Proceedings

Seminar

On

Formal Product Design Education in Bangladesh

Sept. 20-22,2003

A study into Relevancy, Feasibility & Applicability

Organized by:

DTC

Proceedings of Seminar on Formal Product Design Education in Bangladesh

A study into Relevancy, Feasibility
& Applicability.

Sept. 20~22,2003
Hotel La Vinci

Organized by DTC
Component C –BDS programme
GTZ

Content

1.0 Concept Paper of Seminar on Product Design education.

1.1.1 Introduction:

There is not much scope of saying a lot about the Development & Diversification of Product manufacturing in Bangladesh. The culture that prevails is that the industry invariably copies products seen in design journals and samples obtained from abroad employing not so appropriate technology. Perhaps the only reason the industry can sustain itself in the market is through cheap labor as well as cheap pricing. The key elements in this grim scenario are:

a) **The Entrepreneur / Manufacturer / Producer:** Apart from some large and specific enterprises, most of the Manufacturers and SME's do not house an appropriate Research and Development (R&D) section within their organization. The practice is, as mentioned before 'copy culture' and /or production of design ideas that accompany the order itself from abroad. In the latter case the manufacturer acts as a provider of cheap and sometimes skilled labor. Unlike common practices abroad, where a percentage of the profit is and essentially invested for R&D ensuring sustainability of the product line in the ever-competitive market, there are few such examples here in Bangladesh. The loan structure that is available for the manufacturer does not ensure investment in the R&D since it is not mandatory on the part of the manufacturer to do so. But, in order to develop the culture of Industrial Design in Bangladesh it is not an option but an essential for R&D to be established, since ever stiffening competition from China, Vietnam and other Asian countries in cheap yet quality products forces us to persevere in the designing field and abandon the practiced system of copying.

b) **The Professional Industrial Designers:** The numerous institutes that produce designers who are to provide services in this field of Industrial Design are not tailored to impart such training in Bangladesh. To give an example: The designers involved in different design houses, boutiques and handicrafts mostly come from the fine arts background, but the institute itself does not have an applied art / industrial art department and mainly focuses on the visual art. However, the recent addition of the craft department in the institute caters to the handicraft industry but is far from the actual demand from the market. The other design- disciplines existing in the country e.g. 'textile & fashion design' and 'leather product design' are specific to its need and do not essentially fall into the Industrial Design criteria. One other discipline that produces professional designers is the profession of Architecture. However, although this discipline deals with materiality of materials and three-dimensional aspects of objects, it follows its specific needs governed by single client - single requirement concept. It furthermore does not take into account the dynamics of the market or requirement of the mass as is typical in Industrial Design. So who are the professional industrial designers and what is their impact in the industry? Apart from some specific individuals, who have obtained their Industrial Design degree abroad, most are coming from fine arts background. These professionals have developed their skills through on-the-job training as well as experience and in spite of their commendable achievements their efforts fall short of international standards. This is quite obvious when one observes the performance of Bangladeshi products designed by our professionals in international trade fares. It is self understood that something learned on-

the-job and the same thing learned extensively in a professional discipline will not have similar results.

c) **The input from the technical experts:** Designers are often limited in their activity in want of appropriate technology and machineries. Often it is not possible on part of the entrepreneur to invest heavily on precision machineries from abroad. The truth of the matter is people from the technical profession have failed to play their role in developing and providing precision machineries for professionals to work with. One must do soul searching and observe the actual number of mechanical engineers who remain and practice in their profession after they have graduated in their discipline.

1.1.2 DTC's concept:

As discussed earlier, examples of entrepreneurs and manufacturers investing in R&D in an appropriate way, is meager and one can sum up the reasons as follows:

a) Failure in understanding that the investment in R&D is a necessity and not a luxury for sustainable expansion of businesses by the entrepreneurs and manufacturers.
b) Absence of confidence on part of manufacturers regarding designers since they are ill equipped and lack skills.

DTC was conceived to address the above by providing R&D services and training to SME's reducing the risk on part of the investor.

But it was understood within DTC that the country needs to produce designers who are appreciative of the requirement that this profession of industrial design demands. Thus, it was felt that the industrial design discipline needs to be somehow institutionalized and to give professional training in some form to designers at the under graduate level.

To explore the Relevancy, Feasibility & Applicability of the product design education in Bangladesh, the upcoming seminar has been chalked out for better understanding of the required system.

