the third month, and the growth board curves were corrected. It is not hard to understand that parents and pediatricians were worried about the development of many breastfed babies, since they were not matching the "standard" weight. This lead, for many times, to the resource of complementing the child's feeding with bottled formula.

Alternative to the bottle

Breastfeeding is not an instinctive behaviour, but a socially learned process that does not come naturally and may be painful and uncomfortable sometimes. For that and other reasons, alternative means to feed babies are under research. The little cup is a promising method. It allows suction with pauses for breathing, and even premature babies are able to be fed through it. Its use is relatively recent and restricted to hospitals and a few families. Though it is present in the market, the cup is still a product in need of efforts to reach its proper level of efficiency.

Reflections on a revision of baby bottle use

Exploring the general idea of a revision of the notion of use in general, Frascara (1996: 44) explains that for many people "use equals possession, which equals power, power to do things, to enjoy things and to achieve comfort". He adds that people end up getting used to the things they use, taking them for granted and believing to have the right, and not the privilege, of using them. Therefore, from

4 www.uff.br/Sbqrio/novidade/bisfenol520policarbonato520mamadeira.html

5 Studies show that the development of the human face depends only 40% on genetics, leaving 60% to how the individual will suck, swallow, chew and breathe.

people's point of view, a "revision of use" that results in a "reduction of use" will be feared as a possible reduction of freedom and power as well, and will be rejected. From industry's point of view, a "revision of use which results in a reduction of use will be feared as a possible reduction of business", and will, also, be opposed. A "revision of use" rejected by people and industry will not achieve support from governments (severely pressured by the interests of their voters and companies). Design's task is to build arguments for a "revision of use" to be seen by people as providing them with more comfort, leisure and freedom, by industry as a possibility for profit increase and by politicians as helping them stay in power. The author adds that what is important for people is not the use of a certain product, but the values associated to it. The challenge, then, is to think of this revision not as a denial of those values, but as an association to ones as equally important.

Frascara (1996: 57) points out that "the magic power of objects has been skillfully promoted by advertising". He extends the symbolic dimension of products to their "functional actions" and teaches that "driving a car" (or, in our specific case, "bottle feeding" and "breastfeeding") are also an "aesthetic act". For that very reason, any revision of use includes the "cultural task" of modifying the aesthetics of actions that products in revision are involved with, as well illustrates "smoking", that used to be a symbol for glamour and now it is a symbol for self-destructive and anti-social behaviour.

Concluding, Frascara explains that understanding is a cognitive process while acting is a social one and that as an idea that has to do with action, a revision of use will have to be understood, then adopted, and finally acted on. In sum, "the idea has to affect the knowledge, the attitudes and the behaviour of people in order to succeed" (1996: 59). For that, it must count on measures such as legislation, control, imposition and penalties.

Final considerations

We believe it to be hard to think of any other more vital and urgent task as a wide revision of the use of baby bottle. Therefore, we believe in the strength childhood has gain in the modern life and its ascension as one of the dearest values of today's society. In this sense, inspired by the questions that sum up Frascara's teachings, we finish by questioning:

How can a change be created in the symbolic function attached to bottle-feeding, so that, without attacking strongly held values, changes could become desirable? How can we recognize leaders, followers and our potentially most supportive partners? How can it be possible to simultaneously work with government, people at large and the business sector toward a revision of use of the baby bottle? Which are the specific actions that will promote and materialize that revision and establish new cultural paradigms?

We hope the debate on the issues here exposed will provide paths not only for a successful revision of use of the baby bottle, but also, and more importantly, for planned actions by designers to protect and strengthen our children.

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Bicycle culture and sustainable futures

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Abstract

Sustainable design need not always be about designing new green products but instead encouraging and building on existing products and infrastructures to expand healthy aspect of industrialized cultures thus creating new sustainable futures. This paper explores how such a strategy is being employed on the undergraduate level to teach design as an act of social responsibility and service.

Keywords

Product design, service design, bicycle culture, sustainable futures, social responsibility,

Introduction

Sustainable design involves a complex set of variables including material extraction, renewal, and recycling, energy consumption, life span of products, and re-usability. Both there are subtler ways of designing for a sustainable future or living a more sustainable present. One such approach is not to design new products but to re-think existing products to incorporate them more thoroughly into the average consumer's mindset and daily experience. With this in mind, the product design program at Columbia College Chicago began a multi-year project to research and identify ways of extending and expanding 'bike culture' into the consumer's daily life. While many students were initially disappointed not to be designing new bikes, they soon began to understand that designing around an existing artifact posed new and exciting challenges for a new century where service design will be as vital a part of the profession as product design.

This paper will present an overview of an on-going project devoted to 'bike culture' as one form of our sustainable future. The project will examine what it means to design around existing paradigms so as to increase their usage and appeal while developing new products in conjunction with services. The paper will provide an intimate glimpse into the process, challenges, and outcomes of this important project as it enters its third year. Student work will be presented along with the research, city partnerships, and corporate sponsorships that have helped shape the project.

The power of the bicycle

Few people need to be convinced of the power of the bike. We have all grown up with them and experienced firsthand the freedom and mobility they provide. Learning to ride a bike is in fact one of the first significant milestones many children must reach as an act of maturity. The bicycle was one of the first artifacts to be industrialized and subsequently impacted early methods of industrialization. Many of the first bike manufacturers evolved into some of the first automotive manufactures (Rover, Morris, and Skoda in Europe) while the Wright brothers began their business in manufacturing bicycles before pursuing the loftier goal of air flight (Herlihy, 2006). Bikes were central to the women's suffrage movement in the late 19th century (ibid) and continue to weave in and out of the popular imagination based on everything from fashion to politics and economics.

At the heart of the bicycle is its ability to create culture whether that be in the form of bike messenger morals and attire in the 1980s to mountain biking bravado in the 90's to the retro-fitting of 'old-school bikes' into single geared beauties in this century. In the city of Chicago, the bicycle holds a central position in the counter culture best exemplified by Critical Mass[1]- an activist group of cyclists who take over the main city boulevards on the first Friday of every month to reclaim the streets demonstrating the possibilities and pleasures of a less aggressive mode of transportation. Many other bike related organizations have an active presence in the city from the Active Transportation Alliance (formerly known as The Chicagoland Bicycle Federation) to West Town Bikes. In the first glance, as a city known for two seasons- winter and construction- Chicago is not the most natural place to bike. In reality, with a natural asset like Lake Michigan bordered by bike paths, a flat topography, and a strong proletarian sensibility, the city is an ideal place to commute on two wheels - all of these combined with the city's storied history (former home of Schwinn bikes). Against this history lies another more recent move on the part of the mayor (Richard Daley) to 'green' the city of broad shoulders by encouraging greater bike usage especially within the inner city.

In order to achieve such a lofty goal the city has embarked on a massive plan (Bike 2015 Plan)[2] to encourage and empower the average citizen to use bicycles as an integral part

1 http://en.wikipedia.org/wiki/Critical_Mass

2 http://www.bike2015plan.org/

of a daily transportation. The large goals include increasing bike use- 'so that five percent of all trips less than five miles are by bicycle' and to 'reduce the number of bicycle injuries by 50 percent from current levels'. The larger plan is broken down into eight chapters as follows:
1. **Bikeway Network** – Establish a bikeway network that serves all Chicago residents and neighborhoods.
2. **Bicycle-friendly Streets** – Make all of Chicago's streets safe and convenient for bicycling.
3. **Bike Parking** – Provide convenient and secure short-term and long-term bike parking throughout Chicago.
4. **Transit** – Provide convenient connections between bicycling and public transit.
5. **Education** – Educate bicyclists, motorists, and the general public about bicycle safety and the benefits of bicycling.
6. **Marketing and Health Promotion** – Increase bicycle use through targeted marketing and health promotion.
7. **Law Enforcement and Crash Analysis** – Increase bicyclist safety through effective law enforcement and detailed crash analysis.
8. **Bicycle Messengers** – Expand the use of bicycle messengers; improve their workplace safety and public image.

Passive forms of sustainability

As educators we are always searching for new ways to bring sustainability into the classroom. After some thinking and searching for appropriate sustainable projects, it occurred to us that not every form of sustainability needed to involve designing new products but could in fact involve encouraging alternative lifestyle choices. Additionally we understood the enormous challenges designing a new bike would pose and realized that any concepts that might be developed would never be developed which was antithetical to our philosophy of direct cultural engagement as designers. Nevertheless, we had to find a way to make such a project work within the context of an industrial designer's education- there needed to be specific deliverables, a real research component, testing of concepts, and presentations. We rapidly put a team of design faculty on the project with professional bike experience to further refine the idea for immediate launch in the fall of 2007. That was the genesis of what has now become a multi-stage project around bike culture and sustainable futures that happens once a year.

As is the case with many large scale projects, a number of meetings were called to shape the project goals and desired outcomes. The team of faculty included former SRAM designer Kent Solberg and Carl Boyd (a sustainable designer and advocate). It was agreed that the Chicago Bike 2015 Plan would serve as our template and that we would seek out the city as the actual client. Phone calls and emails were sent out to rally the client around the idea while building additional constituents within the city's rich bike advocacy network to become involved. We were fortunate that Ben Gomberg ('bike czar' and program coordinator) jumped on board early thus providing the much needed context and pressure for our students to realize that this was indeed a 'real' project with actual client who had real demands including a series of presentations in City Hall and some 'out-of-the-box' thinking about ways to increase the desirability of bike usage. Another critical partner in the initial launch of the project was Alex Wilson of West Town Bikes- a bike repair shop that doubles as a community outreach and training center located on the west side of the city. Alex combined years of knowledge in advocating for greater bike usage with practical knowledge on everything from bike repair to retro-fitting carts and extending the bike's capabilities. It was a great partnership overall and the project began with the necessary enthusiasm to get off the ground. Shortly after the launch few students seemed to recall that they were not designing cool new bikes but instead looking for unique and crucial opportunities to increase the value and centrality of the bike as a more than an entertaining diversion or cheap and occasional mode of transportation.

Taking it to the Streets

The team of students (16 in all) were broken into four groups of four and tasked with the challenge of establishing key areas of development for the humble two wheeler. The students established a wiki site for greater communication across their groups and to share the vital research each of them were uncovering. The first 5-6 weeks involved going out into the world and observing firsthand what the issues were. This was a clear invitation for the design students themselves to pull out their own bikes and change their way of commuting thus experiencing the issues up close. Research was drawn from the world around them, online videos of common accidents, new bike accessories, and new uses for bikes around the planet and of course one-on-one meetings with the city to learn what their plans involved so that the students could be partners rather than observers.

The teams quickly established key areas of concern that included better bike locks for the existing infrastructure and possible new accessories to increase safe rigging, mobile bike repair stations, better bike integration with other modes of public transportation, and finally mobile bike paramedic bags. Each sector had unique challenges that required a thorough understanding of the users and the multiple contexts of use. No one could develop their project along unrealistic lines which meant the solutions needed to be realistic and cost effective or they were not going to ever see the light of day. While the group charged with examining integration with existing public

transportation could realistically retrofit a train car to accommodate bikes, they could not, for example, redesign the train car itself or any of the stations. Each group proceeded with physical mock-ups (where possible) for field testing while running through the normal procedures of visualizing possible solutions through physical appearance models, computer simulations, renderings and animations or walk-through of possible solutions. The final presentations took place in front of city officials along with bike advocates and received a unanimous nod of approval. The students left one of the city's buildings convinced that change can indeed occur on such a localized level.

Bike Culture 2.0

The next time the project was run it was determined early on that the process needed to be different from the previous experiment. Through much conversation and discussion, the original idea was pushed to another level of refinement and evolution to include outside businesses that might benefit from the incorporation of a bicycle into their business model. Faculty member Carl Boyd led the group of students and worked diligently to find appropriately sized and positioned partners who would take the project seriously and provide students the necessary access into their working methods to better understand how bikes could be incorporated into their day-to-day processes. The clients who were selected included a landscaping company, a home cleaning service, a gourmet coffee shop, and Time Out Chicago (the weekly news and entertainment magazine). The challenges this time were straightforward: develop workable solutions to encourage the clients to seriously embrace bikes as an alternative mobility choice. This involved not only understanding the clients' needs but figuring out low cost methods to make small numbers feasible. In all instances, except TimeOut Chicago, these companies were local with limited resources and no ability to invest in large roll outs should the technology fit their needs.

Again working with Alex Wilson from West Town Bikes, the students were able to run ideas past him and while receiving invaluable input on everything from concept feasibility to practical construction methods for the various prototype solutions. The students developed multiple concepts in model form first to get as many ideas out as possible and to evaluate the best potential directions. Full scale prototypes were built and tested to confirm that they meet the sometime stringent requirements (for example hauling gardening equipment on a single bike) of the client. The range of solutions included very lightweight panniers for the house cleaners that took full advantage of the bike geometry while maximizing space for cleaning products to a full service art-deco inspired bike-powered cafe for dispensing coffee samples. Each student presented their solutions to the individual client and again the reception was both enthusiastic and encouraging (suggesting the possibility of a real trial run in the future). Again the students witnessed first hand the power of localized design thinking that is not about the big gesture and the shiny new product but a way to embrace a service and improve functionality while also encouraging both exercise and greater environmental stewardship.

Bike Futures in the Future (conclusion)

This project is slated to continue into the future with each incarnation different than the last. The idea is to amass a wealth of knowledge and ideas that will seed a larger and more diverse bike culture in the future. With each new incarnation there will need to be innovation applied to the actual design brief to differentiate the current project from the past while still learning from previous projects. The ultimate goal is to use these projects to continue exploring new and innovative ways to increase service design projects in the future. While designers generally think of themselves as creators of new products the reality will need to change towards design solutions that involve ramping up existing sustainable solutions rather than simply adding more stuff to an already overpopulated material culture. This is a challenge for us as faculty and it will be a challenge for our students as designers of the future. Finding satisfaction in tweaking something, adapting something, or even fixing something is not the same as creating something and yet this has to be part of our sustainable future- adaptation as opposed to creation. It is a hard lesson to learn and one that will happen with small steps initially until we have the language and necessary skills to imbue it with the degree of creativity currently associated with designing products. If a designer really is a solver of problems, there is no lack of problems in the world to solve. It is merely a matter of changing focus and creating the infrastructure to make it real.

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¿Cómo se puede acercar el diseño y la información a las personas ciegas, con base en los fundamentos del diseño para todos?

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Resumen

El diseño, como disciplina viva, enfrenta retos importantes que implican su transformación y apertura hacia nuevas áreas. El diseño gráfico puede innovar y modificar sus propios paradigmas hacia sectores de usuarios que no ha contemplado, o que por descuido o ignorancia ha olvidado. Tal es el caso de las personas con discapacidad y especialmente los ciegos. Surge entonces la interrogante ¿es posible hacer diseño gráfico para ciegos? La respuesta, aunque paradójica, parece indicar que sí es posible realizar este tipo de diseño para personas que no ven, aunque posiblemente la denominación de este diseño debería cambiar para identificarse como "diseño háptico" o "diseño táctil".

Palabras clave:

Diseño para todos, diseño para ciegos, diseño háptico, Braille, empaque.

Introducción

El artículo 9º de la Convención de Naciones Unidas sobre los Derechos de las Personas con Discapacidad[1], señala que éstas deben estar en posibilidades de vivir en forma independiente y participar plenamente en todos los aspectos de la vida[2]. Este artículo, que se refiere al tema de la Accesibilidad, demuestra una relación inmediata con todas las áreas del diseño, que no pueden permanecer ya ajenas a ésta, y motiva a considerarla dentro de todas las prácticas diseñísticas. Los puntos más relevantes de este artículo refieren que el diseño debe incluir a las personas con discapacidad como un sector permanente de usuarios de todos los productos y servicios que el diseño ofrezca. La Convención, es el primer tratado firmado sobre derechos humanos en el siglo XXI, y México como país promotor y firmante, se encuentra obligado a volver realidad las encomiendas de la misma. Los diseñadores estamos invitados a ser participantes activos en el cumplimiento de este compromiso, con la propuesta continua de diseños incluyentes en todas las especialidades del diseño.
Según las estadísticas de la Organización Mundial de la Salud, las personas con discapacidad en el mundo aproximadamente ascienden a un 10% de la población, aunque también las estadísticas señalan que la población que envejecerá en los años próximos será considerable. Con esto se pretende enfatizar que las acciones referentes a la accesibilidad no únicamente benefician a las personas con discapacidad, sino también a un sector mucho más amplio, como son las personas mayores, los niños, las mujeres embarazadas y todas aquellas personas que puedan presentar alguna limitación temporal o permanente.

Volviendo al tema de la accesibilidad como lo refiere el mencionado Artículo 9º citado en el primer párrafo de este texto, pretende asegurar el acceso de las personas con discapacidad, en igualdad de condiciones con las demás, al entorno físico, el transporte, la información y las comunicaciones, (incluidos los sistemas y las tecnologías de la información y las comunicaciones), y a otros servicios e instalaciones abiertos al público o de uso público, tanto en zonas urbanas como rurales. Específicamente lo concerniente al acceso a la información es lo que se tratará de exponer en este texto, considerando de forma especial a aquellas personas que debido a una limitación visual no pueden leer la información que se exponga en los objetos o productos de diseño, como son los libros, los empaques y la señalización.

Relación de la accesibilidad y el diseño para todos

Algunas personas señalan que la accesibilidad es un término que se ha vuelto extemporáneo[3] y se ha sugerido la adopción del término "diseño universal" que la misma Convención a que se ha hecho referencia, define como "el diseño de productos, entornos programas y servicios que puedan utilizar todas las personas, en la mayor medida posible, sin necesidad de adaptación ni diseño especializado. El diseño universal no excluirá las ayudas técnicas para grupos particulares de personas con discapacidad cuando

1 La Convención de Naciones Unidas sobre los Derechos de las Personas con Discapacidad y su Protocolo Facultativo, fueron aprobados el 13 de diciembre de 2006 por la Asamblea General de las Naciones Unidas en la ciudad de Nueva York. Fueron abiertos a la firma y ratificación de los Estados Parte a partir del 30 de marzo de 2007, y entraron en vigor el 3 de mayo de 2008. Se ha convertido en el primer instrumento jurídico internacional del siglo XXI. González Martín Nuria (s/f) Convención de Naciones Unidas sobre los derechos de las Personas con discapacidad. Biblioteca Jurídica Virtual del Instituto de Investigaciones Jurídicas de la UNAM. Consultado en línea: www.ejournal.unam.mx/bmd/bolmex120/BMD000012018.pdf Fecha de consulta: 23 abril 2009

2 Derechos humanos ¡Ya! Consultado en http://www.derechoshumanosya.org/accesibilidad_convencion Fecha de consulta 02 mayo 2009

3 Hablar de "accesibilidad" ya se está volviendo anacrónico, la utilización de este término en el ámbito internacional alcanzó relevancia entre los años 1970-1990, cuando las organizaciones de personas con discapacidad se organizaron e incluyeron el término en su agenda. Consultado en: http://www.abc-discapacidad.com/index.html Fecha de consulta 15 de mayo 2009

se necesiten"[4]. En este sentido, cabe señalar que el diseño debe gestionarse para todas las personas, sin distinción de ninguna índole, e incluyendo las limitaciones que éstas pudieran tener. En este sentido, y como el término también se ha trabajado, yo prefiero utilizar el concepto "diseño para todos" por su carácter incluyente y democrático. El diseño para todos y sus siete principios rectores, fueron desarrollados por una serie de investigadores en el Centro para el Diseño Universal, de la Universidad Estatal de Carolina del Norte en Estados Unidos en 1997[5]. Particularmente, y siguiendo el tenor del acceso a la información, el cuarto principio de diseño para todos, se fundamenta específicamente en que la información que se transmita, sea completamente perceptible. Esta transmisión de información debe ser efectiva para cualquier usuario, independientemente del ambiente o de sus capacidades sensoriales.

Algunas guías o pautas que propone este cuarto principio de diseño universal, sugieren: a) la utilización de diferentes modos (gráfica, verbal, táctil) para una presentación redundante de la información esencial; b) que se provea un adecuado contraste entre la información esencial y la adicional; c) que se maximice la legibilidad de la información esencial; d) que se diferencien los elementos de forma que puedan ser descritos (es decir, que sea fácil dar instrucciones o direcciones); y e) que se provea compatibilidad con la variedad de técnicas o dispositivos usados por las personas con limitaciones sensoriales[6].

Las personas con discapacidad visual y el diseño.

Desde que Víctor Papanek escribiera su libro Design for the Real World: Human Ecology and Social Change[7] hace ya casi cuarenta años (porque la edición en inglés data de 1973), señalaba la importancia de que los diseñadores fueran socialmente conscientes, y que deberían considerar en sus proyectos las necesidades de la gente del mundo actual (Papanek, 1977:77). La discapacidad no es una realidad nueva en la humanidad, ha existido desde siempre, pero debido a múltiples barreras sociales y culturales, estas personas habían permanecido ocultas, invisibles y escondidas para la sociedad. Los múltiples cambios económicos, políticos, sociales, y culturales sucedidos durante el siglo XX, y en una medida importante la participación solidaria del diseño, han permitido que las personas con discapacidad poco a poco vayan participando más abierta y dinámicamente dentro de la sociedad. Muchas veces las personas con discapacidad han sido incluidas por medio del asistencialismo y desde una óptica médica, como si el objetivo fuera "curarles una enfermedad". Estos criterios han evolucionado a una visión más social e incluyente, donde se reconoce que es labor de toda la sociedad y mediante la suma de esfuerzos, que la inclusión de las personas con discapacidad en la vida cotidiana puede ser una realidad posible. Es aquí donde el diseño tiene una gran responsabilidad, pues uno de sus objetivos fundamentales es que mediante éste, se procure una calidad de vida mayor para todas las personas.

Por ejemplo, Jorge Frascara en su libro Diseño gráfico para la gente[8], enfatiza que el diseño socialmente responsable fortalece la importancia de la profesión para la sociedad, permite una apertura a nuevas oportunidades de trabajo y una creciente valorización dentro de la percepción de nuestra profesión. Brinda algunos ejemplos de cómo se podría empezar a abrir camino en este sentido, mediante el mejoramiento del acceso de la información para los ancianos, para las personas con problemas visuales y de aprendizaje, diseño de materiales didácticos para la erradicación del analfabetismo, el mejoramiento de señales y símbolos para seguridad, el mejoramiento de los programas visuales de las nuevas tecnologías, entre otros muchos más.
El diseño gráfico para personas con discapacidad visual, debe permitir que aquellas personas que no ven, puedan tener acceso a la información y esto implica un reto muy importante, que algunos pueden calificar como la paradoja de nuestra disciplina.

Importancia del tacto

Ciertamente para las personas que tienen alguna discapacidad visual sea parcial o total, el acceso a la información impresa resulta bastante complicado ya que en el caso de que la persona presente debilidad visual será difícil que lean las tipografías pequeñas, y en el caso de que sean ciegas obviamente no lo podrán leer y por lo tanto quedarán excluidas a cualquier tipo de información de esta índole. Es aquí donde los criterios tipográficos toman relevancia, pues deben considerarse todas estas limitaciones sensoriales cuando de usar tipografía se trate. En el caso de las personas ciegas, el sentido del tacto es uno de los principales medios por los cuales es posible presentarles la información en algún producto de diseño.

Otl Aicher[9] define la escritura como la interpretación visual del lenguaje y a éste como la interpretación del mundo. Sin embargo, tal declaración de Aicher puede ampliarse, a una interpretación que adquiere características táctiles. El sistema braille puede ser la referencia más conocida de esta

4 CONAPRED (2007) Convención sobre los derechos de las personas con Discapacidad. Protocolo Facultativo. México: CONAPRED. Pág. 13

5 The Center for Universal Design (1997). The Principles of Universal Design, Version 2.0. Raleigh, NC: North Carolina State University. Copyright © 1997 NC State University. The Center for Universal Design. Si se desea consultar directamente este Centro de Diseño Universal, entrar a la siguiente dirección electrónica: http://www.design.ncsu.edu/cud/

6 The Center for Universal Design (1997). The Principles of Universal Design, Version 2.0. Raleigh, NC: North Carolina State University. Copyright © 1997 NC State University. The Center for Universal Design. Si se desea consultar directamente este Centro de Diseño Universal, entrar a la siguiente dirección electrónica: http://www.design.ncsu.edu/cud/

7 Papanek Víctor (1977). Diseñar para el mundo real. Ecología humana y cambio social. Madrid. Hermann Blume
Ediciones.

8 Frascara Jorge (1997) Diseño gráfico para la gente. Comunicaciones de masa y cambio social. 2ª. Edición (2000). Ediciones Infinito Buenos Aires. Argentina. Págs.51-57

9 Aicher Otl (2004) Tipografía, Valencia: Campgrafic. Pág. 14

interpretación táctil del lenguaje. Fue inventado por Louis Braille en el siglo XIX, y se trata de un código formado por la combinación de puntos en altorrelieve desde una matriz generadora de seis puntos[1].Por tratarse de un código, las particularidades y la sintaxis son las mismas que para los caracteres visuales. Los puntos que lo forman son percibidos por medio del tacto y sus combinaciones facilitan el proceso de lecto-escritura para personas con discapacidad visual. Este sistema permite el acceso a la información para éstas y también resulta ser un excelente medio de comunicación. Sin embargo, se puede decir que una de las desventajas de este código es que requiere ser aprendido, y debe practicarse con frecuencia para poder ser escrito y leído con rapidez. Estas dos características han propiciado que el porcentaje promedio mundial de las personas con discapacidad visual que lo saben y practican sea aproximadamente de un 20%, sin que esta cifra sea exacta u oficial. Paulatinamente, el braille ha formado parte de sistemas de acceso a la comunicación como por ejemplo en menús, teclas de cajeros automáticos, elevadores, máquinas despachadoras de boletos y sistemas de audio. En la arquitectura ha logrado incorporarse individualmente en señalizaciones de muros, pasamanos, botes de basura o también de forma combinada con altorrelieves, en mapas, directorios y planos de localización en determinados sitios. Por otra parte, son pocos los países que han implementado su reproducción tanto en libros, revistas y folletos como en empaques y envases ante lo cual las personas con discapacidad visual encuentran mucha dificultad para obtener información en general y sobre todo en los objetos de uso cotidiano como podrían ser los medicamentos y los alimentos.

Otro elemento que obstaculiza la implementación del código en el diseño gráfico es el económico, ya que al imprimirse la información en braille, se requiere de un proceso extra de impresión como por ejemplo el troquelado en alto relieve o la serigrafía granulada. Sin embargo, cuando se trata el tema de la accesibilidad y en este caso específico del acceso a la información, si se planea desde el inicio del diseño el incluir la información también de forma táctil, el tema de los costos no debería representar un aumento significativo en los mismos ya que actualmente se pueden encontrar un gran número de productos que en sus presentaciones y empaques manejan distintos elementos en alto relieve. Si se considerara la inclusión del braille desde un inicio, el costo no aumentaría y solamente restaría seguir propiciando la enseñanza y aprendizaje de su lecto-escritura[2].

Aplicaciones del diseño de la comunicación para personas con discapacidad visual

Según la Organización Nacional de Ciegos Españoles (ONCE)[3] en su documento Accesibilidad para personas con ceguera y deficiencia visual, ha establecido ciertos criterios que todos los diseñadores deben conocer e implementar con la finalidad de que la información que se transmita sea completamente perceptible.
Algunos criterios importantes para poder cumplir con este cometido son:
Que la información sea claramente visible y que pueda comprenderse inmediatamente de modo que permita un uso rápido y sencillo.
Que la presencia de contraste sea suficiente entre la información y el correspondiente fondo.

Que la adopción de un tamaño tipográfico sea adecuado, en función de la distancia a la que será leído.

Se recomienda utilizar tipografías sencillas de palo seco tipo Helvética aunque pueden utilizarse también aquellas que tienen patines. No se recomienda el uso de las variantes tipográficas itálicas ni las condensadas, pues dificultan la lectura a las personas con debilidad visual. Los puntajes recomendados para una lectura más ágil son de 12 puntos o más. También se recomienda preferentemente el uso de mayúsculas y minúsculas en los textos; las mayúsculas únicamente para palabras cortas.

Las personas ciegas no pueden utilizar los mensajes transmitidos en forma visual, por lo tanto, es esencial que se brinde de manera simultánea a la visual, la información a través de señales táctiles ya sea a través del uso del relieve, mediante el sistema braille y también por medios acústicos Como se mencionó, un ejemplo del uso de los sistemas táctiles, es la aplicación del código braille, que ya se puede apreciar en algunos lugares con sistemas señaléticos que incluyen este código y también algunos productos como medicamentos que hacen lo propio. Estos productos responden a iniciativas legales que, por ejemplo en la Comunidad Europea, ya son de implementación forzosa. Esto obliga a los diseñadores a retomar este tipo de criterios en todos sus diseños. El mejor ejemplo de este tipo de disposiciones es Directiva 2004/27/CE, que es una ley por la que se establece un Código Comunitario sobre Medicamentos de Uso Humano, que regula el etiquetado en braille en los mismos.

10 ONCE: (2003), Accesibilidad para personas con ceguera y deficiencia visual, Organización Nacional de Ciegos Españoles (ONCE), Madrid, pp 211
La Organización Nacional de Ciegos Españoles (ONCE), es una institución que agrupa a todos los ciegos españoles.

11 Martínez de la Peña Angélica (2008) La tipografía no sólo se lee, también se siente. Encuadre. Revista de la enseñanza del diseño. Octubre 2008, volumen 2, número 13.

12 ONCE (Organización Nacional de Ciegos Españoles) (2003) Accesibilidad para personas con ceguera y deficiencia visual, 1ª. Edición, Madrid. Coordinador de la edición: Pablo Martín Andrade (Jefe del Departamento de Autonomía Personal) Capítulo VII

(1)

(2)

(3)

Cualquier información que sea transmitida para ser recibida por el tacto comunica, aunque no siempre se esté hablando de la percepción háptica, con la utilización de las manos y específicamente de las yemas de los dedos por medio del movimiento de las extremidades. Existe también una señalética tacto-podal que permite, por medio de los pies y los bastones blancos de las personas ciegas, identificar dónde está la señal y cuál es el mensaje.

(4)

(5)

En el ámbito editorial, existen los libros impresos en braille y también los que presentan ambos sistemas simultáneamente (impresión en tinta y braille en alto relieve). Algunos ejemplos recientes de libros impresos en braille son: el primer Diccionario Escolar en Sistema Braille editado por la Comisión Nacional de Libros de Texto Gratuitos en noviembre de 2004, para su uso en la educación básica en México. El diccionario es único en América Latina y con el paso del tiempo se convertirá en un producto de exportación[4]. También el 30 de abril de 2009, fue lanzado en Puerto Rico el primer diccionario de español en Braille. Éste es la última edición del diccionario de la Real Academia de la Lengua Española, que consta de más de 24 mil páginas contenidas en 148 volúmenes[5]. De este mismo diccionario se hizo una versión en letra grande o de puntaje mayor, que se compone de 12 mil 95 páginas en 32 volúmenes.

(6)

Conclusiones

Es importante reconocer e investigar las situaciones sociales que contribuyen a forjar el futuro de una profesión, si se quiere que el diseño se mantenga en una constante evolución. El trabajo con los usuarios resulta fundamental en esta iniciativa, por ejemplo, con las personas con discapacidad, mediante acercamientos que permitan conocer cuáles son las necesidades reales de estas personas y trabajar eficientemente para brindarles soluciones adecuadas.

13 Banco Nacional de Comercio Exterior SNC (2004) Disponible en http://www.bancomext.gob.mx/Bancomext/aplicaciones/noticias/index.jsp?mes_directivos=11&ano_directivos=2004&need=1 Fecha de consulta 1 de mayo de 2009

14 EFE (2009) Lanzan primer diccionario de español en Braille. Periódico el Universal online. Consultado en http://www.eluniversal.com.mx/notas/594985.html Fecha de consulta 1 de mayo 2009

Existen diversos grupos ante los cuales el diseño no puede permanecer ya ajeno, por el contrario, resulta una obligación acercarse a este tipo de problemáticas para poder desarrollar nuevas herramientas mediante la integración de grupos multidisciplinarios de trabajo donde el diseño es innegablemente un agente fundamental en la generación de nuevos proyectos incluyentes que deben ser difundidos y aplicados en favor de nuestra profesión.
Asimismo, resulta también importante que los diseñadores se encuentren actualizados acerca de lo que va sucediendo en otros ámbitos, como lo es por ejemplo la cuestión de los derechos humanos, que van generando líneas de acción que inciden directamente en el quehacer de u proceso diseñístico incluyente.

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Design for development

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Abstract

During the past five years I have worked on collaborative, interdisciplinary projects with indigenous community organizations and disciplinary experts in Mexico. Participating in these projects, intended to provide long-term stimulus for economic growth, has altered our approach to projects, our design process, and, as a result added to our methodological and intellectual design toolkit. Using examples and lessons learned from projects, I discuss some of the inclusive, socially responsible, and sustainable philosophies, strategies, and tactics we use – focusing on field research, ethnographic methods, sustainability, and responsible cultural representations to demonstrate how design can be used to foster development.

Keywords

Social design, Sustainability, Social responsibility, Community development, Design research

Introduction

"Design for Development" signifies a shift in the way many designers learn and practice. Our focus is to explore ways we can, as stated by Paul Polak (2008) "design for the other 90%" (p. 64). Agreeing with Polak (2008) that there is a problem when "90 percent of the world's designers spend all their time working on solutions to the problems of the richest 10 percent of the world's customers (p. 64), we believe there is both opportunity and obligation to explore how design processes and products can be leveraged for development and the social good. Working under the premise that design plays an important role in fostering economic, cultural, and social development and change, we use design thinking, concepts, methods, processes, and products to engage its power and potential for the social good. This includes our intellectual and creative development as designers as well as that of our partners. We intend for our work to be sustainable and relevant, therefore we work in partnership with communities and subject matter experts. It is through these collaborations that we explore how participatory design research can inform us and lead to meaningful, innovative, and sustainable solutions to social, cultural, economic, and environmental problems that are identified by people within the communities where we work.

Living and traveling in developing countries (emerging economies) when I was a child fostered an appreciation of cultural diversity and exposed me to dramatic economic and social inequality. I studied political science and worked in international development – an indirect path to design but one that made design seem even more important – it was through this lens that I learned and understood first hand how visual communication and design played integral roles in community education, public health promotion, training… so many things that people were doing within their communities as they worked for positive change. Today, working alongside others and responding to different and shifting constituents and contexts has altered my design practice in very positive ways, adding to our design toolkit, and proven design to be a liberating and empowering activity, as well as product, for everyone. At its core are creativity and innovation that stretches and changes the way we think. Design for Development's objectives support the education and empowerment of designers, collaborators, and community members – essentially all involved in the project and process. We work to:

1. Develop an amplified worldview in order to work responsibly and effectively at local and global levels;
2. Partner and learn through project experiences;
3. Expand the intellectual foundation and application of design for development and the social good;
4. Exchange design and creative methods with partners to stimulate diverse approaches to creative thinking; and
5. Empower all project participants.

Design for Development formally began during an intensive fieldwork period in the southern Mexican states of Yucatán and Quintana Roo. This area is home to the beautiful Riviera Maya and some of the most renown archeological sites in Mesoamerica. It is directly tied to another thread of my research which explores the layers of production, distribution, and consumption of the Maya imaginary in this heavily touristed region. This imaginary commodifies the Maya and the natural environment. Understanding lived realities of modern Maya people and the complicated relationship of people in rural towns and villages to the tourism economy is intrinsic to working with marginalized people in this region.