Background: Apart from giving R&D services in product design, it is the stated mission of DTC to institutionalize the discipline of product design, so that professionals are created to cater to the need of the industry.

Title: **Seminar on Product Design Education in Bangladesh - A study into Relevancy, Feasibility & Applicability**

1.1.3 Objective:

The deliberation of the seminar should shed light on the necessity of industrial design in Bangladesh and orient participating education institute on how to set up a product design department within their institutes. Other annexed activity of the three-day seminar would be to study the need of the entrepreneur in terms of market economy and address the issue of creative thinking in education institutes.

1.1.4 Target Group:

Educationist, Education institutes, Entrepreneurs

Why will the participant want to be at the workshop?
The participants of the workshop will be benefited of the following:

1. Will be oriented of the product design discipline, scope of the discipline as a career option - feasibility & impact
2. The scope of the discipline in the local & international market context.
3. Be aware of the methodology in setting up an industrial & product design department within their institutes.

1.1.5 Resource Persons:

i) Academic - faculty at German university: Prof. Hartmut Ginnow-Merkert
ii) Academic - faculty at Indian University: Gaurang Shah
iii) Academic - faculty of Korean University: Kun-Pyo Lee
iv) Supporting resource person - Bangladeshi professional with relevant experience in the field: Chandra Shekhar Shaha
v) German schoolteacher conducting working session focusing on the creativity of school going children: Peter Faerber

1.2 The structure of the seminar:

The Seminar will be deliberated in sections each with specific modules to fulfill specific objectives. They may be structured conforming to the following:

1.2.1 Section I: participants are representatives from Universities, educationist, and policy makers in education.

Module A: Relevancy of product design discipline

Objective:
As most of the participating Educationist & entrepreneur will have meagre orientation regarding the product design discipline this module will orient them to the need of this profession.

Methodology:
To orient the participants of the impact of this profession, the resource persons will shed light upon the contribution of this discipline in manufacturing industry in their respective countries. This will assist the participants to relate to possible impact of the discipline in Bangladesh.

Proposed topics:
Orientation of the impact of such discipline elsewhere,

i) The European industry - mainly focusing on the initial experience in the product design discipline with the end results that has been achieved.
ii) The Indian scenario - Most recent activities of the industry in India - examples that can be studied for Bangladeshi scenario.
iii) The Far East scenario – see above.

Some Success stories with popular products

Module B: The rationale behind the need of product design discipline.

Objective:
This module will focus on issues that product design discipline addresses. It will also shed light on the impact of this discipline on the performance of products in the market.

Methodology:
Focusing on product behavior in actual market scenario & establishing the parameters for a successful product. Professional input of the industrial designer in this regard.

Proposed topics:
Behavior of the product in the market.
What elements supports a product in the market

How does the industrial design discipline assist these products to perform well in the market?

Look into some sick products in the Bangladeshi context (case studies)
Input resulting in possible improvement.

The system of product design
All the steps of the industrial design process, making the participants aware of its complexity and establish the fact that these services should be rendered by professionals.

Product specification, develop design concept, analyze critical design features, create detail design, analyze detail design, modify design, generate detailed drawings, build prototype, test prototype, programming - machine tools, equipment production layout, Manufacturing product, test finished product, ship product, monitor field performance, feedback.

Example of a product through the above stages / steps.

The European system, industrial application, training, education.
Advantages of such products : Feeble products to Super products.

Experiences of local manufacturer - their short comings and their successes (OTOBI, GAZI plastic products) - if possible, field visits may be organized.

Factors that influence changes in the market.

The Indian experience - how India has been able to create a market of its own?
The Bangladeshi experience - brand development of a local company - Aarong branding

Half day working session:
Topic "What should be the typology of education base in Bangladesh"

Module C: Feasibility of education base

Objective:
Goal is to establish the rationale of setting up a product design department.

Methodology:
The demand & appeal of this discipline will be discussed from the point of view of the entrepreneur, the university and the prospective students. Also the dynamics of the profession (market demand) in economic terms and also economics behind running such a department within a university (feasibility) will be addressed.

Proposed topics:
Attraction to the students - viability of this profession as a career option
Attraction to the universities – Profile within the environment of universities
Attraction for the entrepreneurs - how does the input of the professional help in development & diversification of products & ensures sustainability of the product in the ever competing market.

The economics behind the endeavor:

Win-win situation for all

Module D: Application

Objective:
To make participating institutes aware of the requirements needed to set up an industrial design department.

Methodology:
Discussions by the expatriate resource person on their experience in developing tools, designing curricula & course deliberation methods.

Proposed topics:
The Educationist: Infra structure development, application tools
German experience
Indian experience

Curricula development - The nature of the curricula, context, issues, what would be the right curricula for Bangladesh - Bangladeshi modality.

Course deliberation methods - orientation, Transfer & fusion of industrial requirements with academic activity - infusion of industrial requirements / demands within the curricula.

Professional Training

1.2.2 Section II: participants are entrepreneurs, local brand developers.

Market economy of product design

Focus on how different region has made a mark in the world market. Example of how industries have created markets for itself through intensive marketing as well as fare participation.

i) The European experience - with permanent seasonal trade fair in specific sectors
ii) The Korean experience - how Korea is raising its access in the world market.

The concept of trade fairs and it's mechanisms: Development of marketing tools, systems to attract potential buyers and market creation. Input of the product design discipline in this regard

Half day working session:

Topic "What can be the role of an industrial designer in the growth of a manufacturing company"

1.2.3 Section III: participants are education institutes / educationist from the primary and secondary education level

This section will deliberate on Creativity & Creative thinking in these levels that contributes to the development of the psych of the student.

i) Look into the level of creativity at the school levels & involvement of students in this regard.
ii) Experience of the European resource person and applied systems in European schools.
iii) Experience of the DTC research team.

Half day working session:

Topic "What can be the nature of deliberation in the education system that encourages creative thinking amongst the students".

Note: floor discussion on all phases of the workshop

A study into Relevancy, Feasibility & Applicability of Formal Product Design Education in Bangladesh

20.09.'03

Relevancy — **Presentation**

9.30am

- The European Industry
- The Indian scenario
- The Korean scenario

Lunch

Presentation

- The need of product design
- The potential of product design
- What elements support a product in the market
- Factors that influence changes in the market

Tea

Workshops

- Market Demand
- Creativity in Education System

21.09.'03

Workshops

9.30am

- What should be the typology of product design?
- What can be the role of an industrial designer in the growth of a manufacturing company?
- What can be the nature of deliberation in the primary & secondary education system that encourages creative thinking among the students?

Lunch

Feasibility — **Presentation**

- Attraction to the students: Viability of this profession as a career option
- Attraction to the Universities: Profile within the environment of universities
- Attraction for the entrepreneurs: Professional help in development, diversification and sustainability of products

22.09.'03

Applicability — **Presentation**

9.30am

- Presentation of Workshop Findings
- Application: Experience concerning best practice in setting up an industrial design department

Lunch

- Curriculum Development
- Discussion and Formulation of further steps to be

Dinner & Farewell

Seminar

On

Formal Product Design Education in Bangladesh

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Organized by:

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Seminar

On
Formal Product Design Education in Bangladesh

Background:

Competitiveness and profitability start with product development effectiveness. Product innovation and a superior design-to-delivery process are the key drivers for business performance in manufacturing organizations. It is what sets leaders apart and enables them to bring superior products to market faster, and in turn command higher prices and yield greater profits.
So far, only a few entrepreneurs in Bangladesh have followed this strategy. Prevalent for many is still the culture of copying products from abroad. This however has the loss of market competitiveness as a direct consequence. In the long run cheap and skilled workers are not enough to make Bangladeshi manufacturers stay in the market.

Industrial Design:

Industrial Design, or Product Design, is the professional career specialized in creating and developing concepts, technical and formal specifications that optimize the function, value and appearance of the products for the mutual benefit between the user and the manufacturer.
In order to create and manufacture an optimal product that improves quality of life of the human being, as individual and society, requirements such as culture, economics, technology, market, final user, environment and ethics have to be taken into consideration.

Objective and Structure:

This seminar will shed light on the necessity of product design as a discipline and orient participating education institutes on how to set up a product design department.
The seminar is designed to explore the *relevancy, feasibility & applicability of product design education in Bangladesh*. These subjects will build the cardinal pillar of the seminar and will be accompanied by two fundamentally supporting topics: *"The market economy"* what is to be expected from Bangladesh as a market and how can it be tackled, as well as the introduction of *"Creative Thinking"* in education in order to set the basis for creativity in any design process.