The area where are working is a place where economy, culture, and environment are so tightly woven and the opportunity to work on so many levels is what makes this area so rewarding for investigation. Several challenges make the case for fieldwork: 1) How does one understand

the economic relation between urban centers, rural towns, and tourism centers?; 2) What capital exists – including skills people possess?; 3) Based on the former, what are possibilities for new business and product development within this context?; 4) What are the obstacles to development and how can these be creatively overcome?; 5) How do we create a new and responsible visual language that does not essentialize or objectify Maya people?; and 6) What are cultural, social, economic values and goals within a community or organization?.

Regardless of where one is from, the social, cultural, and economic complexity of this place – and I will assert most places where we are working with "others," i.e. people who we have not worked with, research, and who do not mirror ourselves – requires on-the-ground exploration because what we will assume will, in all probability, be wrong because it is what we bring with us from somewhere else. So this process of fieldwork is an excellent way for designers to work more effectively, and it also means we have to be involved at the inception of a project and not simply at the end. In part because our interactions and observations during fieldwork are intrinsic to project development and ideation. This is one of our conditions when entering into a partnership situation and it is a welcome one by all.

Partnerships

From the onset, we refer to people we work with as "partners" and not as "clients." There are two reasons for this: 1) We frame the project as a learning experience for all involved and are careful to articulate that it is an equal exchange and not charity – thus the expectation is that all sides contribute to the project; and 2) the word "client" may infer that designers are in the service of clients and philosophically we view this as an exchange of non-monetary goods. In fact, we don't work for partners (or clients) but with – an important distinction. It is only when we are on equal footing that we can all contribute to build a healthy project. All of our projects are in a phase of development and are in the following sectors: Agriculture and food production (honey, orange juice, organic farming, native seed cultivation, and conserves); traditional arts (woodworking, natural medicines); and community development (eco and community tourism, Maya culture education). Details about each project are online at www.design4development.org.

Approaching fieldwork

Our cumulative experiences working in communities indicate that actively incorporating inclusive research methods and activities into our design practice is the most effective way to develop appropriate and sustainable solutions. One of the crucial assumptions we make is that people know what they need and so successful projects address real, and not just speculative, needs of people identified by the beneficiaries themselves – from within a community. Discussion and dialogue fosters ownership and engagement which, in turn, increases the likelihood of long-term sustainability. Our strategy is to begin each project in the client community in order to establish a dialogue and learn about the context in order, keeping in mind that our primary purpose is to learn the needs of the community rather than simply satisfy our own goals and expectations as designers. Because we are on-site for approximately a week, we pack our days with as many activities as possible and this can be overwhelming. However, it is exactly this rapid immersion that lends itself to discovery and suspension of judgement. This experience relies on our ability to absorb using all our senses, and we document as much as possible for reference. Initially, we build in little time to critically assess our findings so that we can let our experience inform us, acknowledging that we will make space for analytical activities later in the fieldwork process. This is sometimes difficult for designers (and students) who are accustomed to a studio structure: knowing the anticipated outcome, roles, schedule, having order, and having our equipment. Most significant is this, often new, aspect of the design practice that requires active participation in the discovery and definition through direct engagement with the client/partner, community, and context. It is here that we incorporate principles and practices of ethnography into our process – specifically participatory meetings and semi-structured interviews.

We begin by setting up the design problem as a problem yet to be fully or concretely defined and within this, there is acknowledged space for refinement and re-articulation (i.e., we think we know what the problem is based on a description or conversation, but we will approach this in a way that opens up everyone's opportunities. The subject (for example: organic farming and education, apiculture, native seed preservation and education), combined with the social, cultural, economic, and environmental context, is so complex that working on-site with as many client and subject matter experts as possible is the most pragmatic way to begin to conceptualize the project. In dialogue with project participants, we assess our findings and define the project. Since findings are specific to projects, I provide selected observations from my notes about two projects: 1) Xyaat ecotourism cooperative, a community-based initiative where visitors can learn about daily life and practices, natural medicine, contemporary history, crafts, and the environment; and 2) Hach Kaab Honey, an initiative of four cooperatives to bring their quality honey to market under one brand identity and earn a fair market price for their product.

Xyaat ecotourism cooperative: concern about distinguishing themselves as an organization that is community-based and not tourism from outside the community; want to be represented as modern Maya; percentage of profits fund educational and

environmental programs; employs community members on a rotating basis; rise in town inhabitants working in all-inclusive resorts; many view the service industry in the Maya Riviera as the only source of stable income; discrimination of Maya people in the tourism sector; a rich history tied to the Caste War; engagement with the land and environment and actions being taken for preservation and responsible development and farming; new cooperative farming initiatives; development of a network of community tourism groups; wanting to educate everyone about traditional medicine, contemporary history, and language; and desire to remain small, manageable, and responsible to the community.

Hach Kaab honey: concern that they don't understand the market but willingness to try; ancient Maya gods have no relevance to them today – so to use this in any aspect of identity does not connect with them; local political issues enter into their ability to get government support; the process is much more complex than initially thought given the expansion from one cooperative to four.

Fieldwork provides the opportunity to observe and participate in dynamics and processes in context, ask questions, establish dialogue, and build a frame of reference for project work. In terms of cost, time, and overall benefit to the project, I consider it the single most effective way to begin a project because it is such a rapid learning environment. Granted that the fieldwork itself must be structured and ours is packed full of diverse activities with partners. More than just learning about what we consider to be the subject matter of the project (for example, how to sell honey), we learn about the product's production process (for example, the process of beekeeping), and spend time at social gatherings and meals with partners, their families, and the community. This immersion allows us to make disparate connections and view the project holistically.

This fieldwork phase has social benefits as well. Our partners say that our willingness to listen and learn from them – in the case of the honey project something they did not expect – was fundamental to establishing trust and dialogue that resulted in elegant, appropriate, and responsible solutions. A serious approach to projects increased their confidence in its success and motivation to move forward. Interviews and discussions initiated by us become a group effort, leading to further ideation and opening up possibilities that would not have surfaced otherwise. Creative processes such as brainstorming and sketching are transferable skills and appropriated in ways that work within community contexts. Articulating and critically considering macro and micro project issues allows a group to collectively establish a dialogue, buy-in, and further focus on their strategy. There is no substitute for direct involvement and "being there" because it was in these personal interactions that we built deeper, more meaningful relationships.

For designers, ethnographic research/fieldwork provides the opportunity to learn first-hand about culture, context and communication. We set up information sessions and conducted semi-structured interviews, and were careful not to analyze and evaluate people and situations. It was only through these on the ground activities that we could begin to unravel the real vs. perceived obstacles to development by experiencing lived realities. This includes learning about many different experiences and practices, including what it's like for a family to live on less than $5 a day. This work requires and builds empathy – understanding the feelings, thoughts, and experiences of others.

The subsequent design and production phases may occur anywhere but we maintain a continuous communication flow that generates dialogue and negotiation as we develop the project. An unexpected outcome that has now become a pattern is how the resulting design product contributes to empowerment, pride, and provides motivation to continue the process. The product, in this context, is often instrumental in having others, including government officials, take the work of community organizations seriously and demonstrates their ability to bring their product to market. Working in indigenous Maya communities allows us to observe that there is tension in the tourist representation of ancient Maya as people unchanged over time just as there continues to be a struggle to overcome their ethnic subordination and reclaim their identity as modern Maya people, who are – as the mural in Carrillo Puerto states – "a community on the move," with roots in the region, in the land. Our findings have helped us work towards a more socially responsible representation of Maya culture that moves beyond simplistic stereotypes. We do capitalize on Maya language, not as a device to capitalize on ancient culture, but because it is the primary language spoken in the communities where we work and is intrinsic to Maya identity. Product naming, language use, the development of a visual language – the brand identity – is a collaborative and participatory process and this both empowers and speaks to the agency of the partners we work with. Through our collaborative project work we dissect the Maya imaginary and simultaneously work to create alternative and responsible representations of contemporary Maya culture.

Ultimately, it is this process of fieldwork that aids in developing long-term, responsible, and appropriate solutions that empower all participants as we engage design for development. The value of our work is greater than the products we produce – it is the collaboration, exchange, and learning that is embedded in each experience and the possibilities which emerge.

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Design for humanity in the century of famine and warfare

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Abstract

Today only 20% of the world's total population live in more developed countries, while 80% in third world (McDavitt, U.S. Bureau of the Census, 1998) are trying to survive within inadequate conditions. Namely, only one-fifth of the world population has access to a designer-made environment, generally living in adequate conditions.

Responsive designers, NGOs and foundations are struggling to provide a better environment and life standards to those living in the Third World. Unfortunately they generally can't estimate that their attempt might legitimate the discrimination and inequality. In other words, there is a possibility that Design for Humanity may affect the poor in a negative way.

Keywords

Design for humanity, Third World, design responsibility, social design

Introduction

There are TWO worlds in the solar system: Northern World and Southern World. To my horror, one of the very few commonalities between is that they include carbon based compounds, such as people made of flesh and bone, flowers, animals, trees and microbes. They are so different from each other that they seem to be different planets: Northern World and Southern World or First World and Third World. We can widen this grouping further[1] like First World/Third World, Wealthy/Poor, White Collar/Blue Collar, Nuclear energy production/Nuclear energy waste disposal, Consumer/Producer, Production of waste/Waste disposal, Unreal World/Real World[2].

Today only 20% of the world's total population live in more developed countries, while 80% in third world (McDavitt, U.S. Bureau of the Census, 1998) are trying to survive within inadequate conditions. In addition, many of those, who live in the third world, have little or no access to most of the products and services (Design for the Other 90% Official Web Site). Namely, only one-fifth of the world population has access to a designer-made environment, generally living in adequate conditions. Also, Unreal World consumes 90% of the overall wealth of the world, while the Real World has to survive with the only 10%. It is claimed at Design for the Other 90% web site that, if all of us lived the American lifestyle, we would need nearly 6 earths[3].

Design Today: For whom does the 90% of the designers work?

> "Problems cannot be solved by the same creative level with which created them"
>
> Albert Einstein

"Design is conscious and intuitive effort to impose meaningful order… therefore all men (and women) are designers" says Victor Papanek (Papanek, 1971, p.3). Cooking is a good example to design according to this point of view; also preparing our desk for studying means taking a part in design activity, because design is an intuitive task. However there are some people named as "designer" whose profession is to impose meaningful order to others' lives. No matter they are architects, city planners or industrial designers; they design other's lives. The utmost important aim of the design activity should be making the world a more livable and desirable place for all. That's why human factor is of great importance in design field. Design is a very critical profession because it might be very hazardous to the mankind. "There are professions more harmful than industrial design, but only a few" (Papanek, 1971, p.215). Design, especially industrial design may influence our lives deeply, because it is a mass production and we inevitably use industrial design products. "Whereas architects and engineers routinely solve real problems, industrial designers are often hired to create new ones. Once they have succeeded in building new dissatisfactions into people's

1 This grouping is open to argument at some points. For example, it is not logical to claim that the whole third world is poor and labourer or proletarian; and actually I don't mean this. However, I think there is enough evident if we think about manufacturing policies of world wide producers starting from 1980s. They decided to move their manufacturing units to the third world while their administrative and engineering units are still in the first world. As a result, they confidently print their labels on products: DESIGNED and ENGINEERED in EUROPE, (but manufactured in China).

2 I appreciate this term proposed by Victor Papanek, though he used it in a different manner. I suggest using it in an opinion that they are struggling with the Real Problems of the earth. They don't have much contribution to the problems which have been mostly arising since 1960s, although most of those factories which are known as some of the basic environmental pollutants locate in the 3rd World. Here, no one disagrees with Nigel Whiteley: "Third World countries on the other hand, resent both being told what is good for them, and having to pay (often quite literally) for the mistakes and high living of the West" (Whiteley, 1993, P.118). Those problems have been generally caused by the over consumption of resources and over emissions from point (factories) or non-point (air conditioners, exhausts, waste) sources. However 3rd World doesn't have much effect on that consumption; because they don't have enough economic power to serve the so-called Consumer Culture. On the other hand they are frequently blamed for being the cause of the environmental pollution.

3 After completing the survey at http://www.myfootprint.org/en/visitor_information the message delivered to me by the website was like this: "Dear Alkin, if everyone on the planet lived your lifestyle, we would need 1,4 earths. Reduce your footprint!", although I generally use mass transportation, don't travel a lot, and eat vegetable from national producers and very occasionally meat.

lives, they are then prepared to find a temporary solution" (Papanek, 1971, p.215). This indicates well the moral responsibility of designers to create products that are embedded in social responsibility.

There is an abundant number of examples which can convince us about the power of design and designer respectively. Tony Fry (1999) mentions about motor cars in the context of environmental impact and power of design. Let us think how much changed the city form, architecture, commercial activities, world climate, wildlife and waste generation after the wide production and consumption of motor cars by the means of mass production. Industrial design culture tries to confront issues by trying to find solutions. "The imperative of existing industrial design culture is to find new ways to generate wealth, new technologies, new products and new markets that deflect the problem in order to keep things the same" (Fry, 1999, p.91).

According to Buckminster Fuller design can solve the problems of the world as far as it deals with real issues instead of capitalist manufacturers' desires and love relationship with money. However, Nigel Whiteley believes that socially responsible product or social design approaches are noteworthy working areas in design field but due to great influence of the consumerist culture they can not reach their target. "If history is a reliable guide, socially useful production is always on its way but seldom arrives" (Whiteley, 1993, p.94).

90% of the designers work for the 20% of the world population; they work for the rich, living in relatively developed countries. Reason is very clear to Whiteley: "…first because it (social design) may harm their own financial prospects… Second, they find such notions anathema, politically and ideologically" (Whiteley, 1993, p.43). Victor Margolin speaks about Product Milieu, and proposes users to participate in the design activity by adopting or proposing new usage to products. "We can engage in its components with more awareness, either by supporting them or attempting to alter or eliminate them" (Buchanan and Margolin, 1995, p.123). Other 10% of designers take part in some missions voluntarily for the sake of poor and disadvantaged. They come up with the term Design for Humanity.

Design for Humanity

Humane design is a new term for designers with respect to old history of other fields of design. It (mostly) indicates a voluntary effort to produce solutions for the problems of the disadvantaged living in the so called Real World. Voluntary designers from all around the world, especially from developed countries, maintain that mission; they establish departments in universities, organize contests, build web sites and prepare advertisements and campaigns. This appreciated work and effort helps the poor disadvantaged of the Third World. Unfortunately, there is an unnoticed point in this effort beside the goodness of helping people who need: Design for humanity might stand for the approval of "Third World's inadequate life standards" by changing into a casual design activity.

According to Design for Other 90% society, "of the world's total population of 6.5 billion, 5.8 billion people, or 90%, have little or no access to most of the products… in fact, nearly half do not have regular access to food, clean water, or shelter". However, this is not even a problem; it could be solved easily. The only thing to do is to invest a small percentage of the money which is spent for the army and war expenditures. The whole starvation, infrastructure and fresh water issues could possibly be solved in a short period of time. This assistance is the business of the administration of developed countries, but they don't approve such aids because of their capital based economies. Even the problem is basically created and sustained by the governments' and states' policies. As a result, responsive people, NGOs and foundations are trying to make a favour to those living in the Third World. Unfortunately they skip the problem that their attempt might possibly legitimate the discrimination and inequality; in a sense, means that the Third World can live on within those low standards.

Q Drum

"Q Drum" was designed by P. J. Hendrikse. The name comes from its shape; with the rope to handle, it looks like "Q" letter. It is used for water carriage in the rural areas of water shortage. The drum is longitudinal shaft that permits it to be pulled by using a rope which runs through the hole. Q drum is distributed by volunteers and NGOs to the people who need but cannot afford it. Its distributor claims that:

"The idea of Q-Drum originated in response to the needs of rural people for clean and potable water, as well as easing the burden of conveying it. The solution had to be simple, water in adequate quantities is by far too heavy to carry; by rolling the water in a cylindrical container had to be durable, and breakable handles and other attachments would simply not do in many parts of Africa even a hummer and

nail are scarce commodities. The Q-Drum addresses these needs by providing a simplistic, cost effective and durable solution".

As it is summarized above, Q-drum is produced, and distributed in rural areas of Third World where suffers from lack of water carriage system and even doesn't have access to fresh water sources. It is tended especially for use of women and children; its aim is to make their lives easier. Those who can get a Q-drum can be assumed being lucky; because there are many who can't. The child's bliss can be read from his smile in the photo of him and a Q-drum which was taken in Rural Africa. The dramatic impression of little trees, single storey cottage-like homes, and bright sandy terrain at the background, and the child with a Q-drum at the foreground causes a strange feeling in the observer. His smile and posture while pushing the drum (bended forward) are complementary to the background and strengthen the feeling of hot climate and the drought. Yet, the child's smile is hopeful on regardless, such that, an observer eye considers the hope and happiness of him in spite of all the shortage and poverty, immediately; because he is conveying water to his home, although only difference from a child who lives in (for example) Canada is his birth in 10.000 kilometers south-east. This picture, which reveals a feeling that fresh water problem is resolved in rural Africa, can cause an illusion in the sensation of the observer. No, actually his problem hasn't been solved. Here Design for Humanity works against humanity: It misleads the public opinion. In fact, that child has the equal rights to have a water pipe system that conveys fresh water to his home, just like his Canadian friend. As Papanek warns, this is a temporary solution that leads to another (and more destructive) problems.

Q-Drum has been acknowledged by the fact that world-wide patents have been granted for the concept, which means the legal acknowledgement of the product. It is also presented in many web pages, even it is sold through the internet. Those familiarize the public awareness with water problem of rural Africa, and cause a thought in people's minds that "problem has almost solved", but it is not solved that much.

Jaipur foot and below-knee prosthesis

The Jaipur prosthesis is introduced in Design for Other 90% website as a low-cost, durable and waterproof tool for people who need. And it is added that the prosthesis can be used with or without shoes. Designer of the prosthesis Sebastien Dubois claims that it has already helped over 900,000 amputees in landmine-affected countries. His ideas about design activity and developing countries are as follows:

"I spend most of my working time in the field of social design. In cooperation with organisations I design products for developing countries, trying to improve living conditions for different groups of people. There are hundreds of thousands of people on earth living with an amputation. A large proportion of them are victims of landmines. The performance of a prosthesis can seriously influence the quality of life of an amputee"

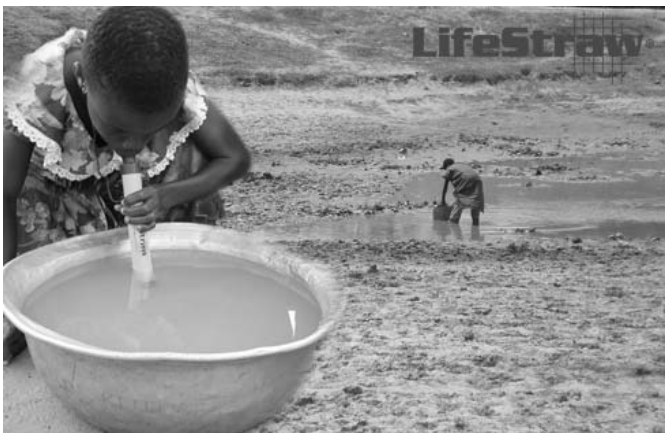
It is such an example that shows us how design products and artworks are successful indicators in illustrating the social - communal system and life standards of their time. They help us understand the human and value attained to her or him. As can be understood, it is the age of famine and warfare we are living in, unfortunately; and it is not more than a hundred years when the most sinful wars impaired the mankind. Humanity is getting more and more miserable and desperate, in addition insensitivity and neglect of people are ascending. Unfortunately, loosing a part of the body, wars and even dying from starvation have been becoming usual things of the life.

This advertisement is an example of how valuable human body in our world today, where 6,5 billion of population reside 80 % of whom live in unfavourable conditions. It is said in the advertisement-announcement that 900,000 people have lost their legs due to a landmine explosion. As a solution, the designer proposes his work: an artificial foot. Where is aesthetics, even more significantly, where is humanity? If we consider that thousands of people read this advertisement, then we may come to think that only that web site is a serious effect that implicitly influences people's mind that landmines and wars are ordinary facts of our century by familiarising the public to the landmines and indirectly to the war, the utmost wild and destructive shame of the mankind. The prosthesis beyond being a temporary solution to the problem, is a shameful example of design, even it is not a design product, in fact. On the other hand, prostheses have been used for decades and they really help people who needs. But it should not be observed as a design product; it is rather connected to surgery and medicine. If it is presented in a design web site, among design products, it creates an effect to cheapen the humanistic values in the observers' minds.

LifeStraw Water Purifier[1]

LifeStraw is a point-of-use water filter manufactured and distributed by Vestergaard Frandsen for the regions in the world which are poor in the fresh water sources.

> "Half of the world's poor suffer from waterborne disease, and nearly 6.000 people (mainly children) die each day by consuming unsafe drinking water.
> LifeStraw water purifiers have been developed as a practical way of preventing disease and saving lives, as well as achieving the Millennium Development Goal of reducing by one-half the proportion of people without sustainable access to safe water by the year 2015"[2]



LifeStraw aims to purify water for the use. The aim is not increasing fresh water resources by building dams and maintaining pipe and agricultural watering systems. Creating new and efficient fresh water resources would be a real solution, which can be achieved by administrative foundations or wealthy countries, instead of designers.

Unfortunately water shortage is a fact; but again approach to the problem itself is problematic. They aim to solve the problem "without sustainable access to safe water" as is proposed at the advertisement. Advertisement itself becomes an evident that LifeStraw Water Purifier demolishes the humanistic values although it is a product of humane design. It is an appreciated attempt to work for the well-being of people, and inevitably it has to be done with minimum requirements within the scarcity in the Third World, but people who are involved in the humane design missions, should be aware that their appreciated work could possibly work against humanity at times.

Conclusion

This paper absolutely does not aim to devalue (appreciated) attempts of those whom are involved in design for humanity approach. Rather, it just aims to draw the attention to the danger lying beneath humane design or design for humanity studies. Also it is a criticism to those who can not estimate the power of the design and its influence on the users' minds.

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Design for social construct & economic growth in the 21st century

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Abstract

This paper is part of an ongoing doctoral research project on titled; Value Creation through Sustainable Design intervention; A case study of Indigenous bamboo cane products in Botswana. Through its practice and manifest, design cuts through the core of human life, and its impact is intricably woven into and reverberates through our daily activities. Whilst there may be an agreed set of definitions and processes for design amongst professionals, there is a plethora of interpretation of design by the everyday person, depending on their context of interaction and understanding. This is more evident in the rural communities of the world, far removed from the glitz of the advanced technological trappings, where simple, but focussed design interventions make a big difference and add substantial value to the everyday life. In this context design manifests itself as a strong economic and social conduit, with a balanced sustainability platform. This paper reflects on and documents the current role of design, through examples of some community based projects and empowerment ventures amongst the world's marginalised communities in the Southern African Development Committee (SADC), in particular Botswana and projects on lessons that may be brought to bear on to the cutting edge technology applications in the industrialised world. The projects will highlight the particular design interventions as well as the engagement strategies employed.

Keywords

Community/cultural based design, value addition via design, design by the people, design for the people

Introduction

African designers have lagged behind for a long time and it is high time they emerge as critical intermediary whose functions is to bridge the communication gap between the rural crafts people and the urban clientele. This is more important at time when crafts people are no longer a designer, producer and marketer rolled into one, as practised in the past. The situation needs to change drastically so that crafts people can deal directly with the bulk of users, and be attuned to the needs and desires of consumers. Design in Africa should emerge and play a crucial role of mediating and bridging the gap between traditional producers and the market. In Botswana's case this fact cannot be overemphasised, because her economy is entirely dependent on diamond exports which were adversely affected by the current world economic downturn. It is for this reason, and in line with Botswana's vision 2016 that this research paper was forged. The paper has the aim of providing insight to actors /stake-holders interested in value added products through sustainable design intervention. Also, this undertaking strives to acquire knowledge of the field of design that is liable to be of great importance for national growth in the future. The goal is to achieve sustainable social and economic development so as to meet both present and future needs of Botswana's aspirations and the challenges of the twenty-first through coordinated and integrated design approach. The anticipation is this endeavour will facilitate the upliftment of the standard and quality of life for local communities in Botswana and put emphases on conservation of the environment. The former Minister of Science & Technology (Hon. Boyce Sebetlela) echoed these sentiments in his official speech to ICSID that: …"Setting priorities in line with vision 2016 as well as developing strategies that would make Botswana a global competitor in research, science and design and technology. It is envisaged that this endeavour will play an integral part advocating the positive cause in diversification and sustainable development of Botswana's economy. It is an essential component of the intellectual capital that Botswana can export and in the process generate a significant income for the economy. It can bring out the uniqueness of indigenous Botswana products."(2003; 3)[1]

Industrial Design in Botswana

The country made great strides when design and technology was introduced in secondary curriculum. This laid an important foundation for sustainable product design to flourish. Therefore, it is crucial that latent talent is harnessed and developed to greater heights with outstanding

1 ICSID African Report -2003:The Strategic Partnership between Design & Sustainable Development

product designs being exported to international markets at the creating the much needed employment in Botswana. It is important to develop the economy, especially given that local industry mainly manufactures products designed elsewhere. Indigenous manufacturers need to add value to local materials to turn them into quality products. Sustainable product design can add value to research, science and technology products and it is crucial that local producers capitalize on it in order to compete globally. To be successful nowadays, local producers and designers need to engage in the innovation process that combines market and technical know-how with the creative talents of knowledge workers to solve a constant stream of competitive problems and with the ability to derive value from product design intervention. Sustainable Design intervention in this study is understood as part of the technological capacity of the traditional production sector (crafts) and an essential tool in helping it to compete successfully in the market place. Existing studies and reports on design have concentrated on technology choice and only peripherally address the problem of design input at the level of traditional production units. Design intervention as an activity which enables the creative sector or individual crafts persons to materialize abstract concepts and embody them in value-added indigenous products which have export potential, thus a crucial activity any business enterprise, independent of its size. This capacity is important because it determines the characteristics of both capital and consumer goods. Within the range of activities involved in indigenous products, design intervention is of particular importance as it matches market and user requirements with production capabilities. Among the wide spectrum of design activities, industrial design therefore occupies a crucial place in production. New Zealand's Design Industry Taskforce points out that; Design is regarded as a process that encompasses every stage of product development, from inception to marketing. As such, design intervention comprises the following distinct elements:

- Research assessment of customer requirements
- Concept development: translation of customer requirements into product or services, utilizing (among other things) innovation
- Concept validation: assessing concepts in the light of customer requirements, competing products, & manufacturing considerations
- Design resolution: testing and refinement of prototypes, with consideration of fitness for purpose, aesthetic appeal, and intellectual property issues.
- Productionisation: maximization of production quality and reliability, while minimizing production & distribution costs.
- Communication: development of marketing and branding to support the underlying product. (2003; 1)[2]

2 New Zealand Industrial Design Task Force report; (2005) Building a Case for Added Value through Design,

Research, science and technology play a crucial role in achieving these factors provided design is entrenched in them. Advanced countries are now capitalizing on exportable services, where they only design products and services and then have them manufactured in developing countries where labour and production costs are lower. While developing countries could be seen to be benefiting from manufacturing products designed elsewhere, they tend to be relegated to what could be termed "The muscle or physical based" while developed countries remain as the "brain or knowledge based". Allowing this model to prevail could result with what can be called "Eternal leaders" and "Eternal followers". Botswana needs to develop a sound knowledge-based industry if it is to survive the stiff competition stemming from globalization, with its own intellectual capital. Addressing the aspect of value added products by the marginalized communities, a humble and down to earth approach ideal. Design intervention in this research is understood as an activity related to identification, analysis and sustainable solution of problems and attainment of these solutions. It is regarded as an activity related to indigenous bamboo cane production, but not exclusively mass production. Design is perceived as a process which is not the sole domain of professionals, such as engineers, architects or professional industrial designers. In this thesis the term bamboo cane sector refers to small manufacturing units with little capital available, employing few workers, if any, depending mainly on family member. In general the units are managed by the owners/entrepreneurs themselves who also work in them. Often they depend exclusively on the business survival.

Botswana's indigenous craft sector

Globalization is linking areas spatially but disconnecting pasts and presents everywhere, Botswana is no exception. The informal sector in Botswana remains an activity cast in predominately rural matrix, whereas the market is increasingly urban if not global. In this sector the crafts people are familiar with the aesthetics and socio-cultural requirements of the clients. However, crafts people still practice traditional skills with primitive tools. They experience a myriad of problems with their crafts products. For instance, illiteracy rate is very high hence militates against communication and link to potential markets. This factor does not help their situation because it allows modern competitive cheaper products in local market. This view is supported by the United Nations Environment Programme (UNEP), TU Delft report that;"Developing economies have different attitudes towards product design as compared to developed economies. Some of the observed differences are:

- A tendency to design incremental improvements for existing products

- Concern with product appearance over product function
- Design based on a tradition of technology import rather than a tradition of invention or innovation
- A tendency not to design solutions that have no precedence in the market
- Lack of tools & experience to compare and evaluate design problems
- Difficulty in developing clear project briefs, (2006;39)[1]

Development through Sustainable Design Intervention
Design capacity must be viewed as problem solving endeavour in developing countries like Botswana. Such an intervention can help evaluate past solutions in terms of contemporary needs and help select and reject from tradition and contemporary experience. Despite Botswana's efforts to improve technology in communication, there are still gaps in awareness, information and exposure among crafts people. Crafts people are usually isolated and unaware of each other's ingenuity and skills that have been lost in one district that have revived or still in existence in other parts of the country. Due to limited access to relevant information, crafts people fail to modify or easily develop indigenous products to need new needs. This research attempted to generate awareness among crafts people of methods, techniques, materials, tools and processes that serve to create value through sustainable design capacity. There is a misconception among rural communities that design capacity is an activity for urban communities.

Design has an important role in ushering economic and social change that does not stop at creating a new or better product. Design plays an important role in encouraging environmentally sustainable and economically viable models for the informal sector. The significant role played by design intervention is encapsulated in the following definition offered Swedish Institute for Growth Policy that; .."Design is a creative activity whose aim is to establish the multifaceted qualities of objects, processes, services and their systems in the whole life cycles. Therefore, design is the central factor of innovative humanization of technologies and the crucial factor of cultural and economic exchange (2005; 22)".[2] It does empower marginalised groups where income generation, social mobilisation and community rehabilitation are greatly needed. Design professional and students triggered this process by collaborating with crafts people. National documents and monographs are crucial sources of references in order to reinvent or revitalise the informal craft sector. In Botswana, there is no or limited recording of crafts work and this has negatively impacted the development and preservation of crafts in Botswana.

Most crafts people are unable to maintain references close at hand and cannot access what the predecessors made before. They rely on memorising and repetitive manual work. If this deficiency is not tackled head on, there is a risk of losing heritage in terms of designs and traditions varnishing due to change and under-utilisation. This problem is compounded by the fact that, a number of craft traditions are oral traditions hence difficulty in documenting them. Therefore, for any design intervention to be implemented effectively, the study of traditions and understanding of constraints and parameters within which Botswana's crafts people operate.

The research established that traditional producers (crafts people) make products targeted at customers remote from their own and selling them in highly competitive markets. To curb these shortcomings, designers and student were assigned to help crafts people in dealing with market situations and reinventing their products to suit local markets. Sustainable design has to seek to regenerate local markets, which seem to be saturated with inexpensive imported goods. African designers need to intervene and provide design advantage to crafts products in order to make them more competitive in local markets. This concept is ideal because, designers exposed to local conditions, could merge design experience and education with the needs of local people, resulting in far more fruitful and long term collaboration. Sensitising customers is a critical aspect of sustainable design intervention. Sustainable design intervention aims at value addition by ensuring better earnings and empowering the crafts producers towards sustainable livelihood.

Change and Adaptation: Economic & Cultural Context

To ensure the economic survival of indigenous products in Botswana, the research focused on crafts preservation as rightly put in Swedish design policy that: "Growth will be dependent on the interplay between the old and new, within and between sectors and technologies, (2005; 16)"[3] The problem that normally arises is seeing economic and cultural viability as discrete options. Culture links indigenous products with crafts people. If the cultural element is taken away the link is broken. According Richie Molaosi: "Culture encourages innovation and experimentation but this likely to fail if the innovation is not accepted by people," (2007; 2)[4]. Therefore, external intervention should be carefully thought through to avoid de-contextualization. Many African designers exhibit weakness of designing products out of context. There is also a problem of copying traditional designs and displace them culturally,

3 Design for Sustainability; A practical Approach for developing Economies, UNEP report

4 Design for Innovation and Growth: A promising competitive concept in the future?, Swedish Institute for Growth Policy Studies

5 Kolmodin A., Pelli A., Design for Innovation and Growth; A promising competitive concept in the future?

6 Richie Moalosi, The impart of Socio-cultural factors upon Human-centred Design in Botswana, PhD thesis 2007

geographically and functionally. De-contextualisation has severe repercussions, and while environments and periods can be mixed, this must be done judiciously and with great care. The problem with most modern designs is that both judiciousness and care are exercised in terms of economics, not creativity. While there are no universal solutions, it should be emphasised that sustainable design interventions need to identify, preserve, and promote what is unique to Botswana indigenous products.

Conclusion

There are enormous possibilities for the exploration of indigenous craft products for designers and crafts people in Botswana. Integration of research efforts in design for social contract and economic growth requires understanding of culture, crafts people dynamics and utilisation of local available renewable materials such as bamboo, cane and reed. Designers and crafts people in Africa should collaborate and employ design intervention to envision new scenarios for economic diversification and sustainable development. This will go a long way in re-inventing the informal sector to boast local economy and meet global challenges. Design workshops and seminars helped create and visualise new products range. These presented opportunities from the rich fabric of crafts sector.

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Design programmes' responsiveness to economic, ecological and social imperatives: the case of University of Botswana

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Abstract

Having been established as one of the tools for economic and social development, design is instrumental in shaping the form of many epochs, economies, and cultures. The new emerging economies have an important part to play and would stand to benefit more from the design strategies that are more contextual to their circumstances, as well as addressing the world's economic, social and ecological problems. This paper analyzes, as a case study, Botswana's design context. It looks at how the University of Botswana design programmes respond to these dynamics. The authors argue that any programme that only satisfies the economic imperatives while ignoring the ecological and social dynamics cannot justify its existence in the modern world. The paper concludes by proposing strategies to make the programmes more responsive to the modern day sustainability challenges.

Keywords

Design programmes, Botswana, economic, social, ecological, development

Global and Local Factors that Shape Design Curriculum

There are many factors that influence the development of the curriculum including; economic, social and ecological imperatives. In case that some might be tempted to dismiss the above facts as mere 'rhetoric' devoid of

substance, Thackara (1997) points out that the winners of the European Design Prize had successfully mapped these imperatives, resulting in being more innovative.

Botswana is industrialising at a fast pace; in fact it is said to be one of the fastest growing economies in the world. It is reliant on diamonds, though there are diversification efforts. Furthermore with a capitalist system in place design has a possibility to flourish because; "Design without capitalism is like a car without an engine-it goes nowhere" (Heller 1992). Botswana has a dynamic culture, which is characterised by the quest for novelty and consumption patterns not much different from those of the industrialised world.

Industrial Design at the University of Botswana.