- *"Relevancy, feasibility & applicability of product design education in Bangladesh"*: Representatives from universities, education institutes as well as policy makers in education
- *"The market economy"*: Entrepreneurs and local brand developers
- *"Creative Thinking"*: Educationists from different education Levels

Apart from attending the deliberation sessions of the seminar, the participants are expected to take part in a workshop session (see seminar structure)

Venue: La Vinci Hotel, Monalisa Hall,
54 Kawran Bazar C/A, Dhaka-1215

Date: 20.09. - 22.09.2003

Registration: 2,000/-

Deadline for Registration: 17.09.2003

A project of
gtz
German Technical Cooperation

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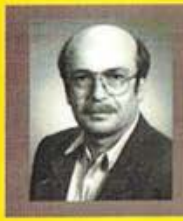
DTC

Resource persons

Prof. Hartmut Ginnow-Merkert
Kunsthochschule Berlin-Weissensee, Germany



1988 Professor, Minneapolis College of Art and Design
1993 Professor of Experimental Design, Berlin School of Art and Design, Germany
1999 (ongoing) Guest professorship, Dongseo University, Korea

Mr. Ginnow-Merkert has more than 25 years experience in design practice all over the world - be it as a teacher, consultant, researcher or as the president of the Minnesota Chapter of the IDSA (Industrial Designer Society of America).

Gaurang Shah
National Institute of Design, India

1990 Member at the Faculty of Industrial Design at NID, India
1995 Advanced course in Product Planning and Design, Germany

Besides being a teacher, researcher and also having been a main figure in setting-up the Industrial Design Department at Sameer, Chennai, Mr. Shah gathered in 17 years of working in the design sector. He for example conducted several short-term awareness programs on industrial design, and worked on projects for renowned companies like Eastman Kodak, USA.

Prof. Ph. D. Kun-Pyo Lee
Korea Advanced Institute of Science and Technology

1988 Professor, Department of Industrial Design, KAIST

Being Vice-President and Chairman of several Research Institutes, with Design Methodology and Planning as well as User-Centered and Cultural Design as his main research interest, Mr. Lee is an expert in this field. He worked for several notable companies as a consultant and as a visiting professor all over the world.

Peter Färber

Since 1987 Teacher at the „Freie Waldorfschule Kassel", Germany
Since 2003 Lecturer at the Teacher-Training-Center for Waldorf-Education in Kassel, Germany

Mr. Färber worked for many years as a schoolteacher with technical drawing, modeling, ceramics and architecture as his core subjects. He is also a member in the International Curriculum Research Group as well as a board member of the School Association.

Chandra Shekhar Shaha

1998 - 2000 Member of the Executive Committee of Bangladesh National Crafts Council
Since 2000 General Secretary of the Bangladesh National Crafts Council

From 1981-2001 Mr. Shaha was, as a Chief Designer, responsible from traditional arts and crafts to utility products at Aarong (BRAC), where he also established and developed the design-studio. He conducted and attained workshops, seminar, symposiums and fairs in countries all over the world.

2.1 Resume of resource persons

Prof. Hartmut Ginnow-Merkert
Kunsthochschule Berlin-Weissenberg, Germany

1988 Professor, Minneapolis College of Art and Design
1993 Professor of Experimental Design, Berlin School of Art and Design, Germany
1999 (ongoing) Guest professorship, Dongseo University, Busan (Korea)

With more than 25 years experience in design practice all over the world, be it as a teacher, consultant, researcher or as the president of the Minnesota Chapter of the IDSA (Industrial Designer Society of America), Mr.Ginnow-Merkert is one of the leading European experts when it comes to product design.

Prof. Gaurang Shah
National Institute of Design, India

1990 member at the Faculty of Industrial Design at NID, India
1995 advanced course in Product Planning and Design, organized by Carl Duisberg Gesellschaft e.V. Germany

Besides being a teacher, researcher and also having been a main figure in setting-up the Industrial Design Department at Sameer, Chennai, Mr. Shah gathered in 17 years of working in the design sector much other valuable experience for the Seminar. He for example conducted several short-term awareness programs on industrial design, and worked on projects for established companies such as Eastman Kodak, USA or Proform Design, Germany.

Prof. Ph. D. Kun-Pyo LEE
Korea Advanced Institute of Science and Technology KAIST

1988 Professor, Department of Industrial Design, KAIST

Being Vice-President and Chairman of several Research Institutes, with Design Methodology and Planning as well as User-Centered and Cultural Design as his main research interest, Mr. Lee is an expert in this field. He worked for several notable companies as a consultant and as a visiting professor all over the world.