The University of Botswana (UB) offers two Bachelor of Design degrees, viz Industrial Design (ID), which produces graduates for the design and manufacturing industry, and Design and Technology (D&T), which produces secondary school teachers of design. The small nature of the industry needs the design graduate to have requisite skills not only in designing, but also in complementary areas such as engineering, manufacturing, entrepreneurship, and even marketing. Whilst it is not generally possible to train a single person in all these areas, the design curriculum of the University of Botswana is cognisant of the regional industrial climate and its graduate exigency. Both design programmes at UB (Figure 1) have a Science base, an Engineering foundation, a Design core, Business, general education for D&T and specialist design courses for the ID programme.

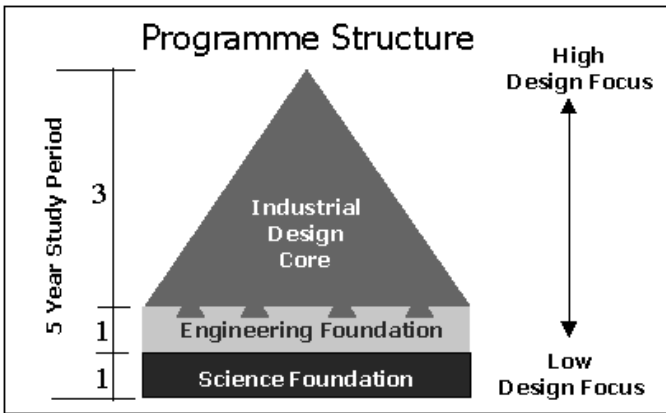

Figure 1. Structure of Design Programmes at the University of Botswana

Economic, Social and Ecological Imperatives

This section discusses how various courses offered by the design programmes at UB address the economic, social and ecological imperatives with the local context. Table 1-3 show various courses together with their objectives tailored to address the afore-mentioned challenges.

Economic Imperatives

Global realities cannot be ignored in designing a programme of study, more so in a globalised world of today. At the same time Woudhuysen (1998) brings to light the fact that a globalised economy is a challenge to designers.

Course	Objectives
DTB 300, IDB 400 Industrial Training	- Learn and use equipment in a safe and effective manner - Empower theoretical knowledge gained in class room. - Familiarize how to make products with due regard to time cost, designs quality and standards.
IDB/DTB 511&521 Major Project	- Use practical, intellectual and inventive skills of manufacturing a 3-dimensional design - Employ a range of planning, making, modelling and communication skills for making products - Design and produce a device, product, system or service - Conduct a reasoned analysis and evaluation of the final product.
IDB 523 Professional Practice	- Analyse the daily tasks of a Designer as a practitioner in industry - Identify professional, labour, legal, ethical and moral factors that govern design practice - Differentiate methods, strategies and techniques of operating a successful design practice - Identify problems that occur within a professional practice and their remedies

Table 1. Economic imperatives

The above courses indicate economic imperatives driven through practical project work where the student is simulating actual professional practice and having to come up with economically viable product deliverables. One important aspect of the above courses is the costing of the project, from conceptualization to production, so the designer has a good idea of the economic dimension of his work. The Professional Practice course outlines the theoretical foundation for varying operational conditions in the actual design world, preparing the designer for a coordinated management of all the informing factors for a successful design output. The economic imperatives are brought together in a practical context during the Industrial Training course, where the students are working under supervision of experienced designers on live projects, with direct economic implications.

Social imperatives

In line with this Balcioglu (1998) highlights that the role of product design in the post-industrial society needs to be reassessed and questioned. Margolin (1998) identifies the fact that the world is suffering from a structural problem and that design must play a significant role in enabling the world to attain an equilibrium model. In addition, Papanek, the most outstanding 20th century advocate of 'Responsible Design' emphasised the need for designers to respond to massive amounts of new knowledge from other fields about human responses to technological environments.

Course	**Objectives**
DTB 311 Design, Technology and Society	- Describe the social implications of design and of developing technologies - Explain the physical, social and psychological aspects of human beings in relation to the design of products.
IDB 313 History of Design	- Identify, analyse and critique various design movements, designers and products and to appreciate their impact on the society throughout human history. - Identify, analyse and critique some indigenous products which exemplify the evolution of design in Botswana and the region.
DTB 413 Special Human Needs	- Sensitise students to the needs of the handicapped, underprivileged and the aged in the society. - Understand a special human need context, identifying a real problem situation that may be solved by designing and making artefacts, services and systems.
IDB 512 Contemporary Issues in Design	- identify major issues of controversy in industrial design education, practice and society - evaluate new philosophies and theories which are a response to the contemporary environment.

Table 2. Social imperatives

The courses shown in Table 2 demonstrate how the design programme at the University of Botswana is attempting to address the same so that the graduates become sensitive to societal issues and problems. The expectation is that the graduates should develop a new paradigm shift on how to successful address social issues in their practice. The social imperatives range from society's needs, wants and opportunities and the underlying philosophy is to address social imperatives from the local context perspective.

Ecological imperatives

Manzini (1998) proposes a new way of rethinking product design for the information and sustainable society. He advocates change of consumption patterns rather than new design methods but proposes new types of products in the period of transition. Rams (1998) argue for new responsibility for Industrial Design so as to contribute to social and ecological sustainability.

Course	**Objectives**
DTB 415 Design for Sustainable Development	- Identify the relationship between rural ecological and social sustainability and design practice

DTB 524 Environmental Factors in Design	- Explain the nature of human environment and the need to preserve it. - Describe the effect of population growth and new materials and processes. - Explain the need for ecological balance and steps being undertaken. - Design environmentally friendly products.
IDB 414 Eco-Product Design	- Identify major environmental problems facing the planet earth as a consequence discrete products. - Critique various methods used for evaluating environmental performance of products and systems in the design phase. - Identify the various strategies, methods and techniques used by designers to create environmentally friendly products.
IDB 525 Packaging Design	- Explore and critique ethical and environmental issues pertinent to the design of packages.

Table 3. Ecological imperatives

Courses in Table 3 familiarize students with the demands and rigour of designing with environmental sensitivity, for a more sustainable world. The material covered including identifying the appropriate materials and resources, with least adverse effects to the environment, and employing the indicative best practices to maintain an ecological equilibrium and ecological ambience. It must be noted that the above courses are not only theoretical but some of them have provision for practical application of the theory gained into practical design projects.

Discussion

The two design programmes have been running for about six years and they are being reviewed so that they are in line with the current dynamics and the mission and vision of the University of Botswana. The University of Botswana has set-up eleven graduates' attributes through its teaching and learning policy. The attributes are responsive to the current challenges in Botswana and the region. Each student upon graduation should have attained these attributes in order to face the challenges posed by economic, ecological and social imperatives. The revised programmes have four strands, which are linked to these attributes as follows:

Strand	**Graduate Attribute**
Design Technology (Courses in this strand cover materials, processes and technology)	- Entrepreneurial and employability skills - Organizational and team work skills - Critical and creative thinking skills
Design Communication (Graphics)	- Information and communication technology knowledge and skills - Communication skills
Design Practice (Projects and internship)	- Self-directed, long life learning skills - Critical and creative thinking skills - Cross-cultural fluency - Innovation skills - Organisation and team wok skills
Design Theory (Theories of design)	- Accountability and ethical standards - Interpersonal skills - Social responsibility and leadership skills - Research and information literacy

Whilst most industries in Botswana may be a single commodity producing company, the role of the designer in the same has mostly been multi-faceted, owing to the generally small to medium size profile of the industry, and not affording the variegated professionals needed for different sectors. This is a common trend in the small and medium industries in most of the developing world.

Conclusion

Given Botswana's context and global trends, the Designer or Design Educator of the 21st century must not be 'appearance designers'. It is believed that for a Designer to be having an impact in Botswana, and indeed the whole of Africa he/she must not only be familiar with the cosmetic aspects of a product but equally conversant economic, social and ecological contexts. The revision of the design programmes at the University of Botswana was in line with

the local and global challenges posed by social, economic and ecological imperatives. The underlying philosophy is to equip students with the necessary skills to face these challenges in the work environment and to be sensitive to society's needs in a sustainable way.

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Designing with the enemy: poster diplomacy via Seattle-Moscow-Tehran-Havana

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Abstract

Designing with the Enemy is an examination of a three-part curatorial project by Daniel R. Smith that has united the city of Seattle with the capitols of nations often at odds politically with the United States—namely Cuba, Iran and Russia. Focusing on the poster as cultural expression, this series of city-to-city exhibitions brought contemporary work of these disparate cities together through thoughtful exchanges shared with public at large.

Keywords

Social Activism, Responsibility, Cultural Diversity

Whose Enemy?

For a brief moment following the events of September 11, 2001, there was an outpouring of heartfelt, grassroots patriotism in my country, including my city of Seattle, famous as a liberal, left-wing corner of the U.S. In my city, Seattle, the remote, liberal capitol of the United States, there was a brief moment of heartfelt, grass roots patriotism for our country following the events of September 11, 2001. We felt for those who died and the rescuers who tried to save them. The world responded, too, with an outpouring of sympathy, sharing our grief and shock. It seemed this tragedy contained an opportunity to bring the world together through our common reaction and desire for global justice. Instead, our President embarked on a public relations campaign to whip-up support for his plan to attack Iraq, a country unconnected to the hijackings. We entered an era of excuses, misdirection and outright lies from the Bush administration about who was responsible and who deserved punishment. The result was to obscure the connections we felt and deepen divisions.

"Either you are with us, or you are with the terrorists."

George W. Bush, September 20, 2001
During Bush's two terms in office, "the enemy" became anyone our president said it was. Blame was directed towards those he had family scores to settle with; who told the truth about manipulated intelligence; and who stood in opposition to war. New enemies and old adversaries were lumped together in the famous "Axis of Evil" speech. The administration seemed to have an endless supply of straw men—targets presented to deflect blame and focus public anger.

The face presented by the Bush administration was not representative of my country or my city in particular. Americans have a deep interest in peace and the world beyond our borders—an interest undermined by the fear-inducing tactics of our president who intentionally incited the worst in our citizenry to further his agenda. We entered a low-point in American diplomacy, the administration supplanting diplomacy with threats and military force, touting the idea that dialogue with our enemies is ineffective, a sign of weakness. Witnessing all this in Seattle, our feelings of patriotism quickly waned, even as much of the country, believing Bush's war-time rhetoric, elected him to a second term in 2004.

The Seattle-Havana Poster Show

In 2006 I traveled to Cuba through an exchange program established by the American Institute of Graphic Arts (AIGA). For an American, any trip to Cuba is an act of political defiance. But I had stereotypical ideas about life there. While my image of vintage American cars crowding the roads was accurate, I had ideas about Cuban graphic design that were out dated. I pictured state-sponsored propaganda frozen in the 1960s or 1970s—a golden era of Cuban political silkscreen posters—extolling the revolution and its heroes. Propaganda exists in Cuba today, but it is created by anonymous designers with little attention to craft, focusing wholly on shock value. In stark contrast to this work stood the exciting output of young, urban designers of Havana.

In Havana, individuals and collaborative groups were creating silkscreen posters for events that were almost never distributed as true advertising—they were made purely for the love of design. They were creating posters for friends, for events, for their portfolios, for anyone who would pay attention. The content was deeply personal, individualistic, not—as I imagined from outside— dominated by some collective idea of design controlled by the state. This was a Cuban "Do-It-Yourself" aesthetic and initiative in action; a close parallel to the punk-inspired attitude that dominates rock concert poster production in Seattle.

I was inspired to do something for Seattle and Havana—to share our work publicly, open eyes to our common ideas symbolized by these posters. A collaborative project would foster a sense of connection between our two peoples and help undermine Bush's attempts to demonize Cuba. Given strong parallels between poster designs in Havana and Seattle, I chose to assemble a joint show. Fortunately I involved the right people from the start as co-curators, Jacob McMurray of Experience Music Project in Seattle, Pedro Contreras Suárez of el Centro de Desarrollo de las Artes Visuales (CDAV) and Pepe Menéndez at Casa de las Américas, and many extraordinary things fell into place. Bumbershoot, Seattle's largest music and arts festival, loved the idea and the show opened there in September 2007. Attendance was estimated at 8,000 – 9,000 people in four days. The reception was clearly enthusiastic—many people were as excited as I was to see connections in the work that humanized the other side of the political divide.

The Seattle-Havana Poster Show consisted of 40+ silkscreen posters. Most of the posters were exhibited as pairings—one from Seattle, one from Havana—hung together to accentuate their similarities. Similar form, content and color guided assembly—there was a pair of crowing roosters; clawing monsters, both real and abstract; and the frenetic energy of a buzz-saw matched by blood-spurting, gnawing rats. Additionally, four designers were selected to have their own mini-exhibits, also as contextual pairings. The godfather of Seattle concert posters, Art Chantry was across from one of Cuba's most famous designers, Eduardo Muñoz Bachs. One of Seattle's most notorious young innovators, Devon Varmega, showed his illegible concert posters across from the illustration-driven works of the young, surreal, Havana collective Grupo Camaleón. In its Seattle premiere, a surprising number of visitors had difficulty distinguishing the American posters from the Cuban, despite the fact that one side was in English and the other in Spanish. At first glance, the work seemed to come from the same space, the same heart.

Soon after the Seattle premiere, CDAV's Contreras received permission for the exhibit to open in his renovated museum in old Havana. April 2008 saw the opening of the first city-to-city exhibit from the U.S. hosted by a major art institution in post-revolutionary Cuba. The exhibits required a year and a half of planning, three trips to Cuba for myself, hand delivery of all the posters, and overcoming unforeseen issues of Cuban life—like CDAV's last minute request to borrow a box of ordinary binder clips from another museum because they lacked the funds to purchase them. Nine U.S. designers in attendance hand carried 400 full-color exhibit catalogs from Seattle to distribute free at the opening. At the end of the exhibit, all Seattle posters were donated to CDAV for their permanent collection. Through this process, we demonstrated that despite travel

restrictions, despite the U.S. embargo and an administration hostile to cooperation and exchange, we could act courageously, in the spirit of friendship, to produce something of lasting inspiration.

The Seattle-Tehran Poster Show

Organizing the exhibits between Seattle and Havana was a significant challenge, but I wondered if the idea could be extended to other countries. Could the project be made even more relevant in terms of U.S. politics and more extreme in the divide it attempted to bridge? I considered the Islamic Republic of Iran. I had no idea if a U.S. citizen could go there, but after a cursory internet search of "Tehran" and "graphic design" I knew I had found my next destination.

The city of Tehran is exploding with talented graphic designers producing beautiful, experimental work. A U.S.-based peace organization, the Fellowship of Reconciliation (FOR), coordinates frequent visits of Americans interested in citizen-to-citizen diplomacy to Iran. FOR encourages participants to research Persian politics, culture and history in advance of their trip and, upon return to the U.S., actively engage their home communities by sharing their experiences. This fit perfectly with the intention of my exhibit, so with the travel arranged, the only obstacle to overcome was internalized fear. At the time, the Bush administration was playing up American fears of Iran, accusing it of supplying explosives to anti-American insurgents in Iraq and stoking fears of Iran's potential nuclear threat. Proof to back these accusations was thin, but given how the administration manipulated its way into war with Iraq, there was little doubt that the anti-Iran rhetoric was a possible lead-up to war.

In anticipation of the trip, I tried to conjure up an image of Iran, but I found myself unable to picture the city of Tehran or its citizens. Small wonder—the images Americans hold of Iran were formulated in 1979 with the Islamic Revolution and reinforced ever since by politicians and media who present a sadly incomplete portrait. Our media recycle vintage footage of the 1979 hostage crisis at the U.S. embassy in Tehran, or show us Iran's president Ahmadinejad giving fiery speeches, but never current images of downtown Tehran, or interviews with average Iranians. Imagine my surprise when I arrived in Tehran and found a bustling, European-style capitol of people friendly towards America and Americans. Strangers in the street, curious about this foreigner, often could not contain their excitement at meeting an American. The effect was surreal—at home Bush was insisting "all options are on the table" in dealing with Iran, including nuclear strikes—while in Tehran strangers asked, please, can they have a photo taken with me.

Despite limitations on my activities in Tehran, I was able to meet with several talented designers, the greatest response being from a loose association of young designers, recent graduates of Tehran University. Born in 1979 or later, they grew up knowing only post-revolutionary Iran. Their generation has struggled to create a new graphic identity. "Graphic design" itself is an idea imported from the west. Its jargon has no clear equivalent in Farsi, so English words such as "posters" and "typography" have become the standard in their industry.

Persian typography, once seen internally as an inhibitor to Iranian design, has become their cutting-edge area of exploration. Under the guidance of famed Tehran University professor Reza Abedini, they have found something "ownable." The flexibility of this new Persian typography is fascinating—Farsi script is more than simple type in their hands, it is raw material. In their work, the word is image, the image is fluid, and Roman characters seem rigid, absolutely static in comparison. While representations of humans and animals are not banned in Iran, as in some neighboring countries, the number of purely typographic posters produced speaks to concern in this area. Also, while no formal body exists to censor their work, the internal political situation is difficult to navigate. As a designer with almost 30 years of experience in post-revolution Tehran, Abedini states "One develops a sense of what is acceptable" to the theocracy in terms of subject matter and imagery. All of this, on the surface, would seem to set the world of Iranian graphic design distinctly apart from the wide-open genre of rock posters in Seattle.

To produce a second exhibit, matching suitable, relevant posters from my socially liberal outpost of the U.S. with the capitol of the Islamic Republic of Iran might seem an improbable task. Fortunately, I befriended a talented young designer Iman Raad in Tehran, who became co-curator of The Seattle-Tehran Poster Show. Raad collected the Iranian half of the exhibit, while I simultaneously assembled the Seattle posters. I had a sense of the work that might mesh with the Persian posters, but I worked blindly until the Iranian half of the exhibit arrived in Seattle.

The process of matching up posters from Tehran and Seattle was magic. The combinations were surprising, accidental, and beautifully suggestive. I had gathered posters that skewed toward the more ornate and focused on typography than those in the Cuban show, in hopes that they would combine well with those from Iran. A pair like Raad's "The Birth of Typography, Lecture by Reza Abedini" and Craig Updegrove's "The Blood Brothers" reveals an underground connection between ancient Farsi script and hand-drawn, American punk. The shocking visual similarities between Justin Hampton's concert poster "Earl Greyhound" and Homa Delvrai's "Hafez" are amplified by the fact that young Iranians gather at the ancient Persian poet's tomb much as Americans seek out Jimi Hendrix's

grave in Seattle or Jim Morrison's grave in Paris. Exhibit feature walls included work by Professor Abedini across from Robynne Raye, Cornish College professor in Seattle, and the male duo Ames Bros (Barry Ament and Coby Schultz) across from the Iranian, female, design duo of Soha Shirvani and Reyhaneh Sheikhbahaei.

The Seattle-Tehran Poster Show premiered at Seattle's Bumbershoot, in August 2008. The reception was even larger than for the Havana exhibit the year previous, with an estimated audience of 10,000 people in 4 days. The amount of local and national media coverage generated, and the excitement expressed by Seattleites upon seeing the work from Tehran, revealed a deep desire of my country's citizens to know more about this "enemy." This first exhibition of contemporary Iranian posters anywhere in the U.S. put a human face on a country our government was aggressively demonizing. In a small, but potent way the exhibit worked to counteract the rhetoric of the Bush administration at a critical time.

The Seattle-Tehran Poster Show has not exhibited in Iran. Sadly, the political climate has worsened for Iranians who maintain close contacts with Americans. My co-curator has suggested waiting to attempt the exhibit after Iranian presidential elections in June, 2009.

The Seattle-Moscow Poster Show

Given the success and the momentum of the exhibits in Seattle, I picked one more destination to end the series as a triptych. I chose Moscow for our historic political divide that once seemed unbridgeable. Cold war fears of the Soviets that permeated the U.S. still color American perceptions of Russia. In the recent past, tensions rose briefly during their invasion of Georgia and in the U.S. presidential campaign, the Republican party recalled old images of Russia and its dictators to bolster the thin foreign policy credentials of Alaska governor Sarah Palin (humorously with Palin claiming "…when you consider even national security issues with Russia as Putin rears his head and comes into the airspace of the United States of America, where — where do they go? It's Alaska.") Current political tensions between the U.S. and Russia are nothing compared to historic levels, but the idea of working with a city that, until recently, was very difficult for Americans to visit, seemed an appropriate way to finish the series.

The Seattle-Moscow exhibit was simpler to coordinate and more open in terms of content than Havana or Tehran. But I expected some aspect of Soviet rule to effect the work of Russian designers—perhaps an unwillingness to criticize the Soviet era because it was so oppressive. The designers I met are instead indifferent to Soviet imagery. New York 1980s graffiti holds more power with the current generation of Russian designers than an image of Lenin, an image that today is pure kitsch, absent the emotional and political power one would expect of an image of Castro in Havana, even 20 years from now. In fact, Seattle designers seem more entranced by the power of Soviet-era graphics, returning the favor of cross-cultural fascination; see for example the Ames Brother's posters for the band Linkin Park and Pearl Jam.

Given the relaxation on both sides, The Seattle-Moscow Poster Show (opened September 2, 2009, Bumbershoot, Seattle) differs from its predecessors. Instead of avoiding political content, the exhibit explores our shared political history. One example is Anna Naumova and Igor Gurovich's poster for the Sergei Kuryokhin International Festival in 2002. Executed shortly after 9/11, the poster for an experimental Moscow music festival presents a typographic silhouette of the twin World Trade Center towers in New York with a crudely drawn airplane hitting the first tower. The image was shocking to me when I discovered it. It seemed odd that a Russian designer would employ the image as advertising for anything. As an American, I realized I felt a sense of ownership over this image. Naumova's explanation of her intent reflected the ideals that motivated the exhibit series. "This tragedy was not an American tragedy. This was a tragedy for the whole world." Seen in that light, the poster is an artistic expression of grief, an expression of compassion for those on the other side of the political divide. The real tragedy is that the world suffered through a U.S. administration unsophisticated enough to see the potential for unity in the aftermath of 9/11 or to express compassion, in the way these designers have, for those some would call "the enemy."

Diseño como factor de desarrollo socialmente sustentable

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Resumen

El diseño desempeña un rol fundamental para impulsar unidades productivas con vocación de manufactura de productos utilizando tecnologías tradicionales, junto con diversos especialistas (interdisciplinar) y diversas instancias (multilateral). Se presenta como caso de estudio la Obsidiana, desarrollado en 6 talleres de la Región Valles del Estado de Jalisco.

La definición de estrategias de manera conjunta con diversidad de actores confirma el impacto del diseño a grupos sociales mediante sus organizaciones productivas y el aprovechamiento de recursos locales disponibles, afirmando el diseño su sentido de relevancia y presencia como factor de desarrollo socialmente sustentable modificando situaciones adversas, en áreas de oportunidad.

Palabras Clave

Diseño sustentable, diseño social, diseño local

Introducción

El diseño como factor de desarrollo socialmente sustentable desempeña un rol fundamental para impulsar los recursos existentes en las unidades productivas denominadas PYMES, especialmente en aquellas con vocación de manufactura de productos utilizando tecnologías tradicionales. Un número considerable de las empresas con tales características se localizan en zonas rurales transformando materias primas locales en artesanías.

Para ejemplificar la generación de soluciones con la intervención del diseño se presenta el caso de estudio de la Obsidiana desarrollado en 6 talleres de la Región Valles del Estado de Jalisco con el objetivo de mejorar las condiciones de trabajo, elevar su productividad y sobre todo, su competitividad, para incrementar la retribución obtenida y mejorar la calidad de vida de los involucrados en la actividad productiva, de manera directa y de los habitantes de las zonas donde se extraen y trabajan estos materiales, de manera indirecta; utilizando los recursos, saber hacer y capacidad instalada en la región a través de proveedores existentes en otros sectores.

Se plantean criterios y lineamientos para el desarrollo de proyectos que inciden en situaciones adversas (situación inicial) para su transformación en mejores condiciones sociales (situación ideal) con la participación de diversos especialistas (interdisciplinar) y diversas instancias (multilateral).

La aplicación desde otros grupos sociales de los conocimientos generados, posibilita el traslado de metodologías, utilizadas a lo largo del proyecto como fórmula que impulse el desarrollo de diversas regiones del Estado y reducción de los índices de emigración al generar opciones para quien elija permanecer en su localidad de origen y permitir el desarrollo socialmente sustentable en zonas rurales para impulsar actividades productivas tanto artesanales como agroindustriales.

El contacto, gestión y definición de estrategias de manera conjunta con diversidad de organismos gubernamentales, no gubernamentales y el trabajo compartido participativo con los artesanos -con transferencia de conocimientos- confirma la vocación universitaria de servicio a la comunidad por impactar favorablemente a grupos sociales mediante sus organizaciones productivas y el aprovechamiento de recursos locales disponibles.

Consideraciones

Para ubicar el presente trabajo es pertinente apuntar que nuestro país, se compone de diversos México's y que el impacto social del diseño tiene múltiples facetas.

México tiene diversidad de rostros entre los que destacan los 3 siguientes:

1. El México globalizado que busca, consume y desecha productos de última generación, personalizados, que estimulan las emociones. En este caso el diseño atiende primordialmente lo inmaterial, lo formal, lo de moda, la alta tecnología, lo comercial.
2. El México tradicional que mantiene los sistemas de producción, administración y de negocios sin mayores cambios (generalmente PYMES y talleres). El diseño se centra en el desarrollo de productos, incorporación de nuevas tecnologías, mejora de procesos, reducción de costos, presentación en el mercado y demás.
3. Y el México atrasado que sufre de abandono, que la globalización parece no importarle pero sufre sus

consecuencias; representado por lo rural, el campo, los indígenas, la actividad agrícola y artesanal, lo que Bonfil Batalla denomina el México Profundo. Los apoyos son pocos o insuficientes (paliativos) y sus formas de vida se encuentran en franco deterioro pero mantienen los modelos de relación con la naturaleza de manera sustentable. Actualmente sus opciones para asegurar un ingreso económico se reducen a emigrar a las grandes ciudades, conformando los cordones de miseria o a los Estados Unidos, bajo las condiciones ya conocidas.

En este México, el diseño tiene la oportunidad de tejer posibilidades de desarrollo socialmente sustentable basado en el rescate de los valores histórico-culturales, actuando desde lo local para impactar lo local y lo global, ofreciendo posibilidades de permanencia en sus lugares de origen.

La implementación de políticas y programas de diseño a nivel gobierno debe integrar las posibilidades que presentan los diferentes Mexicos; es imperativo incorporar los valores de la innovación tecnológica y las tecnologías tradicionales con la participación interdisciplinar y multilateral para beneficiar a los distintos estratos de la población productiva en los diversos contextos, tanto urbanos como rurales.

A través del desarrollo de actividades productivas en zonas diversas y no exclusivamente en las zonas urbanas y destinos turísticos, se beneficia el incremento de la economía, de manera simultánea, se proporcionan mayores oportunidades de elevar la calidad de vida, reducir la pobreza, incentivar la descentralización y mantener una relación sustentable con el entorno. El presente trabajo aborda aspectos y proyectos relacionados con éste México.

El impacto social del diseño tiene múltiples facetas; considerando al diseño como:
1.Factor de desarrollo y generación de empleo; valor agregado; gestor de la innovación; interpretador de información; promotor de valores histórico-culturales; interlocutor productivo y medio ambiente; enlace de posibilidades y necesidades; resolución de problemas
2.En este caso el enfoque principal del impacto social del diseño se orienta a ofertar oportunidades interviniendo actividades productivas para mejorar las condiciones de vida de los habitantes de zonas fuera de las grandes ciudades o concentraciones urbanas.

Jalisco. Marco de interacción

Las acciones definidas para el diseño como factor de desarrollo socialmente sustentable se enmarcan en el Plan Estatal de Desarrollo de Jalisco, PED 2030, que plantea el impulso al diseño como factor de desarrollo económico y social, incluyendo estrategias y acciones en varios de sus programas para apoyar los aspectos de generación de empleo, mejora de condiciones ambientales y desarrollo sustentable. En el PED 2030 se señala:

Asignaturas para el futuro

Mejorar la calidad de vida y fortalecer las capacidades y el tejido social. Impulsar e incentivar a empresarios y emprendedores. Integrar cadenas productivas y generar valor agregado a productos jaliscienses. Descentralizar las inversiones hacia las regiones de Jalisco y garantizar la sustentabilidad en aprovechamiento y preservación de recursos naturales

Visión Jalisco 2030

Gente optimista sobre su futuro, en donde los retos se convierten en oportunidades. Estado donde comunidad y gobierno trabajan juntos. Estado altamente competitivo que impulsa la innovación, el diseño y el desarrollo tecnológico. Cadenas productivas que velan siempre por el desarrollo sustentable. Logro del desarrollo del estado de manera participativa y equitativa.

Principales Políticas para el Desarrollo del Estado

Desarrollo regional y equitativo con especial énfasis en la infraestructura productiva del campo y la sustentabilidad del medio ambiente. Innovación, creatividad y nuevas empresas de alta tecnología, con énfasis en el financiamiento y la mejora regulatoria para la micro y pequeña.
Modernización de la industria, comercio y servicios tradicionales con especial énfasis en la promoción del turismo de los productos de Jalisco a nivel nacional e internacional.
Uso y gestión sostenible del agua, con énfasis en el fomento a la cultura del aprovechamiento racional y eficiencia de los servicios en zonas urbanas y rurales.

Estrategias

Dar valor agregado a los productos con preferencia en mercados más rentables y promover el financiamiento al desarrollo productivo de las artesanías.
Propiciar la creación de centros regionales de diseño e integrar centros inteligentes de negocios regionales, que permitan la vinculación productor-universidad-gobierno con el propósito de hacer eficiente la producción, comercialización y apertura de mercados nacionales e internacionales.

Interdisciplina Y Multilateralidad (I&M)

La manera en que el diseñador puede participar en proyectos productivos para impactar favorablemente (incidir) en las condiciones económico-sociales de alguna localidad y comunidad, requiere de la conformación de equipos multilaterales e interdisciplinarios que, aprovechando las

condiciones existentes, aporten las diferentes posibilidades de transformación de la realidad de manera conjunta y articulada (co-incidencia), buscando generar más y mejores fuentes de empleo, opciones más allá de la emigración de los lugares de origen, tejer redes de colaboración local; y en su conjunto, mejores niveles de vida de los grupos sociales involucrados.

Objetivos

Los objetivos particulares al desarrollar este tipo de proyectos son, principalmente, integrar a los trabajadores de productos similares y a los participantes en la cadena productiva correspondiente en grupos de trabajo sólidos para compartir compromisos y beneficios que fortalezcan su presencia en el mercado, al minimizar los costos de participación en plazas distintas a las locales; generar una cultura empresarial, que permita elevar el ingreso por el trabajo invertido; fortalecer la capacidad de producción, que generalmente se limita a la posibilidad de la participación individual o familiar; considerar los principios del comercio justo, que retribuye al trabajador responsable de la materialización de los productos la remuneración acorde al esfuerzo y esmero invertido; favorecer la participación en exposiciones especializadas en la venta a mayoristas, con el apoyo de elementos de imagen colectiva-participativa, y catálogo común de ventas, que establece especificaciones y control de calidad acordados por los miembros del grupo; desarrollo de productos y elaboración de prototipos que rescatan los valores histórico-culturales a la vez que aportan principios innovadores.

Factores estratégicos a considerar:

Rescatar los valores histórico-culturales de la región y localidad; Impulsar el mejoramiento del saber hacer heredado por la comunidad; Aprovechar los elementos y materiales característicos de la localidad; Generar compromisos e impulsar acciones de organización colectiva; Innovar productos aprovechando la capacidad instalada y producción vigente; Diversificar los mercados meta aprovechando recursos locales y regionales; Incorporar las actividades productivas de la localidad al aportar soluciones; Implementar talleres de diseño participativo con todos los actores; Memoria del proceso: método para organizar intervenciones futuras.

Condiciones

La experiencia ha demostrado que para llevar a cabo proyectos de participación del diseño, en co-incidencia con otras disciplinas (interdisciplina) y sectores (multilateralidad), se logran mejores resultados si se cumplen ciertas condiciones previas a la intervención del equipo de trabajo. Entre las condiciones que deben preexistir, se han identificado las siguientes:

Comunidad organizada en grupo, asociación o cooperativa, de frente común y con representatividad jurídica; Autoridades con la disponibilidad y el compromiso de mejorar las condiciones laborales y fiscales; Instituciones orientadas a la promoción de mejores condiciones sociales que aporten personal capacitado; Programas que articulen las posibilidades de participación múltiple con esquemas de apoyo financiero; Consultores especialistas en administración, organización grupal, diseño, producción, capacitación, mercadotecnia, ventas, etc.; Individuos comprometidos con los objetivos y la disposición de intentar nuevas maneras y relaciones; Valores regionales basados en el saber hacer y la elaboración de productos representativos únicos; Universidades y centros de Investigación dispuestos a desarrollar proyectos de resultados tangibles.

Impacto
Si se cumplen las condiciones, se definen las estrategias adecuadas y se desarrollan los trabajos correspondientes a cada instancia involucrada, la generación de soluciones correspondientes a las áreas de intervención del diseño, pueden impactar favorablemente los siguientes aspectos:

Empleo: creación de nuevas fuentes de empleo e incremento de horas dedicadas a la actividad artesanal; Ventas: aumento del volumen de ventas vía contactos y mejor presencia colectiva en el mercado; Producción: reducción de tiempos en la elaboración de piezas y aumento del volumen de producción; Mejora en las condiciones de trabajo: mediante la adquisición y desarrollo de equipo y maquinaria, con evidentes ventajas sobre la anterior; Disminución del impacto ambiental: con la reducción en el consumo de combustibles para el traslado de materias primas y producto terminado.

Estudios de caso

Con la exposición de diversos casos se ejemplifica cómo los principios descritos con anterioridad se ponen en práctica al desarrollar proyectos de participación interdisciplinaria y multilateral, señalando, en cada caso, los productos de diseño generados para enfrentar la situación a ser modificada. Así mismo, se enlistan las diversas instancias involucradas, la interrelación con el grupo interlocutor y los diversos actores participantes; las características particulares del caso, y del contexto; los objetivos a ser alcanzados; las estrategias reguladoras para el desarrollo de las actividades y los avances en el logro de las metas.

Los primeros casos son presentados de manera sintética, para mostrar de manera más detallada el último caso referente al trabajo en Obsidiana por encontrarse en pleno

desarrollo y cuyo proceso sigue abriendo muchas posibilidades. Se presentan los siguientes casos:

- Raicilla: Bebida elaborada de agave silvestre con técnicas y equipos tradicionales, Mascota, Jalisco
- Miel: Miel de abeja para exportación, Comité Apícola Peninsular: Campeche, Yucatán, Quintana Roo
- Huarache: Producción artesanal de calzado utilizado desde época pre-hispánicos, en Jojutla, Morelos
- Artesanías: Productos de 8 grupos indígenas, Asociación Manos Mexicanas Guadalajara, Jalisco.
- Equipal: Mueble tradicional mexicano de la zona de Zacoalco de Torres, Jalisco
- Obsidiana: Artesanía en piedra con técnica ancestral en 6 talleres de la región Valles en Jalisco

Multilateralidad

Generalmente las instancias involucradas en los proyectos son de corte gubernamental, en los 3 niveles: federal, estatal y municipal; universidades en esquemas diversos de servicio social, prácticas profesionales y centros de investigación; como son:

Gobierno de los Estados en cuestión; Secretaría de Economía de la República Mexicana, SE; Secretaría de Promoción Económica del Estado de Jalisco, SEPROE; Secretaría de Desarrollo Rural, SEDER; Presidencia Municipal del Ayuntamiento en cuestión; Universidad de Guadalajara, UdeG-CUAAD; Instituto Tecnológico y de Estudios Superiores de Occidente, ITESO; Fondo Estatal para la Cultura y las Artes, FECA; Consejo Nacional para la Cultura y las Artes, CONACULTA,

Interdisciplina

Los consultores participantes son de diversas disciplinas y especialidades, tales como:
Organización empresarial (ADOMUS); Mercadotecnia (ITESO); Promoción y ventas (GDO CANO); Historia video-oral (COLECTIVO BA); Diseño de comunicación visual y desarrollo de productos (GRUPO DISEÑO); Innovación Tecnológica y protección de la propiedad industrial (LITED UdeG)

Conclusiones

Además de señalar las ventajas y retos que implica llevar a cabo proyectos productivos, donde el diseño desarrolla sus actividades de generación de mensajes y productos como medio para la modificación de situaciones, se destaca cómo el diseñador, al considerar nuevas maneras de vincularse con el "cliente", responde a la demanda específica de su disciplina mediante un marco "ampliado" del proceso de diseño y requiere del desarrollo de nuevas habilidades y actitudes.

Esto pretende iniciar la construcción del modelo de referencia para proyectos similares que se encuentren en la búsqueda de un diseño: interdisciplinario y multilateral, no sólo por el enfoque de los productos desarrollados sino, sobre todo, por las posibilidades que genera para los individuos dedicados a la actividad productiva en cuestión, sus familias y la comunidad a la que pertenecen al impactar favorablemente en las condiciones de la localidad en un marco de desarrollo sustentable.

El diseño toma así sentido de relevancia y presencia como factor de desarrollo socialmente sustentable, implementando estrategias para la modificación de situaciones adversas, en áreas de oportunidad.

Enfoque temático para la educación del diseño: Diseño y Responsabilidad Social

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Resumen

Los profesionales del diseño deben de ser potenciales agentes de transformación de la sociedad, para hacerla más humana, más justa y más democrática. Dentro de estas exigencias, pareciera muy apropiado el transformar el paradigma del profesional dentro y fuera de la academia: llevarlo del papel de profesional / emprendedor. Diseño Industrial en la Universidad Rafael Landívar, enfoca la educación del diseño por medio de temáticas, mismas que responden, primero a la síntesis del diseño (poner en práctica los conocimientos de cursos del mismo ciclo, en la asignatura de proyecto) y segundo, a la visión de poder formar futuros profesionales en diversas ramas de desempeño laboral.

Palabras clave

Educación, Diseño, Responsabilidad, Social ,Temática

Introducción

Víctor Papanek planteó que los diseñadores y los profesionales creativos tienen su parte de responsabilidad social pues su actividad puede implicar cambios en el mundo real, según hagan buen o mal diseño. Papanek escribe sobre diseño responsable; por ejemplo, los diseñadores pueden contribuir a diseñar productos más ecológicos, seleccionando cuidadosamente los materiales que utilizan o puede diseñarse para satisfacer las necesidades antes que para satisfacer deseos; además, un diseño responsable debe ocuparse de proyectar para el Tercer mundo. Los diseñadores tienen responsabilidad sobre las opciones que hacen en los procesos del diseño.[1]

Víctor Margolin contribuye al desarrollo de la definición del diseño social / Diseño para el Desarrollo, como aquella actividad productiva que intenta desarrollar el capital humano y social al mismo tiempo que productos y procesos provechosos; así el diseñador debe prever y dar forma a productos materiales e inmateriales que pueden resolver problemas humanos en amplia escala y contribuir al bienestar social. Esta forma de pensar está siendo construida por las corrientes que ponen el énfasis en el diseño social. En esta visión el diseño social / Diseño para el Desarrollo es una actividad profesional y económica, por eso no se debe enmarcar en el mundo de la caridad ni del trabajo voluntario, sino que debe ser vista como una contribución profesional que ha de tenerse en cuenta en el desarrollo económico local[2].

Los profesionales del diseño deben de ser potenciales agentes de transformación de la sociedad, para hacerla más humana, más justa y más democrática. Esa capacidad de transformación de la sociedad, obliga a que se enfatice la formación de valores éticos y morales, con una actitud orientada al juicio crítico y a una conciencia humana y social para la toma de decisiones a cualquier nivel. Dentro de estas exigencias, pareciera muy apropiado el transformar el paradigma del profesional dentro y fuera de la academia: llevarlo del papel de profesional / emprendedor - un diseñador que sea capaz de generar empresas, microempresas y proyectos con una base tecnológica que propicie la innovación. Es en este sentido que la idea de la investigación como una de las bases de este nuevo modelo del diseño comienza a tener sentido. En función de lo anterior y de forma particular, en cuanto al diseño, se imponen algunas otras consideraciones. Literalmente, la Misión de la Universidad Rafael Landívar proclama el deber de "responder a las demandas de Guatemala como país multiétnico,... del desarrollo económico y social sostenible... y de apertura crítica a las corrientes contemporáneas de la globalización...". Se puede destacar algunos puntos para ejemplificar la medida en que el perfil del diseñador puede ajustarse a la Misión Landivariana.

El programa de Diseño Industrial de la Universidad Rafael Landívar, enfoca la educación del diseño por medio de temáticas. Dichas temáticas, responden primero a la síntesis del diseño (poner en práctica los conocimientos de cursos del mismo ciclo, en la asignatura de proyecto) y segundo, a la visión de poder formar futuros profesionales en diversas ramas de desempeño laboral.

Es así como, para la enseñanza del diseño, en la URL, los cursos de proyecto tienen las siguientes temáticas:

1 Papanek, Victor (1984): Design for the Real World. Academy Chicago Publishers. Completely Revised Second Edition.

2 Margolin, Victor (2002): The Politics of the Artificial. Essays on Design and Design Studies. The University of Chicago Press. Chicago and London.

Proyecto 1	Producto como Forma
Proyecto 2	Producto como función
Proyecto 3	Construcción / Despiece
Proyecto 4	Diseño y Desarrollo
Proyecto de Pre Grado	Producción
Proyecto 6	Diseño Sustentable
Practica Profesional y/o Proyecto Social	Diseño Estratégico
Proyecto de Grado / Tesis de Grado	Proyecto de Graduación

Se presentará el énfasis del Diseño y Responsabilidad Social en el trabajo realizado en las asignaturas de Proyecto 4 y Práctica Profesional.

Responsabilidad Social: Proyecto 4 / Diseño y Desarrollo

Antecedentes y Estado actual de la Artesanía en Guatemala

Durante los últimos años, el sector artesanal guatemalteco ha presentado problemas debido a que en la mayoría de casos, los grupos pertenecientes a esta labor, no se encuentran bien organizados como empresa. La pobreza existente, el alto grado de analfabetismo, la historia e idiosincrasia de nuestro país, paralelamente a un mercado mundial complejo, en el cual se manejan factores de carácter industrial, han generado un fenómeno socio – económico en naciones como Guatemala, dando como resultado un estancamiento productivo en la rama artesanal, poniendo en peligro un valor cultural.

Actualmente alrededor del mundo la artesanía está teniendo un enfoque más comercial que cultural. Como una forma de rescate de ésta, se ha creado un nuevo concepto llamado Neo – Artesanía o Artesanía Contemporánea, la cual se basa en la realización de productos de consumo con un carácter decorativo, utilitario y vernáculo con un sentido social. Para que este concepto sea aplicado en un taller artesanal son necesarias algunas condiciones de trabajo, especialmente en cuanto a todo lo referente a factores de calidad, producción e innovación en los diferentes rubros existentes. Son estas mismas condiciones las que también han generado la aplicación (de una manera paralela) del Diseño Industrial como una herramienta para el desarrollo comunitario y rural.

Aunque existen en la actualidad instituciones y organizaciones que ayudan a este sector dando asesorías a talleres artesanales que abarcan organización interna, diseño, gestión empresarial, mejoramiento de procesos productivos y comercialización de productos, una gran mayoría de estas empresas no recibe esta clase de beneficio. Aún así, la artesanía guatemalteca es apreciada en todo el mundo, ya que existen diferentes mercados que demandan esta clase de producto, no solo por su belleza, sino también por el contexto e historia que lo rodea. Es necesario recordar que una gran parte de artesanos trabajan en muy malas condiciones, por lo que el diseño puede ser una alternativa para el mejoramiento de sus productos, procesos de trabajo y mejoramiento de la calidad de vida.

Proyecto 4: Diseño para el Desarrollo

Como un programa académico de la Universidad Rafael Landívar en la Ciudad de Guatemala, Diseño Industrial abre sus puertas en el año 1986, gracias al interés de la Facultad de Arquitectura y Diseño de satisfacer las necesidades de diversificación de los programas académicos ofrecidos en el campo del diseño en el país. El programa en ese entonces se enfocó en dos situaciones básicas: el escaso e inadecuado desarrollo artesanal y la falta de incentivos en el área de diseño para el desarrollo industrial y agro industrial en Guatemala.

Proyecto 4 es un curso dentro de la licenciatura de diseño industrial que propone la interacción entre alumno, catedrático y taller artesanal, como una forma de introducción para ser consultor profesional en diseño artesanal. El curso sigue los lineamientos de las temáticas que rigen a la carrera de diseño industrial y pretende a través del diseño proteger un valor cultural del país.

Gracias a alianzas estratégicas, los estudiantes trabajan en talleres de artesanos. El objetivo principal es poder diseñar de acuerdo a un diagnóstico, productos nuevos e innovadores.

Los materiales que trabajan los artesanos son madera, plata, jade, cerámica y algunos metales como bronce. Ellos ofrecen sus talleres y conocimiento para fabricar el producto final. Los estudiantes, con la ayuda de sus profesores, trabajan hasta alcanzar la solución. En contraparte, el departamento de Diseño Industrial ofrece capacitación a los artesanos en áreas del diseño, tales como diseño bi dimensional y metodología del diseño.

El método de investigación en diseño industrial involucra "la contextualización", que es entendida como el conocer que y donde se va a desarrollado el campo o área de trabajo. Al principio del curso, los estudiantes son parte de un trabajo de campo denominado "Gira Artesanal".

En la Gira Artesanal, los estudiantes visitan diferentes talleres artesanales en el país, donde tienen oportunidad de recibir información sobre los materiales y herramientas, tomar fotos y conversar con el artesano. Durante el diálogo se aclaran dudas sobre los procesos de manufactura.

Posteriormente, guiados por el artesano, pueden experimentar y trabajar con sus propias manos las diferentes técnicas y materiales junto con los artesanos.

El objetivo no es solamente conocer los procesos de producción, sino entender que las técnicas y productos artesanales son heredados de generación en generación y que son parte de la cultura Guatemalteca.

La Gira Artesanal tiene una duración de 5 días, los lugares visitados son las regiones de Cobán, Petén e Izabal. Los talleres artesanales son contactados con anticipación para tener todo organizado en tiempo.

Ahora que los estudiantes tienen una noción acerca de artesanía, son distribuidos en los diferentes talleres artesanales, para iniciar la etapa de elaboración de su proyecto individual. Luego de varias visitas y trabajando en su taller asignado, realizan un diagnóstico del problema y proponen soluciones factibles. Llevan su propio proceso junto con la asesoría del catedrático, trabajando en el tiempo de clase en la universidad. El resultado final es un prototipo totalmente terminado. Un producto que responde a la necesidad del artesano y con los materiales disponibles en sus talleres.

Al final del curso, cada estudiante entrega de un documento o una memoria que detalla la investigación, alternativas de diseño, modelo de solución, planos constructivos y bibliografía. Todo lo anterior es realizado con la supervisión del profesor, quién es el que guía al estudiante a tomar decisiones en el proyecto.

PROYECTO 4 ha ganado cierto grado de prestigio en la comunidad de artesanos en Guatemala. Cada año más talleres artesanales participan en el proyecto. En el 2009, han participado un total de 15 talleres.

Los estudiantes interactúan con el artesano a un nivel profesional como consultor. Aunque el proyecto termine al final del semestre, algunos estudiantes visitan regularmente a sus artesanos, ahora en una situación más relajada y una buena amistad empieza a crecer entre ambos.

Hablando en términos académicos, se han obtenido los siguientes resultados.

"DESARROLLO". Gracias al diseño para el desarrollo, involucrando estudiantes asesorados por sus profesores, los artesanos pueden mejorar su calidad de vida por medio de un mayor ingreso económico. Ese ingreso gracias a poder vender mejores productos a sus clientes, productos diseñados que responden a las tendencias del mercado.

Presencia del Diseño Industrial y del trabajo de los estudiantes en proyectos reales. Dirigido directamente a ayudar a otros que lo necesitan, proyección social desde la academia.

Trabajar en situaciones reales en un ejercicio académico, genera en los estudiantes los criterios necesarios para fomentar la capacidad de "toma de decisiones" en futuros proyectos como profesionales del diseño

Estudiantes que conocen más sobre su herencia cultural y que el trabajo de los artesanos es parte de la misma. Concientes que también es responsabilidad del diseñador, mantener las tradiciones.

Responsabilidad Social: Práctica Profesional / Diseño Estratégico

Práctica Profesional: Una visión estratégica

Después de la Revolución Industrial, la actividad del diseñador de generar objetos para facilitar la vida del ser humano se vio necesitada de un nuevo e importante componente, el de comercialización. El cliente ya no compra las cosas porque sí, sino que define su compra por factores como comparación con otros similares (competencia), precio, materiales, etc.

En las escuelas de diseño, ahora se entiende que la forma de los objetos, ya no depende solamente de la función, de lo que comunica o expresa o de los materiales y procesos – como lo expresa Vitrubio, sobre los principios fundamentales en el proceso de dar forma a un objeto en el siglo I –, sino también de esa competencia de mercado. Una competencia de mercado vigente en la actual economía. Una nueva economía. Desde hace más de doscientos años y hasta hace relativamente muy poco tiempo, se consideraba que la mano de obra y el capital, eran los únicos factores ligados directamente al crecimiento económico. El conocimiento, la educación y el capital intelectual eran considerados factores externos, de relativa incidencia en la economía.

Este concepto ha cambiado de forma drástica en estos últimos tiempos y actualmente el crecimiento económico y la productividad de los países desarrollados se basan cada vez más en el conocimiento y la información. En la era industrial, el bienestar se creó cuando se sustituyó la mano de obra por maquinaria. Esta Nueva Economía basada en el conocimiento ("the knowledge-based economy") se define como aquella "en la que la generación y explotación del conocimiento juegan un papel predominante en la creación de bienestar".

El diseño se concibió hasta la segunda mitad del siglo XX como una disciplina encargada de concebir y definir la forma de los objetos, automóviles o elementos de la vida cotidiana. Sin embargo desde finales del siglo pasado la visión estratégica y de sistemas ha venido a redefinir las tareas a las que deben responder los diseñadores, en éste caso, diseñadores industriales. No se trata ya, solamente, de generar formas para productos sino de concebir sistemas a partir de los cuales se puedan elaborar multiplicidad de productos y de establecer estrategias de diseño que respondan a los múltiples potenciales que ofrece el mercado global y definan un espacio dentro de los cuales se puedan colocar diversidad de productos. El diseñador pasa, por tanto, de ser un conceptuador de formas a ser un creador de estrategias y debe definir en que procesos de una cadena de valor puede insertarse para generar un mayor valor agregado a los productos de dicha cadena[1].

Se debe cambiar la concepción del trabajo del diseñador dentro de una empresa o como consultor, no debe ser un "bombero de servicio" al cual se llama en situación de emergencia. Frecuentemente se recurre al diseño cuando se enfrentan dificultades de venta y cuando en general es demasiado tardía una intervención para revertir el proceso de declive. Mientras se considere al diseño un item gratuito que cae del cielo, y no como un item de inversiones, el diseño no aparecerá en las planillas de contabilidad. Más caro que el diseño, es la falta de diseño[2]. Lo que sugiere tener lista una estrategia planificada, que pondera al diseñador como una pieza vital de la empresa.

El diseño es un proceso creativo estructurado. Se asocia inmediatamente con la apariencia de los objetos, pero la aplicación del diseño es mucho más profunda. Se puede diseñar para mejorar las funciones y el atractivo de los productos, para facilitar su producción y garantizar su sostenibilidad. Se puede diseñar para mejorar la ejecución o la calidad de los procesos empresariales. El diseño en los servicios afecta a la forma en la que los usuarios experimentarán la prestación de este servicio, como por ejemplo en un restaurante, en un hotel o en una entidad bancaria. Algunos tipos de diseño, como el diseño gráfico, forman parte de la gestión de la marca y de la estrategia de comunicación de un producto, de un servicio o de una empresa. Existe una gran relación entre el diseño y la investigación y desarrollo. Ambas son actividades creativas para conseguir innovaciones y ventajas competitivas.

El diseñador para lograr plantear estrategias y definir una cadena de valor debe conocer la secuencia de las acciones (cuándo hacer qué), el contenido de las acciones (qué hacer) y los procedimientos específicos (cómo hacerlo). En cierto sentido se puede afirmar que los métodos de diseño buscaban la solución "ideal" a un cierto problema. El conocimiento del método proyectual, de qué es lo que hay que hacer para hacer o conocer las cosas, es un valor liberatorio: es un "haz de ti" tú mismo. No es una receta de cocina, como lo explica Bruno Munari[3], consiste simplemente en una serie de operaciones necesarias, dispuestas en un orden lógico dictado por la experiencia. Su finalidad es la de conseguir un máximo resultado con el mínimo esfuerzo. El reto no se limita a la necesidad de generar un "buen diseño", sino un diseño competitivo, que permita impulsar el desarrollo empresarial e institucional[4]. Es así como "… el diseño industrial puede eventualmente asumir un papel activo en una economía que se dispone a despegar."[5]

La innovación se ha convertido en la principal arma estratégica no solo del diseño, sino de cualquier organización para ser competitiva. Entonces, ¿cómo pueden las empresas innovar? "Innovar significa introducir modificaciones en la manera de hacer las cosas, para mejorar el resultado final. "Así, una innovación puede ser desde una acción sobre el precio de un artículo para conquistar un mercado, hasta la mejora de un producto antiguo o el descubrimiento de un nuevo uso para un producto ya existente". "Innovación Tecnológica" es la incorporación de nuevas tecnologías a la actividad de una empresa dando como resultado cambios en los productos o en los procesos de fabricación. Pero existen otros campos de la "innovación empresarial" como pueden ser la organización interna, la capacidad estratégica empresarial, el diseño y la calidad, modos de comercialización, etc., que no deberían ser despreciados a la hora de analizar la capacidad innovadora de una empresa, ya que pueden ser igual o más significativos que la innovación tecnológica en determinados sectores empresariales.

Esa innovación se puede aplicar definiendo una cadena de valor. La cadena de valor categoriza las actividades que producen valor añadido en una organización. Se dividen en dos tipos de actividades: las actividades primarias que conforman la creación física del producto, las actividades relacionadas con su venta y la asistencia post-venta. Estas actividades son apoyadas por las también denominadas actividades secundarias, o de soporte a la creación del producto[6]. Pero no se trata solamente de plantear una cadena de valor, sino el verdadero aporte de innovación es cuando se entra al detalle. Una "cadena de valor segmentada" determinará los niveles, las fases y etapas de cada nivel, los involucrados y por último las oportunidades de diseño.

3 Félix Guattari en su ensayo "Las Tres Ecologías" Editorial Pre-Textos, Valencia, España 2000.

4 Bonsiepe, Gui. Las siete columnas del diseño. Oficina nacional de Diseño Industrial, Instituto Superior de Diseño Industrial. Habana, Cuba, 1993

5 Munari, Bruno. Cómo nacen los objetos, Apuntes para una metodología proyectual, Gustavo Gili, 1995.

6 Rodríguez Morales, Luis. Diseño, estrategia y táctica. Siglo xxi de España Editores, S.A. Madrid, España, 2006

7 Maldonado, Tomás. El diseño industrial reconsiderado. Ediciones Gustavo Gili, S.A. de C.V. México, 1993

8 Porter, Michael, Competitive Advantage: Creating and Sustaining Superior Performance. New York, NY The Free Press, 1985

El objetivo es entonces la búsqueda de un diseño integral, la búsqueda de una imagen, desde el producto, hasta el modelo de servicio en su promoción y venta, pasando por todos los aspectos de gestión, para llegar a esas oportunidades de diseño.

Estos conceptos se operativizan en la clase de Práctica Profesional mediante un proceso de "aprendizaje significativo". Esto no es ni más ni menos que la aplicación durante el proceso de desarrollo formativo del estudiante del "Paradigma Pedagógico Ignaciano". Podría argumentarse que el curso de Práctica Profesional es un contexto ideal para ello: a través de experiencias prácticas y concretas el estudiante de diseño de cuarto año comienza su proceso de "observación" que culmina en una "contextualización de la realidad". Los problemas de diseño que allí identifica lo llevan de una forma natural a un proceso de "experimentación y reflexión".

Esto en el diseñador sucede en lo que en la metodología proyectual se enmarca como la etapa de "análisis": un ordenamiento jerárquico de los diversos factores de la problemática de diseño – incluyendo a los actores, su contexto socio-cultural y económico, etc. El curso de Práctica requiere que este proceso se lleve usualmente hasta las últimas consecuencias: a través de la propuesta que surge de la "síntesis" del diseño, el estudiante/diseñador puede "actuar" y "evaluar" el efecto que sus acciones tienen dentro de su problemática.

El primer ciclo se cierra allí, pero esto es solo el inicio de una creciente aproximación sensible del futuro profesional a la gestión del desarrollo en su país desde su praxis profesional. A partir de allí, de esa evaluación, el diseñador vuelve nuevamente a contextualizar la realidad y continuar con ese proceso de "aprendizaje sensible" que lo realiza como persona profesional y promueve el desarrollo en su sociedad

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How does "green" mean- the emerging semantics of product design

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Abstract

This paper presents the challenges of perceptions in sustainable design and outlines a product semantic strategy to improve our understanding of "sustainable design" and give products new capacity to communicate with more environmentally-conscious users around the world.

Keywords

Product design, product semantics, sustainable design, social responsibility, ecodesign

Introduction

Sustainable design has evolved both in terms of sophistication and complexity. Part of that shift involves the expansion of green products from small batch production hand-crafted objects using ready-made or recyclable materials into full blown mass-produced objects. Which prompts the question: what does "Green Design" really mean and how do consumers understand it? The flip side of this coin is "Green Washing" which poses challenges to the role of industrial design. In a world where novelty and marketing increasingly drive consumption products must be able to communicate their 'green-ness' directly to the consumer in an honest and palpable manner. How can designers manipulate form, color, material selection, energy consumption, and the perceived affordances of a product to convince all stakeholders of its 'green' value beyond mere marketing or superficial appearances? Answers to these questions have great implications for design, marketing, and mass-production. Clearly, as new concepts of sustainable design emerge in design practice and public discourse, there is a need to update the theory of product semantics to reflect such large and dynamic changes.

To answer these questions, this paper provides a brief overview of product semantics from the past three decades and suggests ways to transform this critical theory. Using case studies, the authors analyze the new possibilities and challenges for eco expression facing the industrial design profession as it grapples with environmentalism. New concepts such as biommicry, de-materialization, service design, customization and their manifestations in products and the context and sub-context they create are explored.

Overview of the Theory of Product Semantics

Product semantics like sustainable design are two relatively new theories that are slowly maturing and intertwining in interesting ways. Product Semantics can be subsumed under the larger science of semiology which is concerned with signs and symbols and their many uses. Sustainable design is an offshoot of both environmental studies and economic theories. The term product semantics was first coined by Klaus Krippendorff and Reinhardt Butter in their 1984 essay Product Semantics: Exploring the Symbolic Qualities of Form which redefined the role of product design as "the conscious creation of forms to serve human needs". The new approach was concerned with "the symbolic qualities of man-made forms in the context of their use and the application of this knowledge to industrial design". The 'semantic' of a product moves beyond the traditional 'form follows function' equation to include social, technical, and cultural communication as well. The contemporary designer acts more as a communicator working with visual gestalts, physical and cognitive affordances, materiality and manufacturing processes to develop products with a deeper connection to the life and needs of the end-user. The industrial designer and author Rune Monö defined gestalt as "an arrangement of parts which appears and functions as a whole that is more than the sum of the parts," (Mono, 1997). Donald Norman defines the term affordance, first coined by psychologist J. J. Gibson, as 'the actionable properties between the world and an actor (a person or animal)' (Norman, 1988). Norman went on to adapt Gibson's original term to 'perceived affordance,' to emphasize the possibility of action regardless of whether such an action was in fact possible thus expanding the potential for greater interaction. Product semantics subsumes all of these issues into a unified design approach that merges the physical, cognitive, and emotional into a singular whole.

Challenge of Perception

The formal or aesthetic appearance of a product remains the central connection to our visceral experience of it while its functionality is tacitly assumed until actually tested or used. Both aspects must seamlessly intertwine in order to be truly successful or as Don Norman puts it: 'attractive things work better' (Norman, 2005). Adding

sustainability then into this equation further complicates matters creating new challenges of perception for both end-user and designer. Consumers in industrialized nations have come not only to associate good design with beauty and functionality but also low cost And while consumer concern for environmental issues is rapidly increasing the industrial designer is challenged to break this model or at least insert real green-ness into the equation. The challenge of the new semantics of product design must clearly communicate 'green-ness' beyond mere marketing or advertising verbiage. Several major hurdles exist in moving beyond the cliches of green-ness to large scale production of sustainable products.

The first hurdle is changing the perception of "green products" as craft-based, one-of-a-kind or DIY (do-it-yourself) endeavors. Alternative lifestyle magazines like Readymade and websites like Instructables often portray sustainable design as self-produced projects using recycled materials or altering (hacking) existing products. While these strategies remain part of the equation they can also negatively impact perception. Hand-crafted products are by their very nature limited in terms of quantity and sophistication. Few consumers would be willing to pay for a hand-made MP3 player or bicycle or trust a handmade medical device. Compared to conventional design, "green design" can appear less sophisticated, less attractive, less functional, and, at times, plainly crude. Consumers understand that cost is a direct result of quantity; economies of scale bring lower prices. Hand craft seems to be authentic- even exotic- but also difficult to produce in larger numbers let alone capable of generating real revenue. The end result may even seem "ugly" in the modern design sense.

Another hurdle is breaking the perception that renewable materials (anything from fast-growing bamboo and biofuels to traditional materials like wood and leather) are the solution to solving the needs of a world population expected to approach 9 billion by 2050 (United Nations projection). For instance, the energy required to harvest, process, and transport bamboo from its native habitat is often overlooked because of its fast growth and biodegradability. Similar logic applies to bio-fuel production, which often causes negative chain reactions in agriculture. Because something is natural does not mean it is cost-effective on a large scale or even desirable as it still uses precious resources like water, electricity, and fossil fuels to process and transport. Journalist Matt Powers claims that pound for pound, making a Prius contributes more carbon to the atmosphere than making a Hummer, largely due to the environmental cost of the 30 pounds of nickel in the hybrid's battery. Viewed in isolation, this comparison seems to suggest that a Hummer is more environmentally friendly than a Prius. Using systems thinking, one can easily point out that the hybrid quickly erases that carbon deficit on the road, thanks to its vastly superior fuel economy. However, Powers continues to say that because a used car already paid off the carbon debt of its manufacturing process, a new Prius can never catch up with a highly efficient used car . These examples demonstrate the complexity of sustainable design and raise public skepticism towards these products. John Thackara writing in his book In the Bubble: Designing in a Complex World states that a laptop, for example, requires 4000 times its weight to produce while also increasing our reliance on paper. The computer, on the other hand, has increased productivity beyond question and will continue to play a pivotal role in everything from smart energy grids to smart cars and products . The complexity of such issues should be obvious while the direction forward is less so especially as some businesses rush to jump on the "green wagon", sending false signals and severely diluting the reliability of legitimate efforts to create eco-friendly products.

Eco-affordance: A New Product Semantics Strategy

Returning once again to J.J. Gibson's original concept of affordance which he defined as possibilities 'latent in the environment' for action, we must now amplify and expand the use and understanding of the word 'environment'. Rather than a reactive response, eco-affordance proposes a pro-active one by extending the environment of the product far beyond the physical engagement with the product to include materials and resources required for the production and the use of the product. Designers, in other words, must break out of the traditional mode of aesthetics and function to radically re-think what a product is if we are to fully engage the public in this issue and create real change. There are numerous strategies to employ that can change consumer perception and a product's true identity for lasting systemic change. Saving energy and resources are two of the main sustainable design principles, therefore, a product or service designed by sustainable design principles must think in terms of subtraction instead of addition of forms.

Dematerialization is one such example of a subtractive strategy, yet the consumer is often times unaware of its upsides as they purchase these newly configured products. One quick example is the creation of the MP3 format and the dematerialization of the CD-ROM. Are consumers in fact aware of the energy savings with this new digital format? Gone from the production of an MP3 file is the extraction of materials needed to create a CD-ROM and its packaging, the energy required to transport the product to a retail outlet, and the inevitable disposal of the disc at the end of its life. Again as Thackara points out, CD-ROMs are often used once and then disposed of. More recently Amazon's development of the Kindle as an alternative to traditional

printed books is an example of dematerialization on multiple levels. As Nicholas Carlson wrote in Silicon Alley Insider: "it costs the Times about twice as much money to print and deliver the newspaper over a year as it would cost to send each of its subscribers a brand new Amazon Kindle instead" (2009). While this makes economical sense to the New York Times, it makes even greater environmental sense to its subscribers who remain largely unaware of the massive resources required just to print a disposable newspaper. University of Colorado reports that 75,000 trees are felled in the production of one edition of the Sunday New York Times - three such editions equals all the trees in Central Park. What makes these e-readers especially significant is the fact that e-ink requires very little energy to align the small spheres that make up the printed image. Each page turn requires a microburst of energy after which no additional power to hold the image is required until the next page is loaded. E-readers are energy efficient mobile devices (carrying 1500 books in one small and light device) yet the object's form alone cannot say: ' I am green'. Such a challenge will only be addressed through greater information on the internet, through advertising, and consumer advocacy.

Immateriality and the rise of services

Another example of immateriality is the development of service design. Italian designer and educator Ezio Manzini points out in many of his publications that service design is a hybrid of materials and immaterials that contributes to a more sustainable community because it reduces the individual consumption of resources. For example, instead of focusing on designing washer and dryers for every household, industrial designers could design laundry mat service to maximize the use of resources. While the term "service design" is not new, it has not appeared on the curriculum of design schools until recently. Though some researchers might not consider service design as a branch of industrial design, industrial designers and researchers have been involved in designing services for public or commercial use for decades as services are combinations of products, resources, organization, local and global economy, and human relations. Service design is multidisciplinary in nature and it involves large number of stakeholders, especially users, as they interact with the service while providing feedback constantly. To improve users' understanding of any service, services must be designed as a gestalt, meaning the visual identity system (graphic communication), the human-machine interfaces, and the physical and virtual forms of the service has to form an integrated system. Such an undertaking requires a shift in design education to think systematically about a service that exists over time and adapts through user input.

One last example is the I-Go or Zipcar phenomenon. The business model here is to reduce the number of cars (or car ownership) while providing 'car service' to the consumer. I-Go and Zipcar both take the complexity and hassle out of car rental creating instead the 'micro loan' model whereby member takes advantage of mobility for as little as an hour instead of renting a car for one or more days. Gone is the need to interact with a customer services person, pay additional insurance or even fill the tank up with gasoline. This dematerialization process provides all the benefits of a car while eliminating the downside costs of cars sitting and underused. Such a business model would hardly be possible without the existing wireless cell phone infrastructure which is one of the key issues with dematerialization. As new infrastructures develop, there emerge new ways of leveraging them to provide services in place of actual owned products. Such a model moves consumers towards greater social awareness and shared responsibility as we minimize the physical footprints of our lives. By literally minimizing forms, the "green qualities" of products and services will only become more visible. The other key ingredient is green marketing with an emphasis on real environmental benefits as opposed to imaginary or 'spun' benefits.

Products that actually 'talk' green

With respect to actual physical artifacts, eco-friendly products must not only appear highly functional in terms of craftsmanship but must last longer and be more serviceable. Service in this case refers specifically to the 'fixability' of a products so that it can service more than one generation of users. A functionally inferior or poorly made product, no matter how "green" it might be, is a waste of time, materials, and the energy used to produce it. This goes directly against the grain of our existing paradigm of 'product churn'. When products are so cheap the thought of repairing them is either not considered or worse yet, costs more than purchasing a new product. Half the world maintains service centers for everything from cell phones to small appliances providing not only jobs in this critical sector but relationships. Bringing a product to be serviced to a local shop expands the ecology of our artifacts and social relationships. One comes to know and rely on the local repair shop much as they do their local car mechanic or even doctor. The stakeholders are greatly increased along with the social capital.

Another effective way to combat "green wash" is for the designers to maintain the honest representation of materials. A successful example is the California based company Method. Their designers have observed the recycling process of plastic bottles that are used widely in the cleaning product business and worked with scientists to create new materials for better package recycling. Built on the sustainable design principles, their bottles use only

transparent or milk-white plastics to allow the colors of the liquids to communicate with the users directly. They also minimize the labels so that their containers will blend in with any kitchen or bathroom and therefore not easily be discarded. They reduced and consolidated the layers of the plastic materials used for the packaging for their disinfect wipes so the packaging can be recycled like other plastic containers. Combined with the streamlined and cosmetic-like design of their containers, Method has built a brand of cleaning products that is both eco-friendly and high-end.

Future Trends: Emerging Concepts and Semantics

A concept that has attracted much interest in the design profession is "biomimicry". Over the past two centuries, we have witnessed many design movements that centered on natural forms. Biomimicry on the other hand is much more sophisticated and demanding than the mere imitation of forms in nature. It demands designers to draw inspirations from the anatomy, physiology, and behaviors of living systems that have developed for millions of years. Sometimes these biological traits might be difficult to convey in physical forms because they exist at the microscopic level. For instance, designers will need to find ingenious ways to communicate to the users a biomimetic surface structure of a new adhesive material that was inspired by the soles of reptilian feet that naturally stick to glass and other non-porous materials like the Gecko. Biologist Janine Benyus uses the example of calcification noting how nature (shell fish for example) can turn it on and off as necessary and how this might apply to calcification in pipes . Or how the power of natural shapes (for example: the nautilus' logarithmic spiral) can influence the design of turbine and fan blades to improve efficiency by more than 50%. Nature works from a 'bottom-up' method so as not to produce waste unlike the human process which is generally 'top-down' beginning with material extraction and continuing through to manufacturing and distribution. And while it is impossible to remove or transform all of our processes it is certainly possible to make them more efficient, repairable, and customizable so that individuals have a great stake in holding on to products they were partially responsible for.