Chandra Shekhar Shaha

As the Chief Designer, Mr. Shaha was responsible from traditional arts and crafts to utility products at Aarong (BRAC) for 19 years, where he also established and developed the Design-Studio, Library and Documentation Department.
He gained further valuable experience for the seminar through workshops, seminars, symposiums and international fares in countries all over the world as well as through being a member of the Executive Committee of Bangladesh National Crafts Council from 1998 to 2000 and General Secretary thereafter

3.0 Seminar proceedings:

3.0 Seminar proceedings:

20.09.2003

Venue: LaVinci Hotel, Dhaka

OPENING

By Mr Saif Ul Haque, short welcome and announcement of Mr. Bauer.

3.1 Speech by Mr. Bauer:

DTC is optimistic to have results from this seminar, which is the reason why it invited Resource Persons from abroad as well as professionals.
He realized that there are to sides to Design here in Bangladesh:

"On the way to the seminar I counted the word 'Design' at least ten times. On the one hand it has a very clear meaning in the English language – the design of a building, fashion for example, a key word in advertisements, a tool in the field of marketing. It can also be found in the newspaper as a promise for a better world, a positive impact. Especially in the field of Fashion, it has a clear meaning and turned out to be an instrument that works.

The other side of Design in Bangladesh I experienced through my work in DTC: DTC came up in the mid 90's. It was a request from the Export Promotion Bureau and the government. A centre was to be set up that improves the access to the international market and that finds answers to the Bangladeshi market demand. An agreement for project implementation was formulated and the project started in 2000.

We found that Product Development is not only a necessity for exported goods but also for those sold in the local market. Just adding a golden line to a cup does not satisfy any market demand – a higher complexity is involved, especially in the case of branded items. Image and social factors, pricing and efficiency are just a few of many aspects to be considered when designing a product.

DTC also conducted research in the field of Product Development in Bangladesh. Since 2001, a small team consisting of an architect and a textile designer are working on this project.

The complexity of Product Design needs to be addressed by educated people. But not people educated in just one aspect of the whole picture like an architect or somebody from fine arts. It is an interaction of all these professions.

There is no accurate institution in Bangladesh so far that is able to produce capable designers. That is the reason why DTC looked for possibilities to support the country in finding answers – answers to questions like: Is designing a marketing tool? Does it have to do with creativity? If it is a highly complex structure, then what kind of structure?
These questions are just a few of many that are addressed by DTC and it hopes to find a lot of answers in these three days of the seminar."

Introduction to Program of the Seminar and to the Resource Persons by Mr Saif Ul Haque.

Introduction Round of Participants.

3.2 Presentation of Mr. Hartmut Ginnow-Merkert: "The European Experience"

European experience

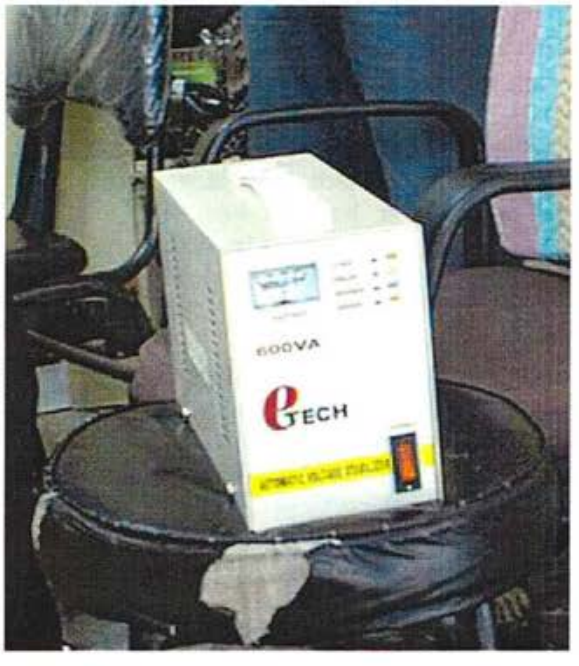
Who needs design?

Earlier this week I had the opportunity to visit several industries in Dhaka. Among others, I saw a PVC-tube manufacturing facility.

I was amazed at the level of engineering skill and ingenuity with which the local staff had resolved complex manufacturing problems. Up to that visit I had considered a continually variable transmission a high-tech concept only to be found in the most advanced Japanese or German cars.

When I saw such a transmission in this context I decided these people have all the ingenuity and creativity in the world. They do not really need the ingenuity of an industrial designer.

If this is the type of products your factory produces, there is no need for industrial design. The product is standardized, your competitors make an identical product, and all that your customers want is a good price and a good service. For the purpose of the seminar I call these "Category 1 Products".