Customization as an extended stake

The last way in which products and product designers can 'green' products is by allowing for greater customization and modification. This connects directly to the power of craft and its close association to the 'gift' as opposed to the anonymous commodity. Gift communities have proliferated on the web around 'open source' software (Open Office), and knowledge platforms like wikipedia for the simple reason that they represent a 'bottom-up' activity. Such endeavors harness the power and good will of social sharing of knowledge and skill to create a new 'commons' owned by no one but shared by all. While it is hard to replicate such a process with products, it is possible to co-create products or allow for modifications. In many ways this overlaps greatly with repairability but suggests greater involvement at the front end of the process as opposed to the back-end. Lego Mindstorms serves as a great platform (toolkit) for creating unique products from a set of components. Similar approaches could include lower level products like furniture and housewares which is an enormous market. Designing around total modularity and providing the incentive for the end-user to apply their own ingenuity will increase their stake and sense of ownership. With the emergence of rapid prototyping, mass customization could become more feasible thus allowing greater sharing of resources and design solutions that might be 'commonly' created rather than owned by a single individual or company. Again such a change would require the development of a supporting infrastructure within cities to create easy-to-use open source CAD/CAM software that could link directly to shared rapid prototyping facilities for small batch production located in a city. Such a model would re-focus and return some production back to cities, provide jobs, and minimize the insanely wasteful resources required to ship products from sites of cheap labor thousands of miles away.

Conclusion

The emerging semantics of sustainable design suggests that designers must become "ecologically intelligent", requiring them to obtain substantial knowledge of sustainable design and apply the principles of "good design" with "eco-friendly design" in their work. This will included expanding the 'ecology' of the product to include services, repair options and facilities, and micro manufacturing. Good design will stand the test of time and will hopefully be kept for much longer, therefore reducing the constant need for new products and reducing the materials and energy required to produce them. This paper intends to start a conversation to help designers explore these possibilities to join sustainable design and product semantics in creating a new understanding of the environmental and ecological challenges facing our profession.

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Ideas that matter, open your heart give blood

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Abstract

Though my paper presentation, which will be supported with reach visual materials, I would like to share with your my sabbatical project that took his a physical form during Fall 2007 semester. I will take you through this creative journey in effort to underline importance of graphic designer's pro bono involvement in project that can benefit a wider community, as well introduce you to the Sappi Ideas That Matter Grant program.

In contemporary societies the non-commercial social poster represents one of the most successful visual methods of raising people's awareness of important social issues such as the protection of human rights, aids prevention, environmental protection, and other numerous issues of regional, national and international importance. Unlike commercial posters, social posters play a much more important role. They are designed to turn their viewer's attention to important problems that exist in society, and make them think about solving such problems. The social duty of a graphic designer is to create visual means of addressing problems, to urge society to solve them and suggest ways of doing so. The designer's consciousness becomes the consciousness of society only when it takes on a physical body that communicates the message to the viewer.

Keywords

Design for non-profit organizations

Over the past thirty years my personal interest as a creative person and educator has been the design of posters that deal with a broad range of social and political issues. For this work I have received more than one hundred international, national and regional awards and recognitions. My posters are a part of collections in prestigious museums and galleries and private collectors around the world. Assigning the design of social posters as part of my course curriculum develops student's awareness of different social issues in contemporary society and also results in acceptance of students works at juried national and international poster exhibitions.

In the effort to identify the new project that would fully satisfy my personal interest and be a creative challenge, I focused on competition for 2007 Sappi Ideas that Matter Grant, a program that supports design for the public good. Ideas that Matter is an initiative that was launched worldwide by Sappi, the world's leading producer of coated fine paper. With this initiative Sappi is providing substantial grants that enable the implementation of creative ideas designed to support social and environmental causes. Sappi's invitation is opened for graphic designers from Europe, North America and Southern Africa to create printed communication campaigns for causes they want to support. With the Ideas that Matter program Sappi has an intention to inspire designers to produce more and better communications for the benefit of society.

This grant competition was a perfect match for my personal interest as creative person. I approached Community Blood Center of the Ozarks with idea to design a new campaign for their yearly blood drives. They liked idea very much, and, through conversation I discovered that the need for blood in the area served by Community Blood Center of the Ozarks has grown by more than 60% over the past ten years. At the same time, the pool of eligible blood donors has declined due to aging population and stricter eligibility requirements. For decades, the baby boom generation has been a primary supporter of the nation's blood supply. As this generation ages and becomes ineligible for blood donation, this is vital that younger blood donors are recruited. Also, industry studies demonstrate that most people begin giving blood at a young age (under 25 years). Additionally, they have learned that the likelihood of blood donation decreases with each year after that age. In other words, it is vital to involve people in blood donation at an early age to start a habit that will last a lifetime. Target audience becomes clearly defined–high school and college students.

My research process began with evaluation of existing visual materials that Community Blood Center of the Ozarks using in their efforts to recruit new donors. It's obvious that those materials are pure designed and don't addressing defined target audience. To the some point this is understandable. They can't afford expertise of a professional designer.

Since I come up first with tag line Open Your Heart Give Blood, two symbols, hart and blood drop become unavoidable, and I was exploring visualization of word Open. This result in visuals solutions where a tag line is supported by images based on combinations of different symbols that are juxtaposed in unexpected ways. Additional goal was

to clear my solutions of any sufficient elements that will distract communication.

At that point I was happy with results and made efforts to test my audience. I show them to my students, and…a big surprise. Student's comments were: "To simple", what means "Doesn't works". With a big disappointment I back to research. This time I research a visual solutions that target younger audience and study what kind of elements designers are using to grab attention of their audience? And elements were obvious. In the last five-six years designs for younger audience were flooded with ornamentations that in many cases had only decorative purpose. But some examples go beyond that. Those examples where visual elements are driven out of culture heritage became inspirations for my new directions. I research the reach visual heritage of diverse ethnic groups unique to the American culture (Native American, Latin Americans, African American, European, Middle-Eastern, Oriental, Asian) and incorporate them into my designs in form of patterns that may attract a target audience.

From this point, everything else becomes almost routine job, and I design new 12 pages educational booklet, flyers, postcards, stickers, T-shirts and gift bags. Since my client in general have a conservative point of view on design, I have to be careful how much new I'm bringing to their designs. I was challenged to find the right balance between a new (in this case trendy) and traditional.

With all those new designs, and fact that my client is ready to move in new bigger space, I decide to offer them a new visual identity as well. First I design new logo that communicates much better their mission and represent its primary activity––collection and distribution of blood supply. Positions of droplets symbolically represent collection of blood supply, and whole flower–like shape symbolically suggesting its growth and expansion, which metaphorically represents distribution of blood supply to the Ozarks community. Manual of graphic standards for proper usage of logo and other elements of visual identity is additional pro-bono contribution to my client.

Thanks to the Sappi Ideas that Matter Grant, printing of all materials designed for Community Blood Center of The Ozarks was finished in March, and implementation of it during the first blood drives in April 2008.

Conclusion

In conclusion I can say that this was a fruitful graphic design journey that in many aspects benefits a wider community. My goal was to expand the Community Blood Center of The Ozarks volunteer base, encourage donations and foster social responsibility. Beyond their persuasive function these designs are also meant to educate about our cultural heritage.

On the end I would like to use this opportunity to encourage our younger audience, students of graphic design, to take the leadership in identifying their perspective clients who can't afford service of professional designer. Needs are tremendous as well the opportunities.

Identidad + inclusión = diseño social

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Resumen

La educación superior peruana se ha propuesto el formar profesionales emprendedores, que tengan como filosofía y visión sacar del subdesarrollo a nuestro país haciendo empresa y posicionando la identidad peruana como una marca en el mundo globalizado. Induciendo al estudiante de diseño en la observación, investigación y reconocimiento de las diversas manifestaciones históricas, sociales y culturales que componen esa identidad. Como didáctica utilizamos el slow design, que propone tomar en cuenta la cultura local y regional como fuente de inspiración para obtener un diseño inclusivo. La investigación que este proceso demanda requiere tiempo para analizar, contemplar e interiorizar distintos aspectos sociológicos, antropológicos y estéticos, para transmitir un mensaje inclusivo, identificable y accesible para toda la sociedad.

Palabras Clave

Educación, diseño, identidad, multiculturalidad, inclusión social

Desarrollo

Revalorando la cultura y haciendo de las constantes crisis económicas oportunidades de desarrollo, el Perú se encuentra hoy en un momento de auge y reconocimiento mundial. Al cambiar el mercado cambiaron también las dinámicas sociales y culturales. Sin embargo, nada de esto ha logrado sacarnos del subdesarrollo. ¿La razón? Posiblemente la sociedad requiere un nuevo tipo de profesional, de egresados con capacidades cognitivas, criterios propios y valores comprometidos con su contexto. Así vemos que, en los últimos tiempos, el objetivo de la educación superior peruana, y latinoamericana en general, ha sido educar emprendedores con visión de progreso.

Desde la pedagogía, una eficiente educación en diseño es la que se basa en la teoría del aprendizaje constructivista que promueve la interacción sociocultural, tomando al alumno como un sujeto activo que construye su propio conocimiento a partir del estímulo del medio en el cual se desenvuelve y su zona de desarrollo próximo o potencial. La relación y reconocimiento del estudiante con su entorno produce el desarrollo cognitivo, logrando así que genere sus propios aprendizajes y motivaciones.

A través del constructivismo inducimos al futuro diseñador peruano en la observación, investigación y reconocimiento de las diversas manifestaciones sociales, culturales, artísticas, literarias, religiosas y culinarias de cada una de las culturas que componen nuestro país, así como la decodificación de sus propios sistemas de comunicación, promoviendo la interacción con esta multiculturalidad que nos rodea. Esto permite al estudiante la construcción de un repertorio de elementos y signos presentes en su riqueza cultural para generar una conceptualización, vale decir, la idea que dará sentido a las nuevas estrategias de comunicación y diseño, vanguardistas e integradoras que, aplicadas con propiedad en un proyecto gráfico, permiten la creación de diseños con identidad propia, identidad nacional, identidad peruana.

Identidad local frente al mundo globalizado

Frente a un mundo globalizado no podemos dejar de ser nosotros mismos. Aquí reside la necesidad de la búsqueda y reconocimiento de nuestra identidad. Debemos tener presente que mientras más locales seamos, mayor será el impacto que logremos. Entonces, ¿cómo podremos diferenciarnos? Una manera es ser absolutamente locales, es decir, reconocer y aceptar nuestra herencia cultural, involucrarnos con la realidad que nos rodea. Diseñar es impactar en la vida de las personas, es hacer política.

Desde mucho antes de la conquista española ya vivíamos un fenómeno político muy particular. Debido a las guerras de poder entre nuestras culturas ancestrales, unas tomaban lo mejor de las otras dando origen al fenómeno llamado fusión. Al llegar los españoles a estas tierras no pudieron desaparecer la cultura que encontraron sino, por el contario, se produjo una fusión de ambas y surgió un sincretismo que hizo parecer que fuimos conquistados cuando, en realidad, nuestras creencias ancestrales fueron ocultadas tras el velo del culto español. Sin embargo, esta particular fusión no terminó en ese momento, pues años más tarde y tras la independencia, llegaron al Perú muchos movimientos migratorios provenientes de los más diversos puntos del globo. Todos ellos trajeron consigo su cultura y sus costumbres. Lejos de aislarse en guetos o comunidades separadas, con el paso del tiempo las nuevas colonias se

fusionaron con la cultura local convirtiendo al Perú un país multicultural.

A ello se suma nuestra inmensa variedad geográfica y climática, la variedad étnica migrante - africanos, chinos, japoneses, italianos, alemanes, judíos, palestinos y, últimamente, pakistaníes-, adquirió nuestras costumbres, formando una nueva cultura cada vez más rica en diversidad. Este fenómeno lo podemos reconocer hoy en la gastronomía, las artes, la literatura, la política, el deporte, entre otras expresiones sociales. Pero también debemos de considerar otro fenómeno maravilloso, que es la migración interna a partir de los años cincuenta, la del campesino a las principales ciudades, en donde vuelve a ocurrir esta fusión pero ahora entre las manifestaciones rurales y las urbanas, naciendo de ella la cultura "chicha", llena de color, vida y dinamismo.

Por todo esto, el estudiante de diseño no puede estar ajeno a su realidad social, la misma que está obligado a conocer, interiorizar y conceptualizar para poder ofrecer con sus propuestas de diseño una experiencia de integración social y cultural, de modernización y cosmopolitismo. El estudiante de diseño debe tomar consciencia de su responsabilidad desde su etapa académica, para que cuando sea un profesional en comunicación visual esté tan involucrado con su realidad que no corra el riesgo de caer en supuestos o estereotipos sin fundamento.

Estrategia empleada

La estrategia didáctica utilizada se ubica dentro del nuevo concepto de slow design, o 'pensamiento de diseño', que se caracteriza por tomar en cuenta la cultura local y regional como fuente de inspiración y como consideración importante para el resultado final del diseño inclusivo. Este es un proceso que demanda una exhaustiva investigación por parte del alumno de diseño que, además, requiere de un tiempo para su estudio, contemplación e interiorización.

La interiorización de este conocimiento adquirido tiene como objetivo lograr una conciencia crítica de los distintos aspectos y niveles tanto estéticos como sociológicos y antropológicos, así como reflexionar acerca de la responsabilidad social que debe tener el comunicador visual al transmitir un mensaje inclusivo y accesible para todos los actores de nuestra sociedad; más aun cuando ésta está compuesta por diversas razas, etnias, costumbres, credos e ideologías. De esa forma lograremos encontrar un equilibrio entre la diversidad social y cultural, generando un sentimiento de inclusión.

Es importante mencionar que, desde nuestro punto de vista, entendemos que inclusión no es lo mismo que integración. Cuando nos referimos a inclusión queremos decir que el emisor lanza un mensaje hacia el receptor incluyéndolo en el mismo. Por ejemplo, este puede ser el caso de Telefónica del Perú que, en una misma campaña de celulares, usa íconos populares de diversos estratos sociales para que cada segmento de ese target se sienta identificado e incluido en la comunicación. En esta misma campaña publicitaria de Telefónica se promociona inclusive una línea de ayuda en el idioma materno de los habitantes de distintas zonas de la sierra y selva peruana. Ese esfuerzo logra inmediatamente una identificación del público con la marca en cuestión.

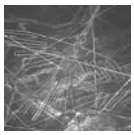
De otro lado, cuando hablamos de integración nos referimos a cuando el emisor lanza un mensaje en el cual no incluye a todos los sectores del target al cual se dirige, haciendo más bien que el receptor sea quien se adapte o incluya de manera voluntaria a dicho mensaje. Un ejemplo de esto son las tiendas por departamentos que utilizan modelos estereotipados y aspiracionales que no tienen nada que ver con la realidad de nuestro país. Por ejemplo, el hecho de colocar modelos sumamente delgados y en locaciones que no son propias de la realidad peruana o, simplemente, con aquéllos donde el target no se siente identificado con el mensaje que se le da. Otro ejemplo puede ser la publicidad de un tipo de vehículo que supuestamente es consumido por su elegancia, sofisticación y el estatus que brinda al consumidor; pero en la realidad ese vehículo es consumido por la seguridad ante robos y secuestros o porque es un todo terreno muy adaptable a las carreteras peruanas, teniendo así como principales consumidores a personas que tienen negocios en el campo y necesitan transportarse frecuentemente a la ciudad.

La propuesta

El impacto de esta propuesta de educación en diseño se traduce en la siguiente fórmula: Identidad + Inclusión = Diseño Social. Es en el ambiente educativo, en las aulas, en donde nuestra experiencia ha permitido aplicar estos conceptos en cursos en lo que el estudiante elabora una profunda investigación social y antropológica de la realidad a la cual se quiere dirigir, permitiendo así el desarrollo de un diseño peruano con carácter inclusivo, en donde el ciudadano común pueda sentirse incluido en un sistema de comunicación visual.

En el caso del curso de tipografía, existe un ejercicio en el que los alumnos desarrollan nuevos tipos de letras pero basándose en diversas culturas peruanas. Lo primero que deben de hacer es buscar los referentes de la cultura elegida y, luego, realizar un análisis de la iconografía utilizada, la estética empleada y la realidad de su entorno. Una vez situados en la época en que se desarrolló esa cultura, podrá diseñar una tipografía basada en los caracteres y estéticas de la misma. Lo más interesante de este ejercicio

es que nuestras culturas no conocieron la escritura como la conocemos hoy en día, y por ello, los resultados simulan una escritura que pudo existir.



Por otra parte, en el curso de Investigación y Diseño I buscamos que el estudiante tome conciencia de la responsabilidad social, del rol que debe cumplir el comunicador visual y de la importancia de su participación activa en la contribución gráfica y visual de un país más justo. Por ello se realizaron una serie de carteles cuyo tema central era Inclusión Social en un País Multicultural. Con esta experiencia se pretende revivir también la escuela de cartel peruano, que tuvo gran auge en los setenta con diseñadores como Jesús Ruiz Durand, quien diseñó carteles con discurso social y estética gráfica contracultural.

Conclusiones

El futuro diseñador debe estar en capacidad de prefigurar un tipo de sociedad con identidad propia y proponerla. Por lo tanto, debe ser consciente de la responsabilidad que asume al reformular las manifestaciones de nuestra multiculturalidad buscando motivar en el público sentimientos de identificación con su país. Partiendo de una educación de emprendimiento y de inclusión social, y utilizando expresiones gráficas actuales y estéticas gráficas que apoyen su discurso, los futuros comunicadores visuales deben estar capacitados para conceptualizar un diseño con discurso social que promueva valores, progreso y equidad para contribuir al desarrollo y crecimiento unificado del Perú y su cultura. Hacer diseño es también hacer política en la medida en que nos permite lograr cambios y transformaciones profundas en la sociedad.

Industrialized society, material culture and first year modular design strategies

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Abstract

Impact of education in design, and its effect on social responsibility

My selection of the Industrial Revolution as the topic of investigation for this project hopes to examine the beginnings of manufacturing and the creation of multiples or spare parts. The project guidelines have students look at the rise of factory towns and the social conditions that exist in these working towns. Awareness of historical developments is critical for students to begin to understand how we have arrived at our contemporary condition. It is my strong belief that knowledge of the past will help them to understand how their decision today can have far-reaching influence and effect visually, socially and economically.

Keywords

Social responsibility, impact of education in design and its effect on social responsibility

A strong foundation should breed curiosity and a desire to generate stronger solutions. How? By having students work on projects that develop, engage and trust to a process of idea development, material translation and idea refinement which consists of research, making, thinking, reacting, research, making, thinking, reacting…

In writing this paper I had to reflect on why I have given this project to students in the past. Several reasons came to mind quickly. I want students to view their studio practice as a way to translate the world around them. Through research and active engagement with the past students begin to formulate ways in which their work can and will influence the world around them. Industrialized society, particularly our material culture, in the 20th Century has been based on the notion of multiples and the use of the spare part. The idea of a custom fit shoe is foreign to all of us, as is a one of a kind automobile or a handcrafted wristwatch. These types of assumptions are an inevitable part of a students design process, the decisions they make are predicated on the idea that any tool they use, any solution they create will be manipulating an element that is replaceable. My selection of the Industrial Revolution as the topic of investigation for this project hopes to examine the beginnings of manufacturing and the creation of multiples or spare parts. The project guidelines have students look at the rise of the factory towns and the new social conditions that exist in these working towns and cities. It is also a way for students to understand and examine the rise of the middle class, socially, economically and in terms of material culture. The middle class demand for goods has a profound influence on architecture, interior design, art, textiles and fashion as well as leisure. Awareness of these historical developments is critical for students to begin to understand how we have arrived at our contemporary condition. It is my strong belief that knowledge of the past will help them to understand how their decision today can and will have far-reaching influence and effect visually, socially and economically. This understanding and awareness of their actions will influence and inform their decision making as artists and designers of the 21st Century.

The specific project outcomes I will be showing today are from several groups of students whose projects stem from the investigation of an invention from the Industrial Revolution. Each team was to research what the Industrial Revolution was and present it to the class. The groups would then identify an invention that they will use as source material for the duration of the project. The selection could be made one the following ways: it may have been based on the aesthetic quality of the form of the invention, it may have been selected because of its function or it may have been selected because of its social impact. Analysis of the relationship of the parts to the whole begins by using drawing, cropping and collage to examine the whole and then its parts in more detail. Just as the Industrial Revolution brought about the use of the manufactured product and the spare part, this project will formally explore the potential of using the spare part or 'module' and cropping as a way to explore space, form and composition. This project was formulated as a guided experimental workshop and was designed as the capstone project for their Foundations Year experience. Guidelines were given to follow, but the outcomes varied greatly depending on each groups' investigation. The project lasted for five weeks. The initial investigation and research for each group was to find as much information and as many images of their selected invention as possible. Why was it created? How did it/ does it affect change in peoples lives? Who was the inventor? What was the inventor's life like, who he/she/they

were? Where they come from? Why they invented it? How they invented it? What inventions and changes did it lead to? Each team was to discover, through a one-week period of initial research, as much information as possible about their selected invention, the inventor and the context in which it was made.

The second week, studio work began with each member of the group creating drawings in their sketchbook. Through this process they will select two drawings, which will serve as the initial studies of their invention. They were to study the object both close up, in detail and also examine the overall form and surface. Each student had to crop an element from their drawings to create a basic unit. These basic unit forms were the beginning of each student's individual exploration into their initial collaged compositions that explore the possibilities of the initial crop or unit and how it can create a variety of super unit structures. The initial collage exploration was influenced by visual aesthetic and the function of the groups chosen invention. They were asked to explore and incorporate drawing, photocopy, digital collage and other materials and mediums. I asked them to explore the visual possibilities of their selected object by abstracting and analyzing the form(s). They were to consider the colors, shadows, size, scale, material, interior and exterior form and space, movement and function. The collage could incorporate 3 dimensional elements.

The next step in the project was to translate their information from two-dimensional space to three-dimensional form. To begin this process we went back to cropping and the creation of the unit and super unit structures. To create a unit form they had to crop again, this time using their latest collages as the source material for their new cropped units. Each member of the team had to design and build a three dimensional model which was based on the modular unit s/he had cropped. The three-dimensional model still had to have the spirit of their original invention, which they selected at the beginning of the project. The focus of this first three-dimensional work was to be on space, scale, and connection alignments. I gave them a limited selection of three materials, which, they had to work with, wood, a transparent material, and one material of their own choice.

The last two phases of the project were designed and built collaboratively. Each group had to create one 2'x2' collage and one 2"x2"x2" model. The collage had to be based off of 2 modular units, one cropped from each member's individual three-dimensional model. At these junctures the project stressed translation from shape to form and now back again to shape. The different groups chose to alter or transform the cropped unit or super unit forms through the investigation of a wider range of possible materials. Thin, flexible, rigid, transparent, opaque, soft, heavy, fabric, wood, metal, etc… For the last iteration of the project students had to crop from their 2' collage and select 1 modular unit to work with for the last stage of the project. Recombine and merge the two crops into one new module. They had to design and build a three dimensional model which is based on the latest modular unit their group had created. The final model still had to have the spirit of their original invention through all of the changes and developments.

I am primarily interested in developing a student's ability to visualize an idea through the act of making. Singularly important is the notion of thinking through the act of making. In art, design, architecture or any creative problem solving discipline thinking alone is not enough. I instill the idea of a need to manifest our ideas into physical reality be that as an object, on paper, as sound, digitally, static image or a time based sequence of events. The creative act is a process of making, thinking, re-acting, making, thinking, re-working… I want my students intelligently responding to a problem throughout the process of creating a visual solution. I set projects that create a framework for the application of these skills allowing them to bring content into their work. Posing questions and setting studio problems that require research and individual investigation. Asking questions that require students to develop an idea through a process of mediated change. This change in the work may include investigations through drawings, paintings, photos, models, library research, writing etc…

It is my hope that this presentation, has clearly demonstrated the evolution and development of this capstone project. At the turn of the 21st century I feel it is important to look at John Dewey's axiom, "learn by doing" which was a corollary to his belief that knowledge, to have real meaning must be a way of dealing specifically with authentic stimuli and situations. "Thinking", said Dewey, "begins not with premises, but with difficulties… in what may fairly enough be called a forked road situation, a situation which is ambiguous, which presents a dilemma, which proposes alternatives". In this studio project I set up a problem that launched students into an investigation of the topic from multiple viewpoints. In all my studio courses I want my students to judge success not only by visual outcomes but also, by the ability of their work to structure thought and to raise new questions.

La Pintura de Castas; un acercamiento histórico al proceso de diseño de imágen para entender la diferenciación social en México

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Palabras clave

Multiculturalidad, diversidad

Introducción

El problema de la otredad es hoy por hoy una de las amenazas más grandes para el bien común. El otro no solo se nos aparece como extraño y diferente sino que a veces hasta como menos humano o inhumano por completo. Las grandes guerras, los genocidios, la discriminación, el racismo y el clasismo, provienen en gran medida de pensar que el otro es tan diferente a nosotros que merece poco o ningún respeto. Poco nos importa el saber que ante la diferencia nosotros nos convertimos en un otro en algún momento de nuestras vidas. El valor de sabernos seres humanos antes de ricos o pobres, negros o blancos, musulmanes o judios, católicos o protestantes, indígenas o criollos, no esta incorporado en nuestra sociedad. La construcción histórica de las identidades en lugar de hacer menos notorias las diferencias entre los seres humanos ha funcionado como una forma de separarnos y alienarnos.

Uno de los más dolorosos fenómenos en México el de la estructura de clases sociales, el del otro que por un conjunto de signos que no se reducen a la raza o la etnia deja de ser gente como uno. Un fenómeno en dónde la imagen tiene un papel preponderante y cuya mención es incomada para TODOS por igual. Una rígida estructura de clases aunada a una pobreza extrema a marcado la tragedia de las naciones latinoamericanas y retrasado los procesos de equidad y democracia. También ha trastocado la psicología social e individual por medio de un complicado patron de diferenciación social y segregación vedada que tiene su primer orígen en la familia.

Este fenómeno no es privativo de América Latina. Kalpana Sehadri-Crooks considera que el ser blanco "representa completo dominio, autosuficiencia y gozo de sí mismo"[1] De esta manera, vivimos en culturas en donde "morenos, negros, rojos o amarillos están atorados con la idea de desear ser "blancos". Y está obseción esta vinculada intrínsecamente a procesos de colonialización, poder, y diferenciación social en todo el mundo. El orígen de esta diferenciación no es sólo por raza o etnia, sino por una lectura muy compleja de formas de serse. El vestido, el habla, los manerismos, el caminar, y un sin fin de otros signos se unen para que los mexicanos nos etiquetemos los unos a los otros, definiendo de esta manera todo un proceso de comunicación y relaciones interpersonales. El punto de partida para explicar la vinculación de la imagen y la construcciones histórica de percepción del otro que he seleccionado, es el fenómeno pictórico colonial conocido como Pintura de Castas.

De los hechos y la aproximación histórica

En 1521 el Imperio Azteca se rindió ante los Españoles encabezados por Hernán Cortés. Durante 300 años España controló la mayor parte del territorio latinoamericano imponiendo su religion, su lenguaje y sus leyes. El nuevo colonizador vino sin sus familias al Nuevo Mundo, forzándo de esta manera, un complejo proceso de cambio cultural y racial que dío orígen a un sistema de castas. La fascinación de este proceso tuvo influencia en un estilo pictórico que conocemos como Pintura de Castas. La Pintura de Castas es un movimiento pictórico "…del período colonial que sirve como testimonio de la mezcla de razas y grupos étnicos –del más claro al más obscuro-…" [2] Esta clasificación pictórica no sólo describía a la población de la Nueva España en términos del color de la piel y los razgos faciales, sino también a través de su profesión, vestuario y entorno. Se trata de cuadros que narran a través de bellísimos retratos familiares escenas multi-signos que describen la vida cotidiana y social de la colonia. Algunos autores argumentan que los cuadros son ficción y carecen de validez histórica, originada por la popularidad que la pintura empezó a tener entre Europeos. Los cuadros se vendían por encargo e influenciados claramente por una orientación taxonómica de las cosas prevaleciente en los siglos XVII y XVIII. Sin embargo, algunos estudiosos sociales e historiadores afirman que el arte contiene información que facilita la percepción del sentir y el vivir de una época. Paul Ricour afirma: "La realidad, (…) no se puede contar ni repetir. Lo único que se puede hacer con la realidad es inventarla de Nuevo."[3] Este sentir de la corriente hermeneutica afirma que un momento histórico debe de analizarse en el marco del contexto que lo origino. De tal modo que ante la

enorme evidencia de textos, pinturas, tratados y ordenanzas que la historia nos ofrece sobre la obseción por el status social en la colonia es imposible negar que este existió y que de algún modo el arte lo recoge.

Además de la Pintura de Castas varios otros textos nos hablan de este singular encuentro de otredades, entre ellos se pueden citar a Bernal Díaz de Castillo con La Verdadera Historia de la Conquista de la Nueva España, las Cartas de Relación de Hernán Cortés, las Cartas Privadas de Emigrantes a Indias 1540-1616, documentos sobre hidalguía y pureza de sangre, entre otros. Ilona Katsew a través de La Pintura de Castas logro tambié hacer una descripción fundamental del fenómeno pictórico y sus implicaciones sociales.

La identidad en la Nueva España se construye a partir de la diferencia. Diferencia sustentada en un código de superioridad. La justificación de este en la América Colonia es la limpieza de sangre, "…entendiéndose esto como tener ascendencia española, ya fuera la persona nacida en la peninsula ibérica, o bien, nacido en América, pero de padres hispánicos; además la limpieza de sangre" también implicaba ser cristiano viejo, es decir, que se pudiera comprobar legalmente."[4]

Lo facinante de todo esto es cómo los seres humanos hemos hecho una máyuscula inversión de nuestro tiempo en reconocer estas formas de diferenciación como verdaderas y eternas. Sean raza, género, religión, orientación sexual, capacidad económica. Obseción originada por el sistema de colonizaje que ha imperado dentro de la historia de la humanidad. Seshadri-Crooks define la raza como: "… un regimen de visibilidad que asegura nuestra inversión en la identidad racial. Hacemos esta inversion porque existe un significante inconsciente el SER BLANCO, que encuentra una lógica en la diferenciación racial ofreciendo una promesa de totalidad del ser. O…un "insaciable deseo" de todos los sujetos raciales de superar la diferencia."[5]

Tanto en la Pintura de Castas como en la realidad, los españoles penínsulares establecen su superioridad y su "limpieza de sangre". De tal manera que desde el inicio, el otro, es decir el indio, es el desarraigado. Y el español buscará siempre formas de refrendar su hispanidad y así lo dejan claras las Cartas de Emigrantes a Indias de 1540-1616; "En está tierra los que son limpios y no tienen manchas los tienen por gente noble." [6](carta 464)

La cultura virreinal contruye eficazmente un sistema de segregación del otro. Para ingresar a la Universidad, a la Vida Religiosa e incluso a la Academia de San Carlos, los requisitos eran; limpieza de sangre y ser cristiano viejo. Se dieron innumerables exepciones, lo cual hacía que el proceso de ingreso fuera injusto, poco claro y anti democrático.

Siendo la Nueva España un regimen que se basaba en la imágen, durante la colonia existió el beneficio de que en esta mezcla de razas la persona saliera "beneficiada" con un porte más español y esta situación meramente genética, le brindara otro tipo de vida de entrada. También hubieron mestizos dítinguidos reconocidos como españoles, como los pintores Cabrera, Morlete Ruíz e Ibarra que aparecen como 'españoles' en el censo de 1753, en palabras de Ilona Katsew, la fama les sirvió para " blanquear, su identidad racial".

La clasificacción taxonómica que se hace de la población de los Virreinatos de Nueva España, Nueva Granada, Perú y Mar del Plata es complicada y termina por agrupar 53 diferentes castas con nombres que a veces resultan hasta divertidos, como torna atrás para referirse a al descendiente de español con sangre mora, india y negra, o tente en el aire, para referirse a una persona descendiente de español con sangre mora, India, negra y china. Por 300 años este modelo es el instaurado y ser español la norma de serse.

Uno de los primeros recuentos que existen sobre cómo es el otro-indígena se incluye en la primera carta de relación de Don Hernán Cortés a los Reyes de España, la descripción incluye que usaban feas cosas, que los dejaban disformes y hace una clara distinción de clases en la población indígena basada en su indumentaria. Probablemente lo que más horrorizó al conquistador en su conocimiento del otro fue la sodomía y la práctica de sacrificios; " Y tienen otra cosa horrible, abominable y digna de ser punida, (…), toman muchos niños y niñas y aún hombres y mujeres de mayor edad y en presencia de aquellos ídolos los abren vivos por los pechos y les sacan el corazón y las entrañas, y los queman delante de sus ídolos…"[7] Estos factores hacen que el otro sea tan diferente a mi en formas y comportamientos que posteriormente surge el cuestionamiento si este "salvaje" es un ser humano.

Pronto se corrió la voz en la madre patria de que la gran fertilidad del Nuevo continente era una promesa de prosperidad y en general hasta el mestizaje parecería verse con diferentes ojos; "Caséme en esta tierra con una mujer muy a mi voluntad. Y aunque allá os parecerá cosa recia haberme casado con India, acá no se pierde honra ninguna, porque es nación la de los indios, tenida por mucho."[8](carta 27). Esta percepción inicial de un Nuevo Mundo lleno de maravillas e igualdad dura muy poco. El caso es que tanto en la Pintura de Castas como en los diversos escritos analizados, con el transcurso de la colonia se evoluciona hacia una vision menos optimista de la nueva sociedad y y mucho de los males se atribuyeron al mestizaje. En las Cartas Privadas queda claro sobre todo el creciente rechazo a la otredad, tanto de indios como de negros. " De estos indios no hay que fiar, y nos dan mucho trabajo, y es menester siempre andar encima de ellos"[9] (carta 177), "Es tan mal servicio el

de los indios"[10] (carta 498). "Son de poco trabajo y menos andado y grandes ladrones y mentirosos"[11](carta 549), nos dice el dueño de una chácara de coca en Cuzco. Hacia los mestizos la opinion del emigrante no era mejor: "No querría de mi enemigo mayor venganza que verle casado en esta tierra con mestiza"[12] (carta 235). En lugar de la unión entre los integrantes de la sociedad novo-hispana, lo que se fue dando fue una rotunda diferenciación que permanece hasta nuestros días. De todas las mezclas la más temida para las autoridades coloniales fue la de indios con negros. Ha tal grado resultaba esto perturbador que el Virrey Martín Enríquez de Almanza (1568-1580) propuso al Rey pedir al Papa la prohibición de los esponsales mixtos.

La Pintura de Castas comienza a recoger todos los prejuicios sociales. De unos cuadros familiares perfectos, llenos de armonía que podrían dar la idea de una sociedad perfecta, se pasa a unos más cotidianos en donde cuando aparece la mezcla con indígena o con negro se nota la "degeneración" obligada por el mestizaje. En ellos ya hay violencia, alcoholismo, hasta asesinatos, refrendando de éste modo lo incluído en las Cartas de Emigrantes, fortaleciendo el prejuicio y haciéndolo una verdad persistente. En 1735 un observador de la época anotaba:

> "…no se hace más distinción que blancos, o de mano prieta: los primeros son los europeos y sus descendientes que llaman criollos (…), de mano prieta se llaman o entienden mestizos, coyotes mulatos, lobos, zambaigos, moriscos, salta atrás, tente en el aire, jíbaros, chinos, e indios los cuales son la mayor población del reino …"[13]

La primera serie de Pintura de Castas perteneciente a Manuel Arellano a principios del s. XVIII y los trabajos de Juan Rodríguez Juárez y el célebre Miguel Cabrera tiene bellísimas imágenes de las familias novo-hispanas y sus mezclas raciales. Para finales del siglo, de 1785 en adelante se empiezan a observar en los cuadros escenas mucho más 'reales' sobre todo en aquellos que narran la mezcla con indígenas y negros. Entre ellos está el cuadro de Francisco Clapera en donde se escenifica una escena de violencia familiar en el cuadro "De mulato y española, morisco". Con el mismo autor las escenas se recrudecen hasta ver en "De genizano y mulata, gibaro" aquí vemos a un hombre borracho tirado en la calle mientras su mujer y su hijo tratan de incorporarlo. Ningún cuadro con castizos, criollos o españoles tiene escenas de disfunción familiar. Uno de los enemigos número uno del orden colonial lo fue el alcoholismo. El pulque era una bebida sagrada que se utilizaba en ceremonias religiosas entre los naturales. Con la llegada de los españoles, se bebe sin control convirtíendose en el mal social de la Nueva España. La Corona sabe la decadencia moral que representa pero debido a los ingresos por impuestos de éste producto no emite regulación al respecto.

En 1774 Andrés de Islas pinta "De español y negra, nace mulato" en donde nuevamente se refuerza toda la ideología de la época con una mujer negra golpendo a un español, para que quede claro lo infortunado de esta unión. El asesinato como fruto de lo erróneo del mestizaje también esta presente en un anónimo de 1780 titulado "De chamizo e india, sale cambujo" solo que en cuadro el pobre cambujo con los brazos abiertos como Niño Jesus ve como su padre un chamizo le clava un puñal en la cabeza a su madre India. Si bien es cierto que es una minoría de cuadros los que contienen este tipo de escenas, cierto también que si las pinturas eran por encargo debido a la curiosidad que este desenfrenado mestizaje estaba causando en Europa era de esperarse que a nadie le gustaría colgar en su sala a un cambujo asesinando a una India enfrente de su hijo, por ello mismo estos pequeños e inevitables actos fallidos del pintor hacen las pinturas más interesantes.

A la par del concepto de Castas surge el de "calidad" que para Robert McCaa era una impresion global que reflejaba la reputación de un individuo en general. Su color, ocupación y riqueza podían incidir sobre su calidad, en la misma medida que su limpieza de sangre, honor, integridad, e incluso su lugar de procedencia."[14] Siendo una casta una construcción social no podía estar vínculada sólo a la raza, sino que a un conjunto de signos que permiten al interlocutor ubicar al otro en el espectro social, de la misma manera como lo seguimos haciendo. En esta lectura, la vestimenta juega un lugar preponderante: "La vestimenta funcionaba eficazmente para pasar por español, según los estatutos del baratillero'es el traje el que da calidad en este reino como se ve en muchos, que son tenidos por caballeros, habiéndo sido en España en mulas de forlones"[15] Se puede afirmar entonces que el lujo se convierte en un aspecto fundamental de la cultura colonial: "Vetancurt no deja lugar a dudas de que la indumentaria se creía un aspecto cardinal de la exhibición de riqueza en Nueva España. El lujo se instauró como forma de diferenciarme del otro haciendo una sociedad polarizada no solo en lo económico y en oportunidades sino de forma física.

Conclusión

La alusión a la reflexión personal sobre el tema de las clases sociales en México y sobre nuestras conductas con respecto a ellas siempre es motivo de conflicto. Tocamos con ello la fibra más sensible de la cultura nacional. Nadie queremos aceptar ser sujetos descriminadores ni sujetos descriminados pero una reflexión honesta debería de ser capaz de hacernos percibir la problemática y optar por una acercamiento nacional a este tema que tanto daño nos hace. El objetivo final de enfrentar nuestras percepciones sobre el otro es la construcción de un ser multicultural, elástico, combativo que multiplique sus posibilidades de ser abriendose al otro, de tal forma que podamos contener millones y hacer una sociedad inclusiva en donde el factor más importante, sea el ser humano.

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Modelos de sustentabilidad y su relación en la disciplina del diseño

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Resumen

El objetivo del presente documento es explorar las dimensiones y los modelos derivados del concepto de sustentabilidad, así como sus implicaciones directas en la disciplina del Diseño con el fin de lograr esclarecer el camino hacia su implementación profesional y académica.

El concepto de "sustentabilidad"[1] ha brindado una idea relativamente universal sobre sus objetivos y la dirección que pretende seguir. Sin embargo, las condiciones particulares de cada contexto temporal, nacional y regional, aunado a las diferentes interpretaciones derivadas de la formulación original del concepto de desarrollo sustentable, han delineado la definición de tal forma que se observa una falta de consenso general, un contenido maleable y una utilización variable para alcanzar diferentes fines. Así, las diversas formas de interpretación, propiciaron la creación de una gran cantidad de modelos y métodos para alcanzar la sustentabilidad, en los que es posible identificar tanto enfoques objetivos y pragmáticos, como aquellos con matices filosóficos.

Palabras clave

Desarrollo sustentable, diseño sustentable, enseñanza y práctica profesional, modelos de desarrollo y planes de implementación de sustentabilidad.

La creación del concepto de sustentabilidad tuvo su antecedente en el análisis realizado por el Club de Roma, organización fundada en 1968, en el que se pretendía considerar al mundo "como un sistema y analizarse como un todo" (Margolin, 2005, p. 115). El análisis anterior resultó en el primero de los informes realizados por el Club de Roma, conocido como Los límites al crecimiento (Meadow, 1974). En este documento se señaló claramente la existencia de un gran problema en el sistema, el cuál podía

1 Para fines del presente documento, los términos de "sostenibilidad" y "sustentabilidad", así como "desarrollo sustentable" y "desarrollo sostenible" serán términos considerados por el autor como sinónimos

ser desarrollado y reformulado a lo largo del tiempo, por lo que se indicó la necesidad de encontrar un equilibrio generalizado y de establecer límites al crecimiento de la población, al desarrollo económico y a los problemas ambientales.

Posterior a las iniciativas del Club de Roma, se desarrollaron un sinnúmero de estudios y análisis que permitirían continuar con la formulación de lo que posteriormente se definiría como un modelo de sustentabilidad. De estos análisis posteriores destaca la labor desarrollada por la Comisión Mundial para el Medio Ambiente y el Desarrollo, apoyada por las Naciones Unidas y dirigida por la primera ministra noruega Gro Brundtland. El trabajo desarrollado por la Comisión resultó en la publicación del reporte Nuestro Futuro Común, también conocido como el Reporte Brundtland (Brundtland, 1987).

La importancia de este reporte radica en el establecimiento formal del concepto de desarrollo sustentable, definido como "aquel desarrollo que satisface las necesidades actuales sin comprometer a las futuras generaciones" (Brundtland, 1987).

La definición del concepto derivó de la premisa de que los problemas ambientales críticos globales son el resultado de una enorme pobreza y de los patrones excesivos de producción y consumo.

Como anteriormente se comentó, el concepto formulado en el Reporte Brundtland adoptó diversos enfoques, siendo el más común que el desarrollo sustentable se centra únicamente en el medio ambiente. De esta manera, posterior a la Cumbre de la Tierra, celebrada en 1992, la idea original sufrió una modificación, de aquella centrada en la preservación del medio ambiente y el consumo prudente de los recursos naturales no renovables, hacia la idea de "tres pilares", unificados con el objeto de buscar un crecimiento económico favorable, la justicia social y la preservación del medio ambiente. Es decir, la sustentabilidad fue colocada en medio de los tres pilares, indicando que se alcanzará únicamente cuando, de manera equitativa, converjan las tres dimensiones (Fig.1).

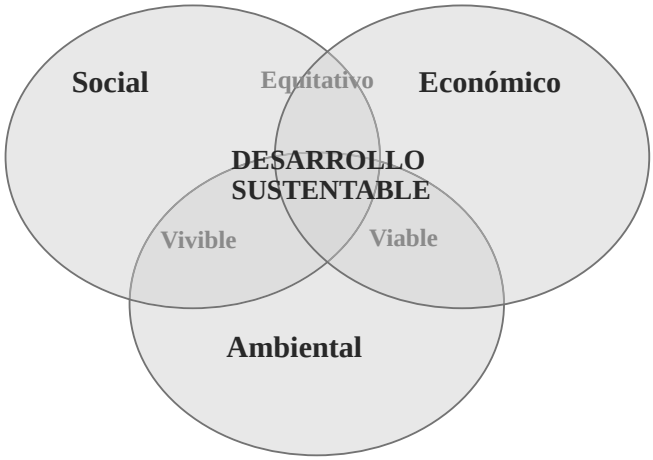

Fig.1 Modelo de los "tres pilares" propuesto posterior a la Cumbre de la Tierra
Fuente: Elaboración propia, retomada de Dréo, J. (2006). Développement durable

Otro enfoque que propició el concepto de sustentabilidad se vinculó directamente con un contexto cultural. En este sentido, es posible encontrar el modelo formulado durante el Foro Social Mundial 2003 de la UNESCO, que fue creado con el objeto de incorporar a la cultura como el "cuarto pilar" del desarrollo sustentable (Fig. 2).

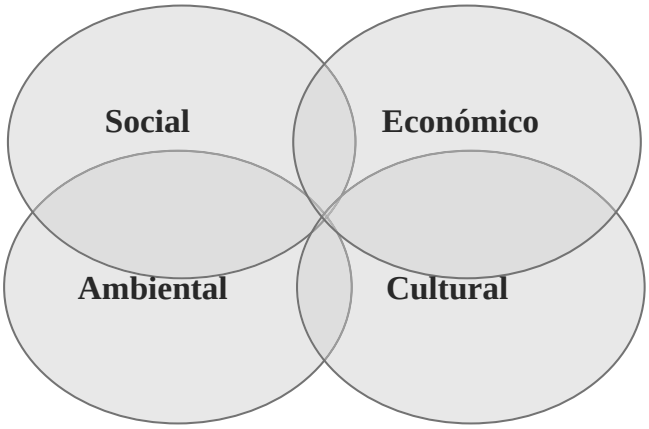

Fig.2 Modelo propuesto para el Foro Social Mundial 2003, UNESCO
Fuente: Elaboración propia

También es posible encontrar diferentes modelos de sustentabilidad apegados a una concepción regional particular, como refleja el modelo "Leitplankenmodell" (Fig.3), formulado por el ministerio de Medio Ambiente de Alemania, en el que se muestran dos barras laterales que representan los recursos naturales, limitando las dimensiones sociales y económicas.

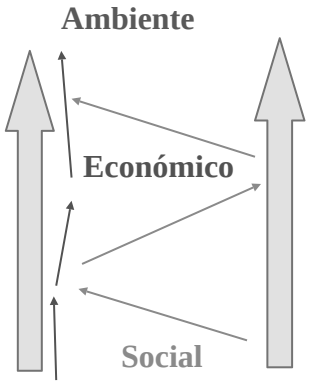

Fig.3 Modelo Leitplankenmodell.
Fuente: Ministerio Alemán de Medio Ambiente en Goetter, J. (2006). México: Fundación Heinrich Böll.

Otros modelos contemplan directamente una "sustentabilidad ambiental" o "ecológica", en los que su objetivo principal es evitar que el capital natural (suma total de los recursos naturales) sea consumido antes de haberse regenerado.

Ya sea desde un enfoque general, o desde una perspectiva particular del concepto de sustentabilidad, es de esencial importancia identificar los principios básicos que lo fundamentan, con el objeto de establecer su vinculación y posterior implementación en las prácticas disciplinarias, como en el caso del Diseño Industrial.

Hacia la implementación del Diseño Sustentable

A fin de esclarecer el camino hacia el fomento de la enseñanza y práctica profesional del Diseño Sustentable, es indispensable analizar el sentido que toma el concepto de sustentabilidad en la disciplina del Diseño Industrial, para lo cual, me permito retomar brevemente el análisis realizado por Víctor Margolin en su ensayo "Expansión o sustentabilidad: dos modelos de desarrollo" (Margolin, 2005, p. 115).

Partiendo de los informes del Club de Roma, Margolin analiza a fondo los diferentes efectos de la expansión económica y de los patrones de consumo en los países industrializados, e identifica dos modelos contrarios de desarrollo: el "modelo de sustentabilidad" y el "modelo expansionista".

El modelo de sustentabilidad de Margolin parte de la premisa de que el mundo, compuesto de recursos finitos, es un sistema en equilibrio en donde el perjuicio a cualquiera de sus elementos, o el agotamiento de éstos, resulta en severos daños y en el inevitable colapso del sistema. De manera contraria, el modelo expansionista no considera las consecuencias ambientales a largo plazo y se enfoca principalmente en el desarrollo económico, donde el atractivo principal es el capital convertido en más producción o en la acumulación de riquezas.

Aun cuando Margolin indica que el modelo de sustentabilidad es el indicado para conseguir un desarrollo equilibrado, destaca que representa un gran reto implementar este modelo, ya que las principales vías para alcanzarlo contemplan un cuestionamiento por completo de la producción, de los patrones de consumo, de la necesidad real de la adquisición de productos y al desarrollo económico en general.

En este sentido, y en relación directa con la disciplina del Diseño, de seguir el camino de la sustentabilidad, el diseñador se encontrará ante desafíos importantes de carácter principalmente ético, pues ofrecer patrones de producción y consumo responsables (que no pretendan promover un consumismo o la fabricación de productos que no sean verdaderamente necesarios), es parte inherente de un principio de sustentabilidad.

Es por ésta razón que el planteamiento de un Diseño Sustentable va más allá de la promoción de un Diseño que integre las dimensiones sociales, económicas y ambientales (los "tres pilares") como aspectos que deba cumplir un producto a manera de listado[1], representa un enfrentamiento de valores, que incluso para diversos autores ha llegado a significar una limitación de la profesión.

Sin embargo, también es posible identificar otras aportaciones que logran ofrecer un panorama optimista para el Diseño Sustentable, pues permiten visualizar de manera más clara lo que podría ser un plan estratégico para su implementación.

En este sentido, Emma Dewberry analiza en dos ocasiones, la primera en la obra Más allá del Ecodiseño: Pasos hacia la Sustentabilidad (Dewberry, 1995) y la segunda en el artículo "Estrategias de Ecodiseño" de la publicación EcoDesign IV, las diferencias entre Diseño Verde, Ecodiseño[2] y Diseño Sustentable. En ambas obras, Dewberry indica que el Ecodiseño puede ser utilizado como una guía para diseñar a nivel de producto, mientras que el Diseño Sustentable engloba un concepto mucho más complejo que se dirige hacia una interfaz de diseño enfocada a las condiciones sociales, al desarrollo y a la ética (Madge, 1997).

Partiendo de lo anterior, es posible plantear que, si bien es indispensable la reconsideración de elementos clave como los patrones de producción y consumo, la base del Diseño Sustentable se centra en adquirir una visión amplificiada

2 I Centro para el Diseño Sustentable del Reino Unido establece que el Diseño Sustentable pretende "analizar y cambiar los sistemas en los que producimos, utilizamos y desechamos los productos" (Chick, A. 1995).

3 Modalidad de diseño cuyo objetivo principal es disminuir el impacto ambiental de los productos

con el fin de proponer diseños a nivel sistémico, y no a nivel de producto.

Si bien lo anterior podría causar incertidumbre respecto a su enseñanza e implementación en la práctica profesional, es el objetivo del presente documento resaltar la existencia de una de las guías oficiales más completas y adaptables que delinea de manera objetiva los elementos claves para adquirir dicha visión amplificada y acercarse a un modelo de sustentabilidad, la Agenda 21: La estrategia de la cumbre para salvar nuestro planeta (Sitarz, 1993).

De esta manera, la incorporación y seguimiento de la Agenda 21, con una adaptación directa para la disciplina del Diseño Industrial, representaría una posible vía para delinear los objetivos específicos y los elementos involucrados para lograr la implementación del Diseño Sustentable. La Agenda 21 fue uno de los documentos más importantes derivados de la Cumbre de la Tierra, pues representó una guía oficial del que se desprendieron una serie de acuerdos firmados por más de 178 países para implementar planes de acción específicos a nivel global, nacional y local, abarcando las diferentes dimensiones sociales, culturales, económicas y ambientales.

Una de las principales características de la Agenda 21 es su capacidad para adaptarse a diferentes contextos, disciplinas, instituciones, entre otros.

Finalmente, es posible concluir en el presente documento que aún cuando existan discrepancias en la interpretación y dirección del concepto de sustentabilidad, expresado en los diferentes modelos planteados, puede lograrse la dirección hacia un objetivo común gracias a la creación de estrategias que tienen como finalidad unificar el desarrollo y el medio ambiente, como aquella derivada de la Cumbre de la Tierra, mejor conocida como Agenda 21.

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Proyecto Sinergia: comunicación gráfica como estrategia para el desarrollo de las comunidades

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Resumen

El proyecto Sinergia surge ante la necesidad de vincular a los estudiantes del programa de Diseño Gráfico de la Fundación Universitaria del Área Andina en proyectos donde se requieren estrategias de comunicación e intervención con poblaciones vulnerables. En su primera fase desarrolló talleres de arte con el objetivo de generar canales de expresión para favorecer el desarrollo humano de los participantes, tanto en su dinámica individual como colectiva. La segunda fase del proyecto es un periódico comunitario que busca generar procesos de cohesión y organización social de la comunidad a través del trabajo en equipo de los estudiantes y el grupo de líderes juveniles del Barrio Bella Flor en la localidad Ciudad Bolívar, Bogotá, Colombia.

Palabras clave

Responsabilidad social del diseño gráfico, comunicación para el desarrollo, desarrollo humano, empoderamiento local de la comunidad, organización social.

Introducción

Bogotá D.C., capital de Colombia, recibe a diario un promedio de 60 familias1 que llegan en condiciones de desplazamiento forzado producto del conflicto interno que padece el país, la mayoría se ubica en los cinturones de miseria que rodean la ciudad, especialmente al sur oriente en el sector conocido como Ciudad Bolívar, donde se establecen en viviendas que no cuentan con condiciones adecuadas en términos de protección ante la inclemencia del clima y de salubridad al no contar con servicios públicos. Adicionalmente, se descuida la nutrición debido a que la remuneración que se puede obtener a través de trabajos temporales o comercio informal no cubre la totalidad de las necesidades de alimentación, y la educación, pues este sector no tiene suficiente oferta para cubrir la demanda de la población infantil y juvenil. Para ayudar a mitigar las precarias condiciones en que estas familias deben instalarse, el gobierno local ha diseñado estrategias que resultan de gran ayuda pero insuficientes y desarticuladas si la comunidad del sector no cuenta con organizaciones que permitan focalizar y completar este esfuerzo, en este sentido trabajan organizaciones no gubernamentales como Laudes Infantis, que a través de una casa comunitaria en el barrio Bella Flor sector la Torre, brinda ayuda en temas de nutrición y capacitación para el trabajo, y Universidades como la Fundación Universitaria del Área Andina apoyan el tema de la ocupación activa del tiempo libre, pues los adultos deben salir a conseguir el sustento diario descuidando a los niños que terminan en la calle expuestos a peligros como la formación de pandillas juveniles, la explotación laboral infantil, la mendicidad, la prostitución y la drogadicción; la Universidad también trabaja en el tema de comunicación comunitaria que ayuda a fortalecer el sentido de comunidad, posibilitando la generación de procesos de organización social que permiten un incremento en la calidad de vida de los habitantes del sector.

Comunicación para el desarrollo comunitario a través del Diseño Gráfico

El proyecto Sinergia tiene como eje la comunicación gráfica como estrategia para el desarrollo comunitario, surge ante la necesidad de articular el componente académico del programa de Diseño Gráfico de la Fundación Universitaria del Área Andina con proyectos de impacto social.

Fase I: talleres de arte

El proyecto Sinergia en su primera fase (desde el segundo semestre de 2008), con el apoyo de la organización no gubernamental Laudes Infantis, lleva a cabo talleres de arte con niños y jóvenes del barrio Bella Flor, con el objetivo de generar canales de expresión para mejorar la calidad de vida de los asistentes mediante la ocupación creativa del tiempo libre, fortalecer valores como el trabajo en equipo, la confianza y la cooperación para el bien común, así como dinamizar la creación de escenarios de intercambio académico y social para contribuir a la construcción de convivencia pacífica y el desarrollo humano de los participantes, tanto en su dinámica individual como colectiva. Estos talleres, realizados por estudiantes voluntarios del programa bajo la coordinación de un docente, rinden como fruto el calendario institucional de la organización no gubernamental Laudes Infantis, diseñado y producido por

los estudiantes de la asignatura "técnicas de impresión", este calendario se distribuye actualmente en Colombia, Suiza, Alemania y España. Durante la segunda fase (primer semestre de 2009), con las obras generadas en los talleres se diseñó y produjo una serie de postales promocionales para la Fundación. Adicionalmente, de manera semestral se lleva a cabo una exposición en la casa comunal donde todos pueden apreciar el producto de los talleres. A través de estas actividades los niños reconocen su trabajo y su valor como actores importantes de la comunidad.

Fase II: periódico comunitario

La segunda fase del proyecto es un periódico comunitario que tiene por objetivo generar procesos de cohesión y organización social de la comunidad, abrir las puertas al desarrollo y les permita el empoderamiento social, cultural, político y económico, pues permite la exposición y debate de las circunstancias específicas de esta comunidad, su relación con la ciudad y el país, así como la búsqueda de alternativas para mejorar sus condiciones de vida. El producto editorial se aborda desde su concepción como aspecto formativo para los estudiantes de la asignatura "Diseño de periódicos" quienes realizan el proyecto en equipo con el grupo de jóvenes líderes de Bella Flor, quienes se encargan de la parte periodística. Este proceso se llevó a cabo por medio de talleres donde los estudiantes se trasladaron hasta el barrio, y en coordinación con los líderes juveniles, descubrieron los hitos que la comunidad ha desarrollado en su búsqueda por la apropiación del espacio y que le permiten identificarse. De manera conjunta se generaron la política editorial, el concepto gráfico, las secciones y en consecuencia con ello se desarrolló la propuesta inicial de diseño, que fue depurada por los estudiantes de Diseño Gráfico, dándole identidad a través de una gráfica muy específica que apropia los valores formales (color y composición) que caracterizan a esta comunidad; desde el punto de vista editorial, la visión de los estudiantes permitió enriquecer la propuesta inicial de los líderes juveniles y éstos a su vez proporcionaron al equipo de diseño una mirada desde lo particular de la comunidad. Los líderes juveniles se encargaron del acopio, redacción y edición de la información fotográfica y textual así como de la ilustración acorde con la política editorial propuesta conjuntamente, donde tienen cabida las expresiones de los diferentes colectivos (ancianos, niños, madres comunitarias). Esta metodología permitió responder adecuadamente a las necesidades de la comunidad y sus expectativas frente al producto editorial.

Los resultados

Desde el punto de vista cualitativo, los resultados de las dos fases se pueden resumir en los siguientes aspectos:

- Los talleres, como ocupación activa del tiempo libre, permiten un espacio para que los niños no continúen descuidados por la ausencia de sus familiares quienes tienen que salir a conseguir los recursos para sobrevivir en la ciudad, ello permite que no permanezcan en la calle a expensas de influencias negativas para su formación (pandillas, crimen, drogadicción, prostitución).
- El periódico permite a la comunidad compartir información específica de su interés acerca su entorno, pero además ser partícipe la ciudad al publicar actividades, programas y estrategias que entidades públicas y privadas ofrecen como herramientas para el desarrollo de las comunidades, así como identificarse y cohesionarse a través de un producto que es específico para su contexto.
- Reconocimiento de las habilidades artísticas de los niños como estrategia que fortalece valores como el trabajo en equipo, la confianza y la cooperación para el bien común.
- Orientación de procesos que contribuyen a la resolución de conflictos mediante el diálogo y la tolerancia.
- Creación de escenarios de intercambio académico y social como contribución a la construcción de convivencia pacífica.
- Vinculación de los estudiantes del programa de Diseño Gráfico de la Fundación Universitaria de Área Andina en iniciativas de alcance social.
- Transversalización curricular a partir de la integración de los contenidos de asignaturas del programa con el desarrollo de ejercicios complementarios al proyecto. En este caso, la elaboración del calendario institucional y postales para la Fundación Laudes Infantis, la impresión de souvenirs ofrecidos en la clausura del proyecto y el diseño gráfico del periódico comunitario.
- Posicionamiento del programa de Diseño Gráfico y de la Universidad ante organismos no gubernamentales y oficiales como institución que implementa acciones con verdadero impacto social.

Evidencias de proceso

- Calendario Institucional y postales que se distribuyen actualmente entre las entidades que cooperan con Laudes Infantis en Alemania, Suiza, España y Colombia, así como el diseño e impresión de camisetas mediante la técnica de la serigrafía (screen) por parte de los mismos estudiantes como souvenirs ofrecidos en la clausura del proyecto durante la primera fase.
- Exposiciones semestrales en la casa comunitaria donde se han exhibido todas las obras de los niños y niñas, de manera que padres de familia, docentes, administrativos y comunidad en general se involucren con el proyecto.
- Número cero de SOMOS, el periódico comunitario del Barrio Bella Flor.

- La producción de un video de ocho minutos como registro del objetivo y el proceso desarrollado durante la intervención.

Conclusiones

- La construcción de comunidad mediante la integración de migrantes de diferentes regiones de país, campesinos y grupos etéreos variados en una misma publicación, permite el diálogo interno de la comunidad a través del reconocimiento de la diversidad y el respeto por las manifestaciones de cada colectivo.
- La sensibilización de los estudiantes ante las problemáticas sociales que padece nuestro país permite proponer la profesión del diseño como posibilidad para dar respuesta a algunas de las necesidades de la sociedad colombiana.
- Generar proyectos centrados en problemáticas reales, desde el punto de vista educativo, resulta más eficaz como herramienta de aprendizaje, se comparten y descubren conocimientos a través de la praxis.
- El desarrollo de proyectos académicos con alto contenido social permite una formación humanista de los futuros profesionales al comprender la comunicación como un acto humano en continua construcción y diálogo con el entorno.

Responsabilidad social del diseñador textil

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Resumen

El objetivo principal de esta presentación es hacer una reflexión sobre la función social de los diseñadores textiles formados en una universidad jesuita, teniendo como punto de análisis
Nuestra identidad de centro educativo de la compañía de Jesús la realidad social y económica que vive la mayor parte de los mexicanos.

Palabras clave

Diseño textil, responsabilidad social, realidad social y económica identidad como centro educativo jesuita.

Introducción

Esta presentación pretende ser una reflexión sobre el compromiso social de los diseñadores textiles de la Universidad Iberoamericana en México. Tendré en cuenta dos puntos de partida: los desafíos que la realidad social y económica de nuestro país impone y la filosofía educativa de las universidades Jesuitas.

Las preguntas que surgen son: ¿Cuál es la responsabilidad social del diseñador textil mexicano egresado de la UIA? ¿Cuál debe de ser el enfoque de nuestra licenciatura ante estos dos puntos de partida? ¿Cuál debe de ser nuestra postura como formadores de las nuevas generaciones de diseñadores?

Desarrollo

Con base en el proceso de globalización, y los cambios generados por los avances de la tecnología, en nuestro país, conviven sociedades que están en el siglo XIX con sociedades del siglo XXI y la universidad Iberoamericana participa del reto que esto significa.

Para Susana Reguillo Cruz especialista en los colectivos juveniles latinoamericanos hay distintas formas de ser

joven hoy, hay jóvenes privilegiados, jóvenes en situación de exclusión y jóvenes en situación de muerte social. Ser un joven privilegiado para Reguillo significa: "para los jóvenes privilegiados, ser joven significa, de manera inédita en la historia, un acceso a un capital simbólico de ideas y de materiales que se han acumulado a lo largo de la historia"[1]. El grupo de jóvenes favorecidos por el sistema neoliberal pasa a formar parte de la élite de nuestros países, siendo beneficiados por la educación superior, títulos dobles, estudios en el extranjero, teniendo una movilidad social y profesional a lo largo y ancho del planeta.

Nuestros alumnos forman parte de esos jóvenes privilegiados y es nuestra responsabilidad como maestros, y de ellos como futuros diseñadores, ser generadores de cuestionamientos, actitudes y acciones de cambio para la construcción de un México que ofrezca oportunidades para todos.

Como dicen los documentos de AUSJAL, nuestras universidades se encuentran en una peligrosa ambigüedad:"llevamos décadas formando profesionales generalmente exitosos en sociedades fracasadas y cada vez más deshumanizadas. Nuestros egresados ocupan puestos de alta responsabilidad en las empresas privadas y en actividades gubernamentales. Sin caer en acusaciones panfleteras debemos sin embargo, preguntarnos sobre las causas de esa disparidad entre el éxito individual de muchos de nuestros egresados y el naufragio de nuestras sociedades."[2]

Es por esto que nuestro quehacer académico se nutre de tres aspectos: nuestra identidad de inspiración cristiana, el carácter de centro educativo de la compañía de Jesús y nuestra condición de universidad latinoamericana enfrentada a la realidad actual de nuestros países.

Como dice le P. Kolvenbach: "Los valores para que sean realmente propios deben estar anclados en la "cabeza", en el "corazón" y en las manos". Convicción, afecto y acción combinados. Este triple anclaje de los valores es parte fundamental de la pedagogía ignaciana. Por eso en el área de la conciencia social "deberíamos exigir a nuestros alumnos que usen la opción por los pobres como un criterio, de forma que nunca tomen una decisión importante sin pensar antes lo que ella afecta a los que ocupan el último lugar en la sociedad"[3]

A partir de esto, tenemos dos grandes retos como académicos de la UIA, uno es cubrir los requerimientos de la realidad social de México y segundo el del campo profesional, poniendo un gran énfasis en la formación de competencias profesionales, sin dejar a un lado la formación de actitudes desde la plataforma de especialización profesional de cada uno de nuestros egresados, como parte de una formación que transmita los valores del modelo educativo jesuita, generando una formación integral que permita desarrollar en ellos un conjunto de competencias que aseguren su grado de excelencia profesional así como la función social como conformadores de un México de igualdad, de posibilidades y justicia para todos.

Los dos grandes sectores donde se integran a trabajar nuestras egresadas son la industria textil y del vestido.

Estos dos sectores en México ha sido un campo de trabajo en donde el respeto a los valores humanos no siempre han estado presentes(condiciones de trabajo, sueldos, relaciones humanas entre otras);convirtiéndose éste en un espacio no sólo para que nuestras egresadas aporten soluciones y propuestas innovadoras de diseño textil y de la moda, así como para que participen y promuevan actitudes de cambio en las áreas antes mencionadas que generarán acciones y posibiliten el cambio en las condiciones laborales de los obreros y empleados que forman parte de los equipos de trabajo de estas empresas y de esa manera no solo sean participes de la innovación textil y de la moda, sino que sean generadores de cambios sociales que se verán traducidos en condiciones de vida mas humana y la conformación de un México más justo que genere oportunidades para todos.

Otra de nuestras grandes realidades es el sector artesanal, específicamente los artesanos del textil de nuestro país, en el cual participa una gran parte de nuestra comunidades indígenas, las cuales tienen las técnicas y habilidades para desarrollar un trabajo artesanal de excelencia como son bordado y tejido por mencionar algunos, sin embargo no obtienen las retribuciones económicas que permitan mejores condiciones de vida a las que se encuentran en la mayoría de los casos es de pobreza extrema.

Las aportaciones que podrían tener nuestras egresadas en este sector sería de gran valor aportando innovación de productos, canales de comercialización más justos, mejora de materiales y procesos, de teñido, hilado, tejido, bordado, estampado, conservando y respetando la riqueza cultural y tradiciones, pero generando mejoras en sus productos que se vería traducidas en un incremento de su ingreso económico y por consiguiente una mejoría de condiciones de vida, igualdad y justicia.

Dentro de este contexto de globalización, los fenómenos de la moda y las tendencias no son ajenos a ello, y el ámbito del diseñador textil se vincula a resolver necesidades dadas y/o "creadas" de sectores generalmente favorecidos

1 Susana Reguillo Cruz http://www.me.gov.ar/monitor/nro6/juv_y_viole.htm 13/05/2009

2 Desafíos de América Latina y propuestas Educativas AUSJAL p38, editorial SEUIA-ITESO, 1995, México.

3 Desafíos de América Latina y propuestas Educativas AUSJAL p50, editorial SEUIA-ITESO, 1995, México.

económicamente. Este fenómeno incluye obviamente a nuestras alumnas y, porque no decirlo, de algunos sectores de maestros debido a la fuerza de valores adquiridos que genera el formar parte de este medio como serian valores estéticos como belleza, elegancia, prestigio, valores sociales como pertenecia a una élite social, fama y presencia en los medios, entre otros. Esta presión o tendencia hace que nos olvidemos o desvinculemos en la mayoría de los casos de la realidad social y económica de la mayoría de habitantes de nuestro país. Creo entonces necesitamos buscar esquemas que expresen nuevos valores y abran espacios a la posibilidad de que a través de la participación de nuestras egresadas se logren cambios fundamentales en la industria textil, del vestido, textil artesanal y de la moda en general que se vean reflejados en la construcción de un México para todos.

Conclusiones.

¿Como lograr esos nuevos esquemas y una nueva jerarquía de valores en el diseño textil desde las aulas, los cuales se vean reflejados en el quehacer profesional? ¿ como lograr que dentro del mundo globalizado, y una política económica neoliberal podamos desvincularnos de los valores adquiridos por la moda, para lograr esos nuevos esquemas que se van reflejados en nuestros ámbitos laborales, llamémoslos escuelas, despachos, fábricas? .

No tengo una respuesta clara, ella requiere del análisis y trabajo colegiado de académicos de nuestra universidad y todas aquellas institución de de diseño textil y de la moda que quieran participar en este proceso.

Retail and design for the ageing society

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Abstract

The increasing number of elderly people in Italy invites to reflect upon the necessity of developing, inside the traditional Points of Sale (PoS), systems of products, services, knowledge, and information for these special users, and, at the same time, transform the traditional stores in places more accessible, usable, perceptible. Starting from an analysis of the contemporary trends in Large Scale Retailing (LSR), the article proposes to trace the guidelines which can orient the designer in developing a new format for PoS, with reference to ageing society.

Keywords

Sustainable design, Design for all, Accessibility, Large Scale Retailing, Contemporary goods.

Paper

In recent decades, the distribution of goods has assumed a progressively larger role in consumption processes. Considering the wealth of merchandise available on the market, the moment of purchase and the experience linked to this moment have become decisive in determining consumer choices (Celaschi, 2007). Thus we are living in a period of history when exchange processes are evolving, yet the degree of sophistication of the merchandise exchanged is not matched by an equal sophistication of the Points of Sale (PoS), particularly in Large Scale Retailing (LSR).

Having become the consummate “non-place”, the context in which “the customer moves around in silence, reads labels, weighs fruits and vegetables on a machine that gives the prize along with the weight; then hands his credit cart to a young woman as silent as himself” (Augé, 1995, pp. 99-100), the shopping centre has frequently been the object of studies by authors seeking to define the impact of an ever more elusive mass culture. Starting from research by Walter Benjamin, Lewis Mumford, and Fernand Braudel,

a wide and transdisciplinary body of knowledge about this phenomenon has recently been built up. Experts of different origins such as Jean Baudrillard, Marc Augé, James Graham Ballard, and Benjamin Barber have taken the shopping mall and, sometimes, the whole system of goods exchange, as a metaphor of the social and cultural transformations of late modernity.