[Voltage Stabilizer]

If *this* happens to be your product, you are facing a different situation. Your product is not the only one in the market. There are a lot more variables. Your customers have a choice.

You are competing against a number of manufacturers, often times against foreign companies, often companies with much more capital and experience than yours. If your product and theirs cost the same, and both perform well, then your customers will look for the best value. They will go for any clue that would hint at additional value.

What good does it do if your product is actually better and more reliable than your competitor's, but nobody can tell the difference? But what does a reliable product look like? What does reliability look like? What does it sound like? What does it feel like?

The clues may be visual, or your customers may go by what they hear or feel when they touch the switches, the enclosure, the handle... They wonder whether they could understand and operate the product with ease, and they may wonder how likely your company may be around in a year or two, just in case the product may need service or replacement.

When you're alone in the market and everybody needs your product, life as a manufacturer is somewhat easy. But when the market is crowded and your competitors try to maintain or even capture market share, you will be well advised to use industrial design, so your product communicates its features and qualities well to the end user.

At this point we're still talking about customers you know well, because they live around you, you share the same tastes and values, and it is easy for you to find out what they like and what they dislike. You try to establish your product in a local, regional, or national market, against a number of competitors, national and foreign. For the purpose of this seminar, I call these "Category 2 Products".

[Rickshaw]

Imagine, you are the manufacturer of this type of product. You have a vision. You see your product parked under a Linden tree in the heart of Europe. Of course you don't want to sell them just one Rickshaw, you want to sell many. Wouldn't it be great to export into a market of some 400 million wealthy people, many of whom would love to leave their cars in the parking lot, to enhance their physical condition, to own a unique product that their neighbors don't have, that allows them to show how concerned they are about the environment?

Well, you say, lets check the Internet to see, if anybody else before me had the idea.

You do a Google search, and, much to your dismay, you find quite a number of Rickshaw manufacturers already selling into many countries of the world. You notice that the principal Rickshaw manufacturers are located in Europe, in Germany, of all things! I have to admit that when I did the research for this presentation, I was quite surprised myself of this fact.

Should this situation discourage you?

I don't think so. Because, if you look at their price list

Rikscha Grundrahmen, fahrbereit, inkl. 3 x hydraulische Scheibenbremse, 8-Gang Kettenschaltung		2.950,00 €
Sitzbank für Passagiere, Standardausführung (für starres Verdeck, Sitzbreite 95cm)		885,00 €
Sitzbank für Passagiere, Bugbugs-Version (für faltbares Verdeck, Sitzbreite 105 cm)		1.117,00 €
Verdeck Standard, stabile LKW Plane, in mehr als 30 Farben		280,00 € (ohne Fenster)
zusätzliches Fenster für Verdeck (Seite / Rückseite / Dach)		12,00 € (pro Stück)
Fensterabdeckungen für Seitenfenster (zur Werbeanbringung)		19,00 € (pro Stück)
Verdeck faltbar, Modell „Bugbugs", in mehr als 30 Farben		305,00 €
Sicherheitsgurt für Passagiere		72,00 €
Radkästen Radabdeckungen Hinterräder (2 Stück)		230,00 € (ohne Aufdruck)
Lichtanlage mit Standlicht hinten, Dynamobetrieb		84,00 €
Werbetafeln Für Rahmendreiecke (Satz)		55,50 €
Tüv-Gutachten zur Straßenzulassung		39,00 €
Elektromotor 36 Volt, 250 Watt mit Tretsensor, Gasdrehgriff, Steuerung und Spezialvorderradgabel , Scheibenbremse		1052,00 €
Batterien, Blei-Gel Batterien, 12 Volt, 40 Ah, zyklenfest (es werden 3 Batterien benötigt = 36 Volt)		90,60 €
Ladegerät 36 Volt, 5A		265,00 €

[8... price list]

You find that a Rickshaw in Germany costs some 5000 Euros which is well over 3 Lakh Taka. That should leave quite a profit even considering the cost of shipping etc.

As you continue your research into the European Rickshaw market you want to know against what and whom you are competing. You find out about some of your competitors by checking their websites. It is no surprise the Rickshaws there look different.

[Rickshaw Germany 01]

[Rickshaw Germany 02]

There are also more types of Rickshaw-related human-powered vehicles that seem to appeal to the foreign customer, all of which could, of course, be manufactured by a Rickshaw manufacturer in Bangladesh.

[Some Rickshaw-related vehicles in Europe]

Your research also tells you that there must be a difference in the tastes and expectations of your customers abroad, and that your product would have little chance to enter their markets without the proper adjustments.

Further research tells you that there are legal requirements. Rickshaws in Germany are required to have certified brakes, and lights, and seat belts. There are also some market-specific expectations. People in markets like Europe are used to have sturdy, reliable products, comfort. And so on.

Now, how do you learn about all these requirements? How do you translate them into products that you can manufacture here and sell there? I think you can guess my answer.

The products of this type are characterized by the fact that a manufacturer wishes to export into a foreign market facing different requirements and regulations, tastes, and competitors as compared to the local market. For the purpose of this seminar, I call these products "Category 3 Products".

There may be more categories, but this should be enough for a three-day seminar.

Of course, the PVC-tubes, the voltage stabilizers and the Rickshaws I referred to just stand in for the vast variety of products already produced and marketed in Bangladesh. If you feel that any of them belong either to the Category 2 or 3 type of products, and if you feel that you would like to increase your sales, industrial design is the answer.

Later today we will take a more detailed look at these issues.

However, I was supposed to tell you about the European experience.

European Experience

Germany came to establish some design leadership in the 1960's, mostly thanks to the Ulm school of design. This was a private design school in Southern Germany whose highly motivated professors and students were among the first to discuss and establish a complex intellectual philosophy and theory of design. They had been influenced by the legendary thinkers and architects of the German Bauhaus, which had to close its doors due to the Nazi regime in the 1930's.

The Ulm school of design ceased to operate in 1971 because of extremely stupid political quarrels between the city of Ulm and the state government located in Stuttgart. Due to its reputation, the former professors and graduates easily slipped into leading positions in Industry and Academia, in Germany as well as abroad.

Here they influenced the field of industrial design dramatically. Industry saw in them a method to satisfy human needs on the aesthetic level, which, in turn, signified an increase in sales and profit.

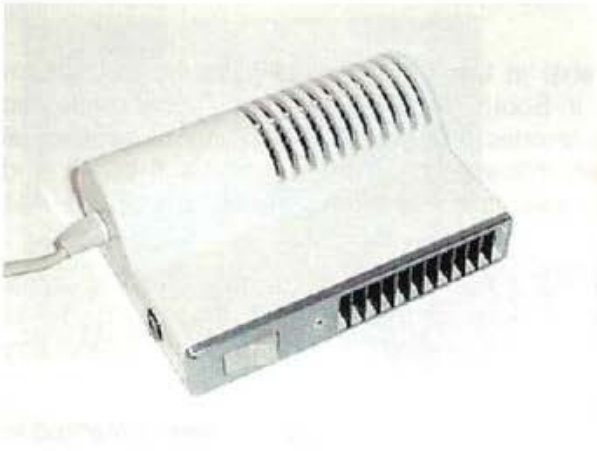
One of the companies embracing industrial design as a corporate strategy from the very beginnings of German design was Braun Corporation. Braun quickly became the established leader in product design excellence, and to own a product from Braun became almost an issue of status and cult.

Braun Radio-Phono Kombination 1961/62

Braun Plattenspieler 1968

Braun AB 3 (A) 1983

Braun Markant S 1978



Braun HLD 24/DK 1964

Braun HLD 6/61 1971

Braun Stabmixer 1987

The images of brown products I am showing you here are representative of the great era of Made in Germany of the 1960's, seventies, and eighties. There were many corporate design offices employing dozens if not hundreds of industrial designers.

Somehow, the market position of a successful and highly visible company allowed it to establish a comfortable price level. Well-designed products were so desirable, and their owners would gain so much status that in the mind of the European consumer, the concept of "good design" necessarily became intertwined with the idea of "expensive product".

After the end of Gulf War I, and in the wake of a global recession, customer behavior started to change. No longer was the money available to purchase expensive products. The consumers having the choice between buying a cheap product or no product at all agreed to compromise on design.

This development is still continuing, and it was damaging to the design profession in Germany.

The general perception of design being expensive led to many companies trying to cut cost by slashing their design departments. A major German corporation, AEG, closed its design division. The quality, the design and the appeal of their products declined, and somewhere in the nineties, AEG disappeared altogether. Other companies followed, more design divisions were shut down on the assumption, that cheaper design expertise could be had on the outside.

Firms formerly renowned for good design and quality ceased to exist selling their brand names to anonymous international corporate conglomerates.