The association between shopping centres and contemporary "non-places" represents by now a shared idea, sometimes almost overused: we can apply it to the general concept of supermarket, without taking care of its dimension, destination, or localization. In synthesis we can affirm that LSR spaces are important culturally and are destined to improve considerably. Nevertheless, if we observe a typical large chain store today, this statement appears questionable. It is not always evident how much money has been invested and the emotional adventure of making a purchase is not always a pleasant one (Morace, 2008).

However, even while preserving the simplicity that usually characterises the buildings themselves, these PoS could play an exceptional scenographic role, telling stories, celebrating products, stimulating client interaction, changing over the course of days and weeks. They could adapt to the products they offer, identifying themselves with those products through techniques such as product packaging, or taking their distance and advocating for the consumer.

The range of potential innovations is vast, and there is room for both minor strategies and major overhauls, provided that these are guided by attention to rising consumer-user awareness.

The hypothesis is that it is possible to introduce innovation starting from the PoS's "equipment", which represents the meeting point of products, brands, clients, and space. Modifying the interior (without forgetting the connection between this and the players involved in exchange processes), while leaving the outer structure intact, may help us to understand how a design innovation can activate a change starting from an object. These considerations are based on a wide system of competences acquired during several years of collaboration with companies operating in the LSR sector, particularly in PoS design. Since 2008, a team of the Turin Polytechnic has developed research programs on design applications in PoS innovation, thanks to the collaboration of experts in history of material culture, interior design, brand strategy and ergonomics who already operate in this specific sector (Celaschi, Formia, 2009).

On the other side, this research is driven by the tradition of sustainable design which addresses the degree course in Industrial Design of the 1st Faculty of Architecture of Turin Polytechnic. The development of an eco-compatible approach involves a system of relationships encompassing three spheres: biological (the relation between man and nature), technical (the relation between man and manufactured goods), and social (the relation between man and society). The last one needs a focus on the humanistic components of the design culture, requiring a close link between innovation and new productive systems (Germak, 2008).

The increasing number of elderly people and, more in detail, of subjects affected by the dementia syndrome, in particular the patients that suffer from Alzheimer disease (AD), invites to reflect upon the necessity of taking in consideration these special users in the context of a design driven innovation of the PoS (in contrast, do not surprise how supermarkets are full by babies' products).

In 2008, the phenomenon of the ageing of population was confirmed: in Italy life expectancy is 78,8 years old for men and 84,1 for women. In January 2009 the population with more than 65 years old represented the 20,1% of the Italian population (they were the 17,8% in 1999) (ISTAT, 2008). Corresponding tendencies can be found in other industrial countries. The purchasing power of older people during the coming decades is expected to be higher than before, as will be the demands for good quality of life, activity opportunities and self-determination. In addition to the increase on the proportion of elderly people, it is also important, particularly in a design context, to take into consideration that the generation which is now growing old has essentially different experiences, expectations, and demands compared to earlier generations. These dates demonstrate how the phenomenon of an ageing society will have a great influence on the market of all commonly-used products, which will be expected to be suitable for this growing group of people who will be active, qualified, quality-oriented, endowed with economic means. The elderly market is the largest market there ever been.

In Italy we can find traces of a new interest that moves in this direction: development of new products, collections, services, knowledge, and expertise with reference to design for the ageing society. Italian companies such as Caimi Brevetti, Sunbeam, HB Group, Serrature Meroni produce objects which are not expressed design for elderly, but could be indicated for people with some kind of disabilities. But the really innovative contests are universities: the Milan Polytechnic (Faculty of Design) is developing a research design centre for elderly people called DAS and the University of Genoa (Faculty of Architecture) is studying new products for the subjects affected by the dementia syndrome, in particular the patients that suffer from AD (Stabilini, 2008). Nevertheless, in respect to these researches, it is important also to take in consideration, in a design oriented perspective, how this kind of products, services and strategies could be commercialized, distributed, and popularized in LSR.

Looking at objects made for the elderly really says more about what product designers and manufactures consider the seniors are. People still think that elderly means pathetic, poor, and unfortunate. It is true that a large proportion of elderly is affected by dementia (the dementia syndrome afflicts more or less a million of Italians, a number that will duplicate in 2050) and needs constant assistance by the caregivers, but, just as important from a design perspective, however they represent the 20% of people over 80. At the same time, as our society matures, and baby Boomers start swelling ranks of the elderly, we will have to start coming up with innovative products and services for seniors.

Contemporary PoS in Italy still have not many solutions to fulfil the needs of this kind of users/consumers, especially concerning the interior equipment. Maybe foreign countries demonstrated a much more deep sensibility. Specialty online retailers, like Gold Violin and Senior Shops, created an online shopping system easy, understandable, and usable. A similar approach can drive also new formats for PoS.

If we consider the vital elderly, who present new requirements while carrying out their usual daily activity and have much more time for shopping, the design driven innovation of the PoS could imply:

1. new departments (as new worlds) that could be, at the same time, systems-product-device to exhibit new products and services;
2. new information systems that could involve the consumer in a recreational dimension which can continue also outside the PoS;
3. new tools which can trigger, in the consumer, the desire of rediscovering traditional techniques, processes, modalities concerning food consumption, hobbies and other consolidate customs;
4. new equipments that could be showcase of the manufacturer and the brand.

If we consider the disabled elderly, the design driven innovation of the PoS could imply:
the ergonomic aspects, to create places more accessible, usable, perceptible.

Finally, if we consider the elderly that can't go shopping because they are afflicted by dementia or other acute diseases , we have to take the caregivers into account. In this case, the design driven innovation of the PoS could imply:
new information systems to promote, spread, and popularize knowledge and expertises about the disease, the therapies, the places providing assistance, etc., apart from selling products and services.

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The intersection of accessibility, economic viability and democracy through universal design: how universal design innovations helped a leading research and treatment institution re-vision its identity and improve its operations in Canada and abroad

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Abstract

The Canadian National Institute for the Blind (CNIB) is a nationwide, community-based, registered charity committed to research, public education and vision health for all Canadians. Its mission is to provide the services and support necessary to enjoy an improved quality of life while living with vision loss. &Co was commissioned to design the national Centre whose goal was to build a model of Universal Design, specifically addressing the unique needs of the visually impaired, blind and deaf blind. The principles of Universal Design provided guidance to the Design Team in responding to these needs, while also enabling the Centre to thrive in tough economic times.

The CNIB Centre makes the case that Universal Design is a vehicle for promoting social equality, environmental sustainability and human health and well-being. This is not simply design for equal use; rather, it is design for unfettered participation in everyday life, and in public life. In this way, the CNIB Centre demonstrates how Universal Design can broaden our thinking to embrace a more democratic approach to architecture.

Keywords

Humane, Economic, Green, Universal Design, Accessibility

Introduction

It can be argued that architects and planners have traditionally defined the "user" in limited terms, designing for only a small segment of the population and, thus, creating many problems for the countless people who do not fit such narrow definitions. Rather than recognizing the diversity of age groups, cultures, lifestyles and the varying levels of ability of those in our communities whom use buildings and public spaces, architecture and planning theory has, to a large extent, been based on a notion of the "user/citizen" as inherently able-bodied. Accessibility standards for accommodating the "handicapped" have typically only addressed a narrow set of parameters.

Conversely, Universal Design is integral to the design of products and environments that are usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. It is an evolving design practice that makes daily life easier, safer and more comfortable for all people regardless of ability, age, gender, culture or language. This is a concept that is entirely viable and one that makes economic and social sense.

The principles of Universal Design incorporate considerations such as economic, engineering, cultural and environmental concerns in the design processes. These principles offer guidance to better integrate features that meet the needs of as many users as possible. According to the Center for Universal Design, the effectiveness of design in the physical world is measured on the basis of many factors, including but not limited to the following: equitability, flexibility, simplicity and intuitiveness of use; the communication of information to the user, regardless of ambient conditions or the user's sensory abilities; the minimization of hazards and the adverse consequences of accidental or unintended actions.

This philosophy informed our approach to the CNIB Centre. The old building that housed the CNIB was typical of many institutions, over-emphasizing the administrative façade and executive office function. Tucked behind the executive offices were secluded workshops for those with vision loss, where menial tasks such as packaging, caning and broom-making were conducted. These work spaces were not adequately equipped to help those with vision loss participate in the mainstream labour force.

Today, those with vision loss are integral participants in the Centre's daily operations. The new building has transformed the long-standing institution into an open, caring, vital learning centre and workplace that serves both

the local community and the nation with its library, vision health and training facilities. With the use of technologically advanced aides and modern facilities, those with vision loss learn vital skills and make successful transitions back into the mainstream workforce.

The new, highly functional state-of-the-art building incorporates innovations that improve the living/learning facilities for visually impaired individuals, while allowing this non-profit to thrive in tough economic times. Energy efficiency, consolidated administrative support systems and sharing of the building amenities have all served to reduce annual operating costs. Savings in annual energy costs alone have been substantial. In fact, in a period of 12 years, it is estimated that these savings alone would amount to the cost of the new building itself.

Approach

When the CNIB approached &Co to create a new vision for its beautiful 16-acre campus in north Toronto, Ontario, Canada, we set out to develop an innovative scheme—and ultimately a business plan—that would best serve the institution's needs; our approach entailed selling three quarters of the land while keeping the prime, accessible Bayview frontage and using the proceeds to fund construction of the institution's new facility. Even though there was less land, we managed to create a complex that does more with less.

The new 150,000-square foot CNIB structure sits like a sentinel atop an impressive embankment overlooking Bayview Avenue, a major Toronto arterial route. It is thoroughly modern, a 21st century emblem of the institution's progressive goals. The functional programme for the CNIB is robust, with unique facilities including those for the making of Braille and Talking Books, a Technical Aids Store, a Distribution Centre, and the Regional Teaching Centre with its high- and low-tech training facilities. We took an atypical client with an extremely complex program and learned its needs in order to help the institution thrive, searching for new opportunities for groups to interact, for possible shared facilities that can enhance the overall experience of inhabiting the building.

We were driven to build a Centre where all are welcome—a fitting home for CNIB's centre of operations in Canada. The challenge was to find clarity in the complex interaction between the four partners that comprise the administration and provide local and regional services to the clients. These partners are the National Office, National Library, Ontario Division and the Toronto District Office. The facilities programme succeeded in bringing together the four partners now housed within the facility, while inviting and encouraging collaboration among them.

A circulation spine (the same on each floor) is a vibrant highly functional element that organizes the programme components along each of its vertebra in a simple fashion with texture, colour and acoustics used to define boundaries, paths and destinations. At the centre of the building, the café acts as the "town square," around which are many activities. It is a two-storey space that brings natural light into the core and spine of the building, further aiding in orientation and providing focus.

Glare is the enemy of the visually impaired. It literally blinds. As such, glare and light levels were controlled through the use of interior and exterior shading devices, indirect lighting, translucent wall panels on the west façade, matte sealers and low-glare materials throughout.

Landscape was also a key consideration. We did not want to build a stark structure antithetical to the nature that ensconces this institution. We fundamentally understood that the landscape of this site has always been vitally connected to the building and its occupants. Positioning the building and roadways relative to the four new, and entirely distinct landscaped spaces, was critical to making a safe and enjoyable pedestrian environment on all four sides of the building. The new building hosts distinct landscaped spaces, each connected to a public space within the building. We created an environment that goes beyond the principles of Universal Design as all the senses are engaged to facilitate independent passage through the building.

CNIB Centre is surrounded by distinct landscaped spaces that connect the building to its natural environment through texture, colour, acoustical boundaries, paths and destinations. As a counterpoint to the mainly rectilinear lines of the building footprint, the Fragrant Garden's curved curbs and paths—differentiated by texture, colour and contrast— twist and wind fluidly through the building's grounds, animating the gardens, paths and terraces where visitors and staff interact. Through a trail of sights, sounds, aromas and textures, navigation is made easy and intuitive. The experience is welcoming and intriguing as the building's inhabitants traverse the stimulating new spaces—entering the protected, quiet Fragrance Garden, with its aromatic plants, seating and water feature; sauntering across the more boisterous western terrace, with its wide vistas; or visiting the serene north Shade Garden that sits along the stately ravine edge.

Results

It was &Co's objective to employ innovative principles of Urban Design to develop a building that would facilitate the needs of its occupants. In the end, we designed a building that contributes to the improvement of people's lives.

Unlike its predecessor, the new CNIB Centre is community-oriented and client-centred. The focus, through design, layout, materials and accessibility features, is on the rehabilitation of Canadians with vision loss. The Centre's design invites occupants to navigate independently and intuitively through space, encouraging collaboration and creativity, advocacy and inclusion.

To quote the client, the new CNIB Centre has allowed the occupants of the institution to "discover synergies that make us truly more than the sum of our parts. Our new home is a concrete demonstration of the evolution of the organization... This building is exceptional not extravagant."

The design innovations challenge the principals of Universal Design, offering a model of unparalleled accessibility and accommodations for those living with vision loss. At a time in history when everyone seems focused on "green" issues, Universal Design is rarely a focus. The CNIB Centre is one of the few buildings in the world that embraces and celebrates the principle of Universal Design.

The experience of communication and innovative collaboration was only deepened through our work with the CNIB. If the goal of Universal Design is to design spaces and objects be usable by all people without the need for adaptation or specialized design, a more participatory and inclusive design process seems to be one useful way of achieving this. That is why our design consultation and presentation methods were revised to accommodate our blind and visually impaired clients. The focus of communication shifted from 2D drawings to models, tactile plans and diagrams, Braille, mock-ups, large samples and, simply, the spoken word.

We endeavored to challenge our client to embrace new organizational concepts that would ultimately benefit the institution and reinforce the brand. For example, the groups who had always been in separate facilities all came with their space programmes that included their own complement of meeting rooms, offices etc. We showed them that although there were occasions when all the meeting rooms were in use, most of the time they were vacant and the space was underutilized.

We went on to demonstrate that if they combined all of their meeting rooms into a "Mini Conference Centre" there would be greater flexibility with rooms of varying size and accommodation. Moveable walls between the largest of these rooms provide the flexibility to have a venue that accommodates over 300 people. This approach also yielded a facility that generates income for the CNIB and is widely used for outside conferences, weddings, Bar Mitzvahs, etc. This is smart business for a non-profit organization such as the CNIB.

According to the client, the conference spaces have been critical to their business, providing additional annual revenue. And the client also enjoys the synergy of interacting with the community at large that this grade-related wholly accessible rental facility allows. Additionally, energy efficiency, consolidated administrative support systems, and sharing of the building amenities have all served to reduce annual operating costs.

The CNIB had a strong vision for the new building and was able to visualize space in "the mind's eye," articulating what they could not physically see. We learned much from them about the limits of our own perceptions. In our exchanges with the CNIB, the tables were often turned—we were the "sightlings," the ones who were visually dependent, the ones who had a lot to learn from the way the blind and visually impaired think about, and move through, space. In the words of the then-Governor General of Canada at the opening of the new CNIB Centre:

This is how a place that was built to be useful becomes, in its own way, a work of art…It's insight that we're after... So much of what we call "consciousness-raising" is as simple and as essential as being able to imagine what it is like to walk in someone else's moccasins. This building – so thoughtfully designed and executed, so in tune with the CNIB's mission to foster equality and independence – will certainly amplify the Institute's ability to serve the visually impaired. For the sighted, as well, this is a fascinating place that stimulates all the senses, that offers many ways to open our minds to the challenges and to the abilities of the blind. (Adrienne Clarkson)

Conclusion

The CNIB exemplifies an all-inclusive approach to architecture – and it demonstrates how we used principles of Urban Design to transform our clients' core values into a beautiful place that inspires and uplifts the spirit. Nothing gave us greater satisfaction than witnessing the delight on the faces of the CNIB and their clients when they came to see the new completed project and opened their doors to show off their new home to the community. A design approach rooted in principles of Universal Design enabled the CNIB to metamorphose from an introverted, sheltered institution into a mainstream workplace and proud showcase with leading-edge training and conferencing facilities.

As we have seen, Universal Design is not be confused with accessible design. Universal Design is an evolving practice that makes daily life easier, safer and more comfortable

for all people regardless of ability, age, gender, culture or language. It is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. Although it may not hold the same cache as other movements in architecture today, the lessons learned at the CNIB now allow us to knit these principles seamlessly into all our other buildings, without the "institutional" appearance. In many ways, the CNIB Centre has shifted traditional notions of design by employing Universal Design to invent new and creative ways of thinking about space. The end result is a building that is functional, democratic in its accessibility, and economically sound.

The Mountain Women: Design as social-environmental integrating tool through sustainable handling of wool

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Abstract

This Project aims a social and productive integration of the women living in the traditional community of Monteiro District based on the retrieval and revitalization of sheep wool traditional techniques handling.

Brazil colonization commencement place, historical Serra da Mantiqueira range was explored in multiple ways, and its consequence was native forests degradation and impoverishment of folk traditional knowledge.

Shepherd husbandry reintroduction in this region associated to teaching shared with the School of Design from PUC-Rio allows to recognize, valorize and stimulate wool spinnery and dyeing artisan techniques for textile production.

Here we'll show how the partnership between the community and PUC-Rio Design School is strengthening the local social-environmental retrieval boarded on sustainable development instruments.

Keywords

Wool, social insertion, design, traditional folk knowledge, sustainability

Foreword

At present, 80% of Brazilian population is concentrated within urban areas, situation extremely different from 50 years ago as stated by Santos M. [5]. Production devices

continuously attract waves of workers which arrive to cities and their suburban areas aiming to satisfy the consumer needs of its own social group. This huge migration of people towards cities is also perceived in Itamonte-MG region, whose people yearn to belong to the world known at TV.

This work aims to promote the valorization and resumption of sheep wool handling in Monteiro District. Its researches were developed in the PUC-Rio LILD laboratories, and it is mainly based on shared interaction participative proposal of skills from a women's group traditional activities, all of them living in this rural community.

This mountain region on the Mantiqueira range has been occupied for the last three centuries by people who took their sustenance from the land. On the XVII century, its paths were tracked by the Bandeirantes (expeditionary explorers) who settled some villages. Gold rush influenced it twice, one for the very mining activities, and afterwards as an exporting route. During this period, innovative shepherd activities were made part of the local culture supplying families with meat, milk and wool. Many years afterwards, when the prosperous coffee period finished, dairy production boomed specially from cow husbandry, and was widespread to small properties, replacing sheep husbandry.

From the reminiscent Bandeirantes communities, sheep wool usage is still reflected in some districts as Campo Redondo, Berta, Serra Negra, and Monteiro. Formerly this wool was mainly used to weave cloaks, saddle blankets, carpets and clothes. Manufacturing these domestic items, artisans earned their own resources to buy essential needs as clothing.

The long distance to large urban centers promoted more than the establishment of communities in those places, it seeded the roots of skills and techniques used to assure those families' survival. Distance is the issue why today it is still possible to find out tradition in habits and artisan technical handling, both sharing space with new technologies, manufacturing improvements, and consumption of industrialized goods.

Recently arrived at the region but of quick sojourn, new land owners are a local novel fashion, and they use their properties for leisure. The counterweight of this new "modern rural" community activities and interests is also mirrored on the productive activities, where labor ties of the required workforce needed to satisfy the tourists' conditions begin to overlap the former local subsistence and autonomy culture.

Figures 1, 2, 3. Monteiro District Landscape, wool handling learning activities, and wool ball of yarn.

From this point of view we can clearly see the progressive loss of traditional knowledge. As Japiassu H. comments – skills that once were naturally passed through generations – in daily practices and tasks. Women's role so important for maintaining these communal skills keeps diminishing till nothing but banal urban life affairs now incorporated to the country land. Beyond the replacement of autonomous productive methods and processes which formerly were fundamental for survival on the land, the evident cultural transformation also results on the direct migration of the rural workforce to urban zone where it is hired for services and spends its payment acquiring industrialized goods at the city shops. As a regional economic alternative for Itamonte-MG Mountains, shepherd husbandry return represent also an environmental gain in respect to soil recuperation.

Reintroduction and valorization of sheep husbandry are recent facts on the mentioned districts. This work's contents approaches a stage which initially targets the development and strengthening of natural wool spinning and dyeing activities, and then it incorporates textile products development. Our proposal is to broadcast these associated techniques, as observed by Papanek V. [4], and share them in order to provide organization of some kind of cooperative with women groups from local districts. As Manzini E. says, it's a strategy aiming the consolidation of learning process and technical renewal of this knowledge, as well as the generation of trading opportunities for produced goods.

The mountain women and the stolen time

Who does really mind about country people? What is the real importance of these people to the present productive system?

Individual initiative resumed sheep husbandry in Monteiro District about 11 years ago. Initially perceived with suspicious by the local community, it was afterwards incorporated little by little to the regional families' day life. These families have their origins from the Bandeirantes explorers, and are organized in a way that everyone is engaged on services that provide support to everybody at home. Each one has its own task. Men and women work hard on the fields and with herding tasks, and the children follow their parents learning these affairs. Home, children, clothes and feeding care tasks is mainly up to women. Naturally, their tasks fulfill all the hours of the day, but they are reciprocally helped by the elder, children and neighboring fellowship collaboration. Time left for leisure and other activities out of routine is the so called "stolen time". Wool handling activities which initiate with shearing, washing, cleaning, carding out, spinning, and dyeing were always accepted as essential to every day's life, but today after the mass trading of textile products these activities are considered as "stolen time".

Dona Rita's family is one of these families we described. Short in statue, strong and callous hands, four children's mother. She keeps an eye on the work and the other on her grandsons. She takes care of meals and looks after children with such tranquility that she is able to concentrate on chatting with visitors. Since she were a child she stood by her mother, Dona Maria, preparing, spinning, weaving and dyeing wool, and sharing tasks as every girl did. She began to practice these skills watching and helping her mother. Then she abandoned wool handling after the arrival of dairy production and cow husbandry activities, as well as all her community did. Consequently, the learning process of wool techniques were left behind.

Nevertheless, in 2006 the regional situation began to change with the arrival of sheep husbandry, and about the middle of 2007, it generated some work force demand to benefit wool. Among local people, mainly women began to concern about wool and discovered a chance to make use of the "stolen time" in order to earn money from a different resource. That was the beginning of the research for forgotten knowledge retrieval and revitalization.

The proposed production flow surely cannot depend of a conventional and aggressive competition market. Those people also cannot be lead by a productive rhythm based on industrial sophisticated technological models, on the contrary, it is intended to valorize the best there may be within these communities represented here by their women work force. Respect is due to time and time deserves respect. Time to observe, to create, to plant, time for harvest, time for renewal. What is intended is to construe these women group's identity based on the recognition of its cultural values and let them serve as examples for the sustainable utilization of the available goods and materials. Let their products be their environment's reflexes, and be recognized as ways to incorporate variations from artisan processes. There is a real vivid trade for these products, and they are demanded by the so-called fair market. At this moment, we concern in guiding our sight through the establishment of an economic alternative for these women, an alternative which makes use of a renewed knowledge, i.e., may it guarantee what Maturana H. R. e Varela F.J [3] call "authonomy and interdependency" in a way that the sustainability tripod might be equilibrated: economy, environment and social action.

Once alone, these women wouldn't develop a strong cultural process, nor would succeed if they became dependant of an enterprise system without their effective participation. Therefore the adopted procedure was to approach academic research activities to local productive processes, within a strategy that shared and assisted the traditional skills retrieval.

So the researchers' group has taken the decision to regularly follow the activities originated from purchase orders' production.

Campo Redondo, Monteiro and Bento José Districts were treated as main target having the key-partners Dona Nair, Dona Regina, Dona Helena e Dona Rita working individually at each production stage. The wool cleaning was made by the community women, including the elder and the children. Dona Regina was in charge of carding out, and no time it took her to call many girls interested in learning the old skills. The same teaching and learning procedure was applied by Dona Nair who took care of the spinning. Dona Helena worked with natural dyeing based on pigments extracted from surrounding vegetation. Dona Rita was the most interesting person of the work as she assisted Dona Regina e Dona Nair classes to remind techniques, and simultaneously, all by herself, she took the initiative and made new experimentations, mainly with natural dyeing techniques. She was so engaged on these investigations that we began to pay attention to her work.

The research to obtain the índigo blue is noticeable in this experiment. To obtain the blue pigment, traditionally applied to wool threads, it is necessary to pick leaves of a country land vegetal, commonly known as indigo plant or aniline (known as anil in Brazil). This plant can only be harvested on summer rain season when it accumulates enough sap for extraction throughout dyeing process. Dona Rita initially commented that her mother, Dona

Maria, used to extract the indigo blue dye using a resting process which would take a whole week, the wool and leaves embedded in water. Afterwards a mordant made out of washed ashes would be added to reach the indigo blue. Differently from processes introduced by foreign technicians, this process consists in boiling the leaves and afterwards join salt as a fixer. The differences between these two procedures turned out to be emblematic in our work as we perceived that much of the care and beliefs revealed by Dona Rita during the traditional process were extremely relevant to obtain the indigo blue dye. To pick leaves from downside up, not wet leaves, not menstruating woman, not sweating or oiled hands, not mixing leaves with branches or pieces of wood, finally, recommendations that might initially seem not relevant, once they were not part of the boiling technique procedure.

We've done our first experience to extract washing blue with Dona Rita, who were curious to test the boiling technique. She socked and smashed the leaves to accelerate the process, she boiled water together with the wool and the crushed leaves arranging them in layers, and a lilac hue began to tint water, but it didn't get intensified. Then salt and yam shafts were added to fix the color, and the wool was left drying. Dona Rita commented the hue it got was far from the desired blue, and on the next week she remade the procedure adding more leaves but no yam shafts. Again the results were frustrating. We tried the procedure with Miss Selma, daughter of Dona Nair and again it did not succeed. On the third try, Dona Rita retrieved her mother's lessons but also she wasn't satisfied because the obtained hue was greenish.

By the fourth attempt, her son Geovani reminded that his grandma used filtered out water and ashes mix at the end of the procedure. He also told that she stirred the colored water with a cup, the wool out the container. We came to an impressing moment at that time. Within a few minutes, the six days leavening stinky water began to modify under cup hits, passing from dark green to a deep and intense blue, the anile blue Dona Rita was waiting so anxiously for. It tinted the wool and spread all over Dona Rita's arm in such an intensity that the blue hued hand's scars lasted for a week. No one could describe Dona Rita satisfaction and victorious gazing.

Dona Rita's family encountered the remarkable fact of persistently retrieving a forgotten knowledge, and it is also spread to other district families. Thread diameter variations, improved treatment on cleaning, carding and washing out processes, have been undertaken by local resident families. They gradually begin to incorporate the feeling of owning the procedures and products developed from wool activities.

Colored skeins market demands produced by these women have come up to the point that purchase orders require natural artisan merchandise produced conditions, with certified cultural identity and organic material production. This valorization is understood by local resident individuals.

Figures 4, 5, 6, 7, 8 – Dona Rita and the process when water color changed from greenish to indigo blue. Threads colored by Dona Rita.

Final Considerations

The possibility of taking possession of fruitful knowledge and skills produced within community is always a charming role for people who have been excluded for years from productive processes. Their sensation that the world turned out to be at reach stimulates not only people who yearn to simulate the cities agitated rhythm, but also the very present productive standard, showing ways in such examples to assume more healthful practices for everybody's way-of-living. In such a case the researches role, as observers, has been to closely follow traditional technical conditions, and show the path to improvement of tools, which might help productive autonomy and results expansion. The promotion of local community participation awareness on research processes vitalizes retrieval possibilities and knowledge development. With the scope of everyone's well being, we can diminish all those distances sharing Design engagement.

To close our eyes to a demanding world is the same as to omit and agree with resources decaying degradation process and uncontrolled energetic consumption, leading people to consume and discard more and more products.

This work is an approach to traditional knowledge and skill origins and it shares the service of social inclusion and autonomy. Not only the retrieval of dormant techniques, but mainly about the essence of human's life.

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The new school collaborates: teaching and learning design and social responsibility in immersive international field programs

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Abstract

More than ever, universities need to create opportunities for our students to learn about, and practice social responsibility and particularly, to create change for the real world (in which 90% of the population has a critical need.)

This paper focuses on the first two years of an ongoing project between The New School's divisions of Parsons (design), Milano (management and urban development) and General Studies (international affairs), in New York, several external partners, and groups of Mayan artisan women in Guatemala, as an ongoing project in social entrepreneurship and humanitarian design. Of particular interest is how students, through an interdisciplinary spring curriculum and an intensive experience in Guatemala are learning skills that would never be possible in a standard on-campus classroom setting, and how interdisciplinary groups of students can holistically approach development work with artisan groups with the long-term goals of culture preservation and income generation.

Keywords

Social design, social responsibility, interdisciplinariety, cultural diversity

Context

The Design for the Other 90% exhibition website states that

"Of the world's total population of 6.5 billion…90%, have little or no access to most of the products and services many of us take for granted."

This statistic offers a responsibility and an opportunity for educational institutions to specifically engage students in collaborations that will ameliorate this statistic. There has been much engagement from the disciplines in the Social Sciences, particularly around economic development, but art and design institutions have not, until very recently, started to understand the positive impact design can have in underserved communities. Case studies, such as those documented by UNESCO, have also demonstrated that design can play "an important role in encouraging environmentally sustainable and economically viable models…of marginalized groups." (Craft Revival Trust et al., 2005, p. 6)

This opportunity has led to the creation of a cross-divisional and interdisciplinary faculty research group at The New School interested in socio-economic and urban development through design.

Universities are not always immediately able to engage with communities in need since they are in the "business" of teaching and learning, with a principle focus of face-to-face on-campus semester-long courses. The role of a partner can help break the boundaries of the physical campus by connecting faculty and students to their constituents. It becomes critical to adopt a model for partnerships such as this one adapted by the Collective Leadership Institute (see Figure 1). (Collective Leadership Institute, 2007).

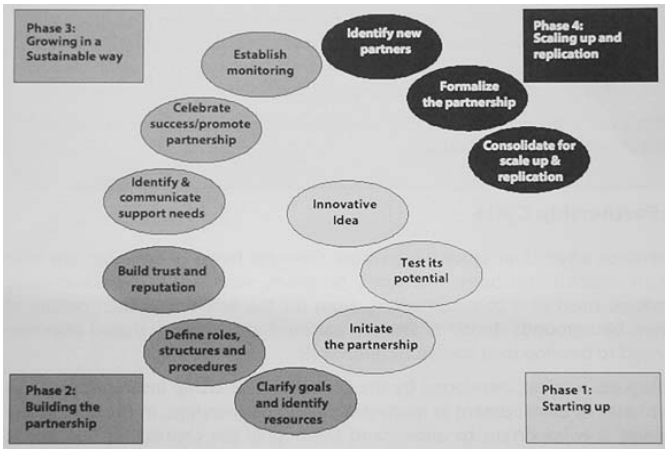

Figure 1: The Partnership Cycle

In 2007 the global humanitarian organization CARE and The New School (TNS) embarked on a long term collaborative project to empower a group of Mayan women in Guatemala—Ajkem'a Loy'a (AL)—by helping them develop a business model to export their handcrafted products to the United States. However, the partnership was not established using the above model and has since been dissolved. Observed challenges that should be addressed in future collaborations include that the project started off with a very large grant by a private donor, without planning to raise money for a continuing engagement, the contacts in the partnership were in the marketing and PR office, not in the offices which offer the core skill of CARE (ie. development), and there was no upfront agreement on how the two organizations would work together, and how this work would be financially sustained. In late 2008 CARE Guatemala lost all of their funding related to AL and worldwide staffing cuts compromised the ability for CARE USA staff to be able to provide further engagement in the partnership.

In 2009, TNS has now partnered with the municipality of San Antonio de Aguas Calientes to connect with their community tourism program, specifically working with a variety of artisan women groups. Following the diagram above, we are in the first circle – testing two "innovative ideas": first, that students can aid the artisan women in their goal of generating a sustainable income from the sale of their artisan goods and second, that San Antonio can be positioned as a destination for community tourism.

Pedagogy

The pedagogical emphasis has been to establish an equal exchange between all participants (between faculty and students, as well as between university affiliates and community partners and individuals). With this value as a priority, and with the assumption that students need to prepare on campus before being immersed in hands-on fieldwork, faculty from several programs at Parsons The New School for Design and from TNS's Graduate Program in International Affairs (GPIA) structured a spring course as a prerequisite for the month-long immersive summer program in Guatemala.

The spring course runs as a lecture series and seminar and ends with an intensive prototyping phase in which teams of students apply what has been read and discussed to the real world context within which they will be working in the summer. The lectures (which are offered by the core faculty as well as experts from a variety of areas within and outside the university) include teaching and learning in informal settings; digital media to communicate, represent and activate; microcredit and financing; marketing; fundraising; and urban development.

It has been critical to demystify the notion of a single expert, and be able to create an equal field of questions, skills, and knowledge to which all participants (students and faculty) can contribute and learn from. This approach has been visibly successful while in the field when students can actively position themselves as consultants with a wide

variety of skills and life experiences (which often extend far beyond their declared "major".)

The course is by application only, to ensure a high quality of students, and a balanced variety of skills and interests. This process has resulted in a mix of approximately 14 students – from Design and Management, Design and Technology, Fashion Design, Fashion Marketing, Graphic Design, Integrated Design, International Affairs, and Organizational Change.

This mix of students and the nature of the project lend itself for an integrative learning environment. "Integrative learning is an umbrella term for structures, strategies, and activities that bridge numerous divides, such as … general education and the major, introductory and advanced levels, experiences inside and outside the classroom, theory and practice, and disciplines and fields." (Klein, 2005, p. 1).

This positioning of students as active agents of the knowledge they have, prepares them to be the leaders, facilitators and teachers of the capacity-building aspect of the summer work. Some workshops that students have prepared and conducted span from ice-breaker activities to promote leadership and teamwork, to specific skill-based workshops in product pricing, sewing, patternmaking and computers, as well as discussion based activities such as how to run an organization and what to do about inventory and quality control.

Additionally, the faculty facilitate students in leading the project on the ground in Guatemala. This hands-on intensive approach requires that students quickly be able to translate theory (from the spring class and previous training) into practice, and always results in a shift for students where they no longer feel that this is a "class," but it is a situation in the real world in which they are playing a critical role.

Design

Given that the professional world that our students enter is increasingly changeable and unpredictable the dynamics and context that shape our educational models are also increasingly complex. The impact of globalization requires that art and design institutions prepare students to address, respond to, and work in a multi-national economy, and multi-cultural social and political contexts. As educators we are increasingly obliged to provide engage with issues of ecological sustainability that arguably require dramatic changes to pedagogical strategies to effectively introduce students to systems, networks, scale, time, relational thinking, and an ethical understanding of their impacts.

As Thackara states in his book In the Bubble: Designing in a Complex World, "In today's ultra-networked world, it makes more sense to think of design as a process that continuously defines a system's rules rather than its outcomes." (2005). Arida in Quantum City follows a similar logic by stating that urban designers need to be understanding of time and change in the built environment in relation to use and shifts in cultural and political perspectives. (2002). There is a growing consensus among design critics professionals and educators, that designers today need to be 'mindful' and be able to evaluate the consequence of design decisions and potential impact on people, place, cultures and our futures. (Thackara, 2005).

Subscribing to this expansive notion of design allows participating students (and not just those "majoring" in design) to think about their work as active skills and knowledges to activate change. Students in the projects have engaged with graphic design (logo redesigns, promotional materials, branding), product design (expanding the product offerings of artisans), curriculum design (in preparing the workshops they deliver as well as teaching artisans how to teach), and design process (as a methodology through which to solve problems resourcefully.)

Outcomes

It is very simple to accumulate a series of deliverables at the end of an immersive fieldwork program. Both the community collaborators and partners (and potentially also funders) are very willing and interested in seeing tangible results and it is natural that everyone involved, in dealing with challenging issues such as poverty, is interested in seeing immediate results in the hope to make a difference.

Less simple is to produce deliverables that "stick" with the community, that truly activate change, and that make a long-term difference. This was a huge lesson learned from the first program in 2008. The artisan's store which was redesigned and fully painted inside and on the façade, is no longer occupied by the group. The workshops for tourists program that students spent so many hours preparing the artisans, and for which a bilingual brochure was designed has not remained a priority for Ajkem'a Loy'a. A micro loan which was adopted by a small portion of the group has been paid off on time, but has also created tremendous tension within the women, and has closed off participation to others in the community.

On the other hand, the women of AL continue to refer to how they learned to price their products in one of the student-led workshops. Several of the members are now comfortable emailing and checking web sites. Most importantly, the core group continues to be extremely motivated to move their association and their product development

forward, and this is in big part thanks to the collaborations with which they have been engaged.

The above mentioned experiences are guiding the work that is just starting in San Antonio de Aguas Calientes. Students and faculty continue to emphasize the value in establishing long-term networks, relationships, and collaborations, and are designing the summer project with activities that will strengthen the various groups involved (via conversations with the municipality as well as with the artisan women, and less skills-focused and more discussion-based activities) and will more likely lead to a multi-year collaboration which will increase the possibility for success in the project.

Conclusions

These types of projects are ideal for a university such as The New School. They require the participation of experts from a variety of fields and therefore facilitates a natural cross-divisional collaboration even in a large university. The intensive and team-based nature of the collaboration also naturally lends itself to bringing together groups of students from a variety of programs and year-levels.

The research group's next steps include

- Continue to monitor the work of Ajkem'a Loy'a and every new artisan group with whom the group works.
- Expand the partnerships so that there is not an over reliance on one partner which can compromise the quality of the work on the ground.
- Continue to refine the proposed model and disseminate it so that it can start to be replicated and adopted by other universities, aid organizations, or artisan groups.
- Further position the group within the university, via internal and external grants and public programs, and continue to challenge the standard 15-week on-campus courses.

One of the biggest challenge TNS will continue to face in this project relates to avoiding scenarios of dependency in which the artisan women cannot succeed without the input or support of external groups. This is a critical priority for the university and yet one of the hardest goals to reach.

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Conferencias Magistrales

Design and Innovation for social needs

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About Microsoft Design Expo

Design Expo is a Microsoft Research forum where the world top graduate design institutions showcase their prototype interaction design ideas. Microsoft Research sponsors a semester long class at eight interdisciplinary leading design schools and invites the top class projects to present their ideas as part of a Faculty Summit.

Design Expo allows design grad and undergrad students from around the world to learn from exploring a particular local or social need and build ongoing relationships between universities. This fact enables students to network and learn from other students in different design programs around the world about how they approach design solutions

Microsoft provides a voice for design schools within the Microsoft Research Faculty Summit to present innovative students' work, raising the awareness and importance of design in society and companies.

Interactive and Industrial Design students solving social needs

For two years (2008 and 2009), our Design Department has been invited to participate in this Microsoft's event. The Design Expo creates a forum for encouraging "out of the box" thinking, by exploring and contrasting students' visions for the future of design, information technologies and computing.

In 2008 edition, nine institutions with established programs in interdisciplinary design presented new ideas around the theme: "Learning and Education". That year's schools' selection include participants from USA, China, India, Europe, and for the first time Mexico, representing Latin-American countries.

Each school presented innovative ideas, concept prototypes, visual and industrial designs, and supporting research in their media based presentations around the proposed theme.

In 2009, for seven international and recognized universities, the design challenge was to explored new ways of working. The goal was to design tools and services that may support new ways of working in the next future. This included: many different economic and cultural contexts, mobile and migrant workers, and part-time, micro-financed work.

In both occasions the students tried to showcase exceptional design thinking about the future of computing and interaction linked with Mexico City's social problems.

The design process

During a semester 16 students from Industrial and Interactive Design are working in innovative business ideas, concept prototypes, visual and product designs around different local problems and they develop different proposals. The process is guided by the professors and one or two Microsoft's liaisons.

Microsoft's key design points:

- Designs solutions should include user interface interactions as part of the user experience demonstration.
- Designs should address particular needs & desires of users, ideally coming from diverse economic, professional and cultural backgrounds.
- Proposals must take a point of view and must be clear on what the user's scenario is addressing and what is not.
- Validation of design's solutions with actual user feedback.

The organization of problem-solving activities for MR design expo's projects is conducted in three phases, which goal is to structure the processes for planning, conducting and analysis of the MR design's project.

Phase 1
First design thinking (launch of the project)

Activities:
- Visit of Microsoft's liaison
- Short period of field research (close observation of people needs)
- Identification of social needs and possible design problems

- Generation of primary knowledge
- First understanding of what is needed
- Nonjudgmental generation of ideas
- Brief analysis of the more promising solutions
- Feedback of Microsoft's liaison, professors and classmates

Phase 2
Structure of design problem.

Steps:
1. Research and analysis. Deep ethnographic field research and more referenced sources that are needed to analyze the problems detected in the previous phase.
2. Problem's descriptions (Brief explanations and descriptions)
3. Context and users (contextual observation)
4. Possible Scenarios
5. Definition of design goals
6. Synthesis of knowledge (analytical and theoretical models)
7. Framework for MR design's
8. Configuration of design's solution

Phase 3
Definition and implementation of possible solutions.

Steps:
1. Design problem's description
2. Definition of design's parameters (from perceptual to cognitive)
3. Analysis of users and context
4. Possible fields for the design's proposal
5. Design's shape and interaction
6. Users and topologies (cultural, physical, etc.)
7. Social and cultural relations attended
8. Usability and ergonomic testing
9. Feedback (receive input from the users on the impact of their actions on the interface or product system)
10. Final Presentation
11. Evaluation

During the whole design process the students consider three key elements, related to problem solving and innovation, these are:

- Empathy – Continuous research to users and context in order to learn about the possible product or service solution; understanding needs and design problems.
- Insertion - Transitioning to physical, emotional and cognitive ease and familiarity needed for new products or services that may be inserting in new contexts or cultural situations.
- Sensation – Excitement or surprise and other emotional factors that will create positive interest and maintain engagement with the solution and acceptance of the service or product.

Design's solutions

Once scenarios and possible solutions are defined, each team builds a design prototype (considering the interaction and user experience). If the design solution involves software, students mock up what a user would see and do, thinking through the interface, the context of the user and results desired. The goal of the prototype is to create a vehicle which best communicates the tangible experience of the design solution. The Microsoft liaison works closely with the professor to determine the practical milestone date for the prototype completion and the nature of what makes and appropriate prototype.

In 2008 the students work around five different topics: obese kid's food habits, environmental education, stress and technical education. The selected project was called: "Foodmates".

Project description:

Foods disorders have become more common. Lack of education about this issue has caused younger generations also to be affected. The project aim was to educate children about healthy food habits.

Foodmates is a system that combines thinking, fun and exercise, providing the necessary information in order to create better food habits between children and their parents. To accomplish the goal, the system contains three elemental pieces: an interactive toy, a video game, and a parental application. With Foodmates, children learn how to balance exercise with what they eat and also discover how to separate and combine the different food group.

In 2009 the students work around four different topics: freelancers, micro businesses, unemployment and service workers. The selected project was called: "Work Recognition System E-tag".

Project description:

Lack of work recognition is a problem in Mexico City. Motivating and keeping employees, in the services industry, requires effective management but also a good system to motivate and reward them. WRS develop Etag, a gadget and an awards system game to motivate positive behavior among service workers.

Results

Microsoft Research Design Expo have allowed our design students to acquire a series of experiences that have expanded their vision of the critical situation of Mexico and the rest of the world; as well as the responsibilities of designers within the Network Society. Through their projects the students have shown a self development of new process of learning, different from the one generated in the classroom, which is clearly related to a more global and less fragmentary vision of contemporary problems.

MRDE projects facilitate the synthesis of theoretical and practical concepts and connect them with new media and information technologies. During these two years, that we have participated at Design Expo, the students have generated innovative solutions thanks to the connection with specific Mexico City's problems, where they have evaluated if their concepts have been pertinent and viable.

Manuel Castells affirms that: "technology is a fundamental dimension of social change". MRDE students know now that new communication media constitute a susceptible tool for a positive or negative utilization.

Howard Rheingold says that: "beneficial uses of technologies will not automatically emerge just because people hope they will. Those who wish to have some influence on the outcome must first know what the dangers and opportunities are and how to act on them"[1]. Through MRDE projects students assumed the responsibility of the social, economical and political changes that come with design and information technologies; they had to be capable of analyzing and evaluating properly the context where a specific need is located so their proposals should be pertinent to the places and people, incorporating in them, a pertinent formal language and an effective use of technologies and design.

Design Expo students have confronted the enormous problems of urban Mexico, assuming in their projects the social impact and economical implications of design and information technologies. They have realized they have a great challenge in the future: to humanize new technologies in order to collaborate with Mexican social development.

1 Rheingold, Howard. "Smart Mobs: The Next Social Revolution". Basic Books. 2002. p xxii

Details sewing the invisible

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A Costura do Invisivel took 180s days and 700 hours and a team of 150 people to create. For clothing I chose the late nineteenth century, a period when fashion was extremely elaborate and precious, both in volume and textures. Those values would be crucial in causing in the spectator an instantaneous, intense feeling of wonder at the work.

The paper reliefs were embossed by Brazil's most traditional engraving company, Balsemão. To cut the lacework for each model, we used the laser technology of Universal. And among paper manufacturers we negotiated with ArjoWiggins, which produce a unique paper products line. We therefore selected vegetable-fiber paper because of the subtle transparency it would give the clothes, and verge de France for its toughness, suitable to the setting.

Aline, my assistant, cross-referenced all the possibilities and brought together those who were cutting, weaving and sewing. Hilda, our seamstress, amazed herself by sewing paper. In his studio Julinho, our scenographer, came up with the solution to the fauna for the setting around our fairies, designing and producing anemones out of paper cones.

In order to generate enchantment we created the Playmobil fairies. This playful element so present in people's memories, would make it easy to the spectator to project themselves into the work, as if in a fairy tale. The serial reproducibility of the dolls – after all, they are exactly alike – would allow the spectator to identify with any models on the catwalk. As in a forest, where there are no well-trodden paths, everyone would be able to strike out on their own, choosing a new direction with each new character.

Fernando Andrade, our make-up artist, re-created the Playmobil esthetics in the models by outlining only their eyebrows and mouths. To achieve the fairy's glance, he would paint their eyelashes white. Inês Sacay, our hat maker, was in charge of the Playmobil wig that would connect the audience minds with our universe. Vana, our props manager and doll-maker, coordinated the efforts of a team of craftspeople entrusted with the task of transforming

miscellaneous materials such as glue, wires, strips and laceworks of paper into "human works".

It was time to dress. In the first fitting sessions we told the models that the clothes had not yet arrived and that they would be trying on only the mock-ups. We dressed them in their black leotards, and then their caps. We made them up, doing their eyebrows, mouths, eyes. We dressed them carefully in their paper clothes: the skirt, then the corselet, the sleeves, the collar. Finally, the Playmobil wig.

At that moment, as if by enchantment, instead of paying attention to the language we allowed ourselves to be swept up in the image. We no longer distinguished the leotard, the skirt, the corselet, the sleeves, the collar, the Playmobil wig. We were surrounded by a larger meaning. Above and beyond impeccable pieces, the craftspeople were perceiving their whole art no longer as a setting for metaphors but rather as a realm of metamorphosis that led to an active behavior, an invitation to the game, to a transformation.

We had closed the circle
Many things had changed over those 180 days. We had rediscovered the importance of marveling at the world, of being attentive and sensitive enough to find new meanings in the most mundane things, or in an instant of lightness. We had rediscovered that there exists a still-invisible 'possible' hidden within the real; that it is necessary to shun the most obvious actions, to dare, to innovate, to learn how to sail on an ocean of uncertainty through the archipelagos of certainty that surround us; that we have to think like cartographers to create our own map, freeing ourselves from the static, but being sensitive to the transformative movements all around us.

We rediscovered the essential participation of the audience in the work, the precise use of the vague, the principle that things which at first appear chaotic and interminable can gradually show signs of leading somewhere, that it is essential to repeat over again until things are different, and that it is good to know how to incorporate the haphazard into artistic creation.

We need to strip our souls bare to reveal our capacity to be light, to dream of the unsayable, the impossible, the inexplicable, the indefinable. And to associate the visible trace with the invisible, creating volumes, textures, colors, words, designs, openings and pathways toward a new thinking. That is what it means to sew the invisible.

Sewing the invisible has caught the attention of the international community and awed the audiences at the Sao Paolo Fashion Week at the theatrical element of the show. I never could imagine such great reaction. This work was considered one of the most important fashion shows of the century by Galliera, Fashion Museum of Paris. All the art curators considered a stunning performance. But the most impressive reactions, that really touched me, were 3 commentaries.

After the show, when I was going home, a cleaning lady shouted my name, left behind her working tools, and came running in my direction. Enthusiastically she shook my hand and deeply thanked me for what hers eyes had seen. As the fashion show access is very restricted for press and buyers, I asked her how she could see the show. She explained that exactly at the moment of my show, she was in front a big screen, that was showing my performance alive, and at that moment she stopped working and started gazing it. I asked: why did you like so much? She replied: I think your works means: people are not important for what they carry outside, but inside.

The next day I was going inside a sponsor lounge. A very big security man stopped me at the entrance, all the public relationship staffs started to explain who I was. He calmly said: I know. He took from inside his jacket a newspaper with pictures of my show in the front page, polite he asked me: Please can you sign for me? I 'm collecting everything about your work to tell this tale to my wife and sons.

A journalist came inside the dress room after the show. He couldn't spell a word. Tears in his eyes. He was very very touched. With his hands, he signalized he was going to call me later. Next day he called me: Jum, you broke my legs yesterday. I was seated in the first row watching your show. Writing about what was in front of my eyes. As usual, I thought I understood everything. When the models started to tore off. I could barely remain stood. I seated and started to cry. My certainties got me blind.

El Diseño y su responsabilidad ante los embates neoliberales

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"Los diseñadores son los conformadores materiales de la cultura".

Introducción

Un recorrido a través de la historia nos muestra que las diferentes épocas y los distintos pueblos se han rodeado de entornos y objetos diversos, que son la manifestación de su cultura, de los avances tecnológicos con los que cuentan, de las herramientas culturales que utilizan y de las formas como se relacionan. Cuando nos centramos en el estudio de los objetos podemos darnos cuenta que estos, son capaces de hablarnos de las actividades, los deseos y los ritos de una sociedad. Gracias a ellos, se preservan modos de vida y creencias, los objetos incluso, sirven para situar la realidad, "… un objeto siempre será la expresión legítima de un modo de vivir y ver el mundo" (Martín Juez, 2002, P.23). Los objetos en los distintos lugares se conforman a través de una serie de características diversas de utilidad y belleza que dependen de la visión del mundo que tiene esa sociedad.

Desde hace más de un siglo, la profesión del diseño se ha centrado en la conformación de la cultura material y es una realidad que cuando ejerce la actividad del diseño, el diseñador expresa valores a través de los objetos y comunicaciones que propone. Cuando un diseñador piensa en un objeto conformado por un material determinado, que se realizará a través de un tipo de proceso, define medidas con base en una cierta ergonomía, incorpora mecanismos de una cierta complejidad técnica y los integra en un objeto que tiene características específicas de forma, color y composición, proyecta un producto que puede ser pertinente para cierto tipo de usuario y poco pertinente (o incluso impertinente) para otro.

Es fundamental que el diseñador esté conciente del impacto que su trabajo tendrá en la sociedad, ya que las características funcionales que proponga en los objetos, propiciarán cierto tipo de interrelaciones entre los grupos usuarios, el lenguaje formal que use, hará referencia a lo comunitario o a lo global y la inclusión de determinados criterios de producción, incidirán en las relaciones de dependencia tecnológica y de desarrollo sustentable de los pueblos

De un tiempo hacia acá, la globalización ha dado pie a un nuevo orden mundial en el que el paradigma neoliberal y las fuerzas conservadoras existentes, situados desde la lógica del mercado, imponen formas y parámetros que permiten el mantenimiento de las fuerzas dominantes en el mundo y traen como consecuencia el desarrollo de unos cuantos y la explotación de muchos, lo que ha dejado de lado el bienestar de las mayorías.

Los conceptos y definiciones derivados de la globalización pretenden a conformar una especie de pensamiento único, un constructo ideológico que busca tener la razón en cualquier circunstancia y que actúa tomando como base un grupo de principios consensuados al interior de algunas organizaciones, centros de investigación y universidades y que se han difundido a través de intelectuales financiados por organizaciones privadas nacionales y extranjeras, medios de comunicación, etc.

Pablo González Casanova propone pensar la globalización como un proceso de dominación y apropiación del mundo (de estados, mercados, sociedades y pueblos) en todos los términos: político-militares, financiero-tecnológicos y socioculturales. De acuerdo con Gandarilla, (2006) de un tiempo hacia acá la ideología de la globalización se ha consolidado como cuerpo conceptual y como paradigma de interpretación y se asume como categoría de análisis o como elemento de dictaminación científica.

Estas concepciones pretenden que el proceso de globalización es homogéneo y homogeneizador y que en él, los avances tecnológicos y sistemas informáticos borran las diferencias culturales y salariales, la polarización entre los distintos países y regiones y las enormes diferencias entre los sectores de la población. Para ello, define que el sistema económico debe ser el regulador de las relaciones y propone un ajuste estructural en el que finalmente las regiones más débiles contribuyen de forma determinante a aumentar las condiciones de acumulación de las más fuertes.

La globalización ha impactado de forma definitiva a los países emergentes en varios temas, uno de los cuales es el relacionado con la cultura material y los significados de los entornos y objetos que rodean a las personas y a las sociedades. Con mayor frecuencia las personas que viven en estos países, se ven enfrentadas a grandes presiones para apropiarse de significados culturales y patrones estéticos alejados de su realidad, de su modo de ser y de su cultura. El avance de la globalización en todos los campos

presenta enormes dificultades para plantear un sano distanciamiento con el neoliberalismo, que poco a poco ha compenetrado a los países y las instituciones hasta ser asumido con frecuencia como la razón establecida.

El avance de la globalización, ha permitido que las reformas económicas y sociales que se dictan a nivel mundial desde una perspectiva centralizada, desarrollada a partir de los problemas y agendas de los países desarrollados, se tengan que asumir en los países en desarrollo sin mucha claridad y causando efectos brutales. Este fenómeno ocurre por supuesto en países como México en el que las micros, pequeñas y medianas empresas que son las que generan cerca del 80% de los empleos, se ven afectadas en su desempeño y muchas veces tienen que disminuir su actividad o cerrar debido a una serie de políticas que les son impuestas desde ámbitos externos.

La profesión del diseño

Desde el inicio de la profesión del diseño hasta la fecha, ha habido discusiones en torno a cuál es el efecto del diseño en el entorno y la vida de las personas y cuál debe ser el papel que los diseñadores tienen que cumplir frente a la sociedad. Las posturas que ha asumido el diseño como profesión frente a las situaciones que les presenta el contexto han variado de manera significativa en las diferentes épocas, ya que en poco más de un siglo el diseño ha oscilado desde posiciones que retomando cuestionamientos filosóficos proponen un tipo de diseño con base en criterios morales, hasta otras en las cuales el factor económico es el criterio exclusivo de evaluación.

Retomando el discurso de la globalización, en el mundo actual se ha dado una enorme importancia a la comercialización y al incremento de los patrones de compra, por lo que muchas empresas han llegado a concebir al diseño como aliado del mercado y han hecho uso del él, como herramienta para obtener mayores ganancias sin pensar en las necesidades de las personas a quienes se dirigen los productos, ni en la sustentabilidad. Gran cantidad de diseñadores trabajan acordes a esta línea, generando enormes ganancias para compañías trasnacionales y avalando la necesidad de "marcas comerciales" e íconos del diseño, ya que el marketing ha visto que la autoría es una herramienta muy conveniente para atraer distintos tipos de audiencia.

En contraposición y considerando algunos aspectos de la globalización como: el incremento en las comunicaciones, el aumento en la inmigración y el mayor conocimiento de las diversidades étnicas y culturales, hay una serie de movimientos que propugnan por la construcción de nuevos conceptos de civilización desde el planteamiento de estados y naciones multiculturales, tolerantes, democráticos y justos. Derivados de estos planteamientos se propone la necesidad de repensar las formas de "hacer" el diseño, de manera que contribuya a lograr mejores condiciones de vida para los ciudadanos del mundo.

En Otoño del ´99, un grupo de profesionales plantearon el First Things First Manifiesto 2000, que mencionaba: "nos hemos criado en un mundo en el cual las técnicas publicitarias y sus medios se nos han presentado como el lugar más lucrativo, más eficiente y deseable donde utilizar nuestros talentos… esta es la manera en que el mundo percibe el diseño. El tiempo y la energía profesionales se usan para atender demandas de cosas que, a lo mejor, no son esenciales"[1]. (Pelta, 2004, P. 67)

El entorno actual en el que se desarrollan los profesionales del diseño es complejo debido a diversos aspectos como:

- el crecimiento de la tecnología que va adelante del desarrollo de productos y permite que el diseñador pueda proyectar casi cualquier tipo de solución, ya que su factibilidad tecnológica está prácticamente asegurada
- el incremento en la cantidad y el acceso a la información y las comunicaciones que ha llevado a las personas a estar inmersas en un inmenso "mar" de información, y no siempre es posible conocer la calidad y veracidad de la misma
- el crecimiento de la internet y las redes de comunicación, que hacen factible que los mensajes generados en cualquier país puedan llegar en tiempo real al otro extremo del mundo
- cambios tecnológicos que permiten nuevos formas de trabajo a través de vías alternativas y virtuales como la internet y abren la puerta a la colaboración con profesionales que están alejados en otras ciudades y otros países, proponiendo estrategias, soluciones y proyectos a través de lenguajes diversos, que deben ser considerados tanto en el espacio, como en el tiempo
- el aumento en la valoración de la imagen sobre los lenguajes hablados y escritos, lo que plantea enormes retos para las profesiones del diseño, que deberán proponer los tipos de lenguaje visual y objetual, que darán una nueva fisonomía al mundo, influyendo en la calidad de vida de las personas
- el avance en el desarrollo profesional que es paradójico, ya que se requiere un incremento en la especialización, en un entorno mundial en el que se plantea la necesidad de abordar los problemas de forma inter y transdisciplinaria buscando respuestas integrales. Este panorama plantea la necesidad de encontrar otro tipo de desarrollo profesional que permita conjuntar diversos lenguajes profesionales con miras a la solución de problemas.

1 First Things First Manifiesto 2000, Diseñar Hoy. Temas contemporáneos del Diseño Gráfico.

El diseño en México

Los requerimientos para el avance del diseño en los países en desarrollo y el tipo de formación que requieren los diseñadores que ejercerán la profesión en estos países, tienen que atender los elementos de trabajo ya mencionados, pero además considerar algunas circunstancias particulares, porque las condiciones de las instituciones y empresas con las que colaboran son más escasas, lo que hace que los retos que enfrentan sean mayores.

Los diseñadores mexicanos, deben contar con todas las herramientas profesionales con las que cuentan los diseñadores de otros países, pero también manejar habilidades para plantear estrategias de competitividad, creatividad e innovación, que ayuden a las instituciones y empresas a competir y subsistir en un mundo globalizado y dentro las limitaciones que este orden les impone: las políticas mundiales, el tipo de crédito, que resulta escaso y caro, la limitada tecnología con la que cuentan y la falta de apoyos del gobierno en sus propios países.

Los diseñadores deben ser capaces de comprender, conocer, distinguir y analizar las circunstancias particulares de las compañías con las que colaboran, así como las características de los usuarios y o perceptores a quienes dirigen sus proyectos, y confrontar sus propuestas con los discursos globales, analizando si éstas se pueden considerar pertinentes o no.

Ante la limitación de recursos, tienen que ser capaces de encontrar otras formas de solución a los problemas que les presenta la realidad, desde las tecnologías intermedias y proponiendo inversiones más bien modestas. Pensar globalmente y actuar localmente obligándose a plantear estrategias innovadoras y de desarrollo de productos y servicios que les den posibilidades a las empresas para florecer a través del diseño. Debido a que las condiciones de operación debe hacerse en condiciones menos propicias que las que rodean a las asociaciones en los países más desarrollados, a los diseñadores les corresponde dar las respuestas pertinentes desde una sólida formación ética y valoral y poniendo en acción la creatividad. El gran reto del diseño en nuestros países, es proponer lo mejor con los menos recursos disponibles.

Otro elemento que está presente en el ejercicio profesional del diseño en México, es que aunque la disciplina tiene ya más de cincuenta años, las empresas e instituciones no la conocen suficientemente o bien no están convencidas de la necesidad del diseño para su desarrollo. Muchas de ellas piensan en el diseño más como un gasto que como una inversión y rehúyen la posibilidad de incorporar a los diseñadores dentro de sus equipos de toma de decisiones, así que otro punto importante, es el trabajo que hay que hacer para lograr la revaloración de los diseñadores y del quehacer profesional del diseño.

La formación para el diseño en los tiempos actuales

Los cuestionamientos sobre cuál ha sido la influencia de las universidades en el desarrollo de la sociedad y de la cultura, ha permitido que estas instituciones se cuestionen acerca del papel que les corresponde jugar frente a la colectividad. En los años sesenta y setenta, la distancia entre universidad y sociedad trató de salvarse con el surgimiento de la educación masiva, que aunque solucionó en parte el problema de la participación reservada a una elite, creó nuevas relaciones de poder entre los grupos universitarios y la sociedad. El planteamiento de una educación para todos, no trajo solución a los problemas de fondo, ya que los profesionistas heredaron el carácter elitista de las personas formadas dentro del ámbito universitario y esto sumado a las deficiencias del sistema educativo, propició que en los años ochenta diera inicio la llamada "crisis de las profesiones", en la que se argumentaba que los profesionales no vivían de acuerdo a los valores y normas que predicaban, porque sus intereses individuales chocaban frecuentemente con los intereses de la sociedad: cobraban en exceso, ejercían discriminación a favor del más rico y ocultos tras el diploma universitario, no se hacían responsables ante el público de sus propios actos, (Shön, 1992 P. 23)

En la actualidad, se espera que las instituciones de educación superior además de ser generadoras de saber, puedan responder eficazmente a las necesidades de la sociedad, ejerciendo su quehacer de forma responsable en materia de formación de los alumnos y generación de tecnologías, de modo que se conviertan en agentes activos para la promoción del cambio social. Las universidades no pueden funcionar aisladamente, deben considerar su contexto local en el marco de un mundo globalizado y no deben soslayar su contribución al desarrollo económico sostenible, a la institucionalidad democrática y a la equidad social de los países. Deben asumir su responsabilidad social, en un mundo en el que claramente es posible ver el desencuentro entre las necesidades humanas y el poder científico, tecnológico, económico y político.

Desde el planteamiento del Espacio Europeo de Educación Superior (EEES), el perfil profesional tiene un fuerte protagonismo en la formación de profesionales, pero desde el punto de vista del Departamento de Diseño de la UIA es necesario además, que el concepto de perfil profesional se vincule a la conciencia de las necesidades sociales y que en su formación, los profesionales sean capaces de tomar en consideración al contexto en el que se sitúan y las necesidades derivada del mismo, como los motivos prioritarios de análisis y evaluación.

Como se mencionaba con anterioridad, las estrategias y los productos o comunicaciones visuales surgidas del quehacer del diseñador, no son un fin en sí mismos, sino mediadores entre las personas que viven en un espacio-tiempo determinado, conformado a través de una serie de elementos culturales, "la importancia del diseño radica en su proceso mental, para imaginar y configurar objetos que sirvan de mediadores del ser humano con su cultura y su medio ambiente" (Rodríguez, 2000, P. 83) por eso, los estudiantes deben realizar un trabajo cercano a la sociedad y relacionado directamente con los futuros usuarios o perceptores, ya que esto les permitirá analizar y evaluar los ámbitos de los que surgen las necesidades, e incorporar en sus propuestas, códigos y lenguajes formales, adecuados a contextos y situaciones concretas

Otro de los conceptos que se han permeado a través de la globalización y al que la universidad, como un espacio de interconexión e interdependencia, no puede ser ajena, es el de "Competencia Profesional" que en términos generales implica una actividad cognitiva compleja, que le exige a las personas la posibilidad de transferir el aprendizaje a situaciones distintas, aprender a aprender, así como plantear y resolver problemas en situaciones concretas. En el enfoque de competencias se busca que los estudiantes adquieran saberes sobre hechos y conceptos, así como procedimientos y actitudes.
Para la UIA, la Competencia Profesional es: "la interacción de un conjunto estructurado y dinámico de atributos tales como: conocimientos, valores, habilidades, actitudes y principios que intervienen en el desempeño reflexivo, responsable y efectivo de tareas, transferible a diversos contextos específicos". (Fundamentación plan de estudios, 2003) Este enfoque integral incluye un saber, un saber hacer y un saber ser y resalta la importancia de transformar los procesos educativos, en prácticas que relacionen el conocimiento del aula y la realidad social del entorno educativo.

Desde mi punto de vista la formación sólo tiene validez, si a través de ella se logra garantizar el desarrollo regional y el progreso social y económico de un lugar, por lo que es necesario concretar un repertorio de perfiles profesionales, sujetos a cambio, que puedan superar los desafíos de la formación y el trabajo: ética, transparencia, coherencia, movilidad, polivalencia, flexibilidad, convergencia, correspondencia, homologación y reconocimiento de la realidad.

Si se plantea la fuerte incidencia e interdependencia entre educación y sociedad, se debe hacer que la universidad no se limite a "ir detrás del carro", sino a convertirse en un agente de comprensión y cambio hacia un modelo deseable. Se debe buscar que las problemáticas presentadas en las aulas, se enfrenten tomando en consideración los factores del contexto, de modo que los estudiantes puedan conocer de primera mano realidades distintas de la propia, (haciendo conciencia de las diferencias) e incidir en un sitio, conjuntamente con las personas que demandan soluciones a través de la generación de respuestas de diseño pertinentes.

Sólo así se puede lograr el objetivo que plantea el Departamento de Diseño,"contribuir a hacer visible el mundo que queremos, a través de la atención a las demandas de la sociedad, rescatando los valores de la cultura y generando respuestas respetuosas del entorno, previendo y propiciando los avances tecnológicos e interviniendo en las diversas fases del desarrollo de proyectos que le permitan proponer, desarrollar y mejorar los mecanismos de relación entre los sectores productivos, los sectores sociales y el diseño" (Fundamentación plan de estudios, 2003)

Los planteamientos globalizadores proponen una educación:

- reducida a la escuela, en donde la participación de la comunidad y la sociedad se lleve a cabo de forma restringida
- con una visión eminentemente sectorial (sin visión sistémica)
- permeada por una visión dicotómica de la realidad
- que se mueve en el inmediatismo y el trabajo a corto plazo
- vertical y autoritaria
- que privilegia cantidad sobre calidad y lo administrativo sobre lo pedagógico
- basada en supuestos de homogeneidad
- que no hace diferencia entre enseñanza y aprendizaje
- que piensa que la educación es un proceso de transmisión, asimilación y acumulación de información/ contenidos, con base en un modelo transmisivo de enseñanza.
- que muestra preferencia por las vías rápidas y fáciles

Por el contrario, es necesario buscar planteamientos pedagógicos que coloquen a los estudiantes frente a lo impredecible y cambiante del entorno y enfrentarlos a situaciones más acordes con la realidad. De acuerdo con Díaz Barriga "el proceso de enseñanza debería orientarse a aculturar a los estudiantes por medio de prácticas auténticas… apoyadas en procesos de interacción social" (Díaz Barriga, 2003, p. 33)

El acercamiento al mundo socialmente constituido es fundamental, ya que la apropiación de competencias profesionales, se da gracias a la interacción de los alumnos con actores externos a la universidad y el acercamiento a contextos diversos es lo que estimula la adquisición de valores como la solidaridad.

Algunas teorías educativas actuales como la Cognición en la Práctica, plantean que el conocimiento es situado, que surge de la actividad y se desarrolla con relación al contexto y la cultura en la cual se aplica. Derivado de esta teoría, hay un enfoque instruccional denominado enseñanza situada, que reconoce que el aprendizaje escolar es un proceso de enculturación que ayuda a los estudiantes a integrarse a una comunidad inserta en una determinada cultura con prácticas sociales específicas; que aprender y hacer, son acciones inseparables y que los estudiantes se deben formar en un contexto adecuado.

La dificultad en los procesos de aprendizaje estriba en que la enseñanza tradicional no ocurre en contextos significativos y en el aprendizaje los alumnos no se enfrentan problemas reales, ni aprenden estrategias adaptativas, ni extrapolables. De acuerdo a Jean Lave las relaciones entre las personas que actúan e interactúan en sus actividades con el mundo social, no deben ser exploradas aisladamente de los conceptos cognitivos, ya que la actividad social siempre involucra cambios en el conocimiento y la participación en la vida cotidiana, puede ser pensada como un proceso de cambio de entendimiento del conocimiento.

Las actividades cotidianas se dan en ambientes específicos que no son homogéneos, así que no es posible homologar el tipo de problemas que los profesionales tendrán en la práctica, por eso es necesario que los estudiantes desde la universidad, sean capaces situarse desde diversas perspectivas y proponer soluciones acordes a los sitios y las personas. Se requiere que cuenten con una visión más integral en la que las personas están implicadas en el mundo a través de una serie de intereses: sociales, políticos, económicos, lo que lleva a replantear lo cotidiano, tanto dentro como fuera del aula. Este marco permite que tenga sentido la idea de la cognición, como perteneciente a la vez a mente, cuerpo, actividad y entorno.

Es necesario reestructurar los procesos de enseñanza y aprendizaje, de modo que se contextualicen los conocimientos aprendidos, para servir en la práctica profesional, permitiendo una formación profesional que de prioridad a la calidad, y que sea acorde con los grandes retos actuales, acercando los estudios universitarios a la sociedad cultural e históricamente construida, e incorporando en la formación, una visión ética de la profesión.

Algunos elementos de apoyo en este tipo de educación son:

- el planteamiento de proyectos con énfasis en la resolución de problemáticas ligadas a situaciones locales, y apoyados por especialistas en el tema
- la búsqueda de modelos pedagógicos innovadores, que permitan que los alumnos puedan plantear procesos “propios” y re-construir sus contenidos

énfasis en el aprendizaje

- un maestro que actúe como guía y facilitador, incorporando los lenguajes profesionales y ayudando al alumno a reflexionar sobre su práctica profesional

Aunque hay enormes presiones de la globalización incidiendo en la educación y aunque las universidades tengan que cumplir con las políticas que provienen de los sistemas globalizados, se pueden plantear caminos alternos que permitan una adecuada formación, de modo que los futuros profesionistas puedan cumplir con su compromiso social, teniendo como perspectiva lo global, pero situados de forma clara desde lo local, conociendo las problemáticas que surgen desde los países en desarrollo y planteando soluciones propias y pertinentes que ayuden a encontrar nuevos caminos de bienestar para nuestros países.

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