The drive to deliver products cheaper and cheaper led many companies to move their operations to countries where labor cost was lower.

Customers still looking for the good old Made in Germany brand labels still found them, but underneath was shabby low-quality mass production. After a few disappointments a customer ceases to believe in a brand that now delivered goods like the one I'm showing you here:

[Krups Brotschneidemaschine]

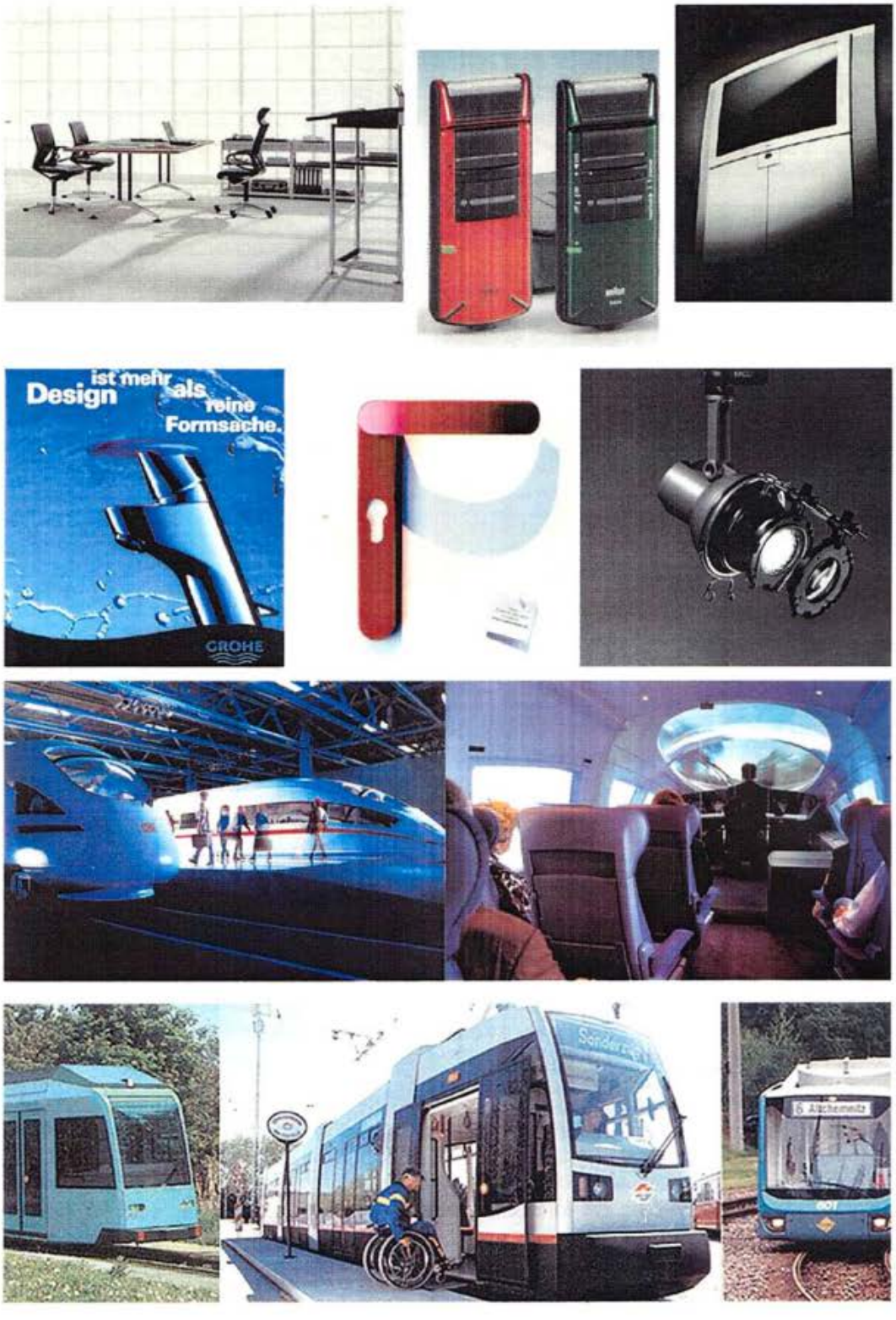
The machine sounds loud cheap; when turning the wheel it falls apart.

This is not what I used to get under the Krups label, says the customer and looks elsewhere. If I can't even trust the good old brands, I might as well buy a product made in China which at least costs less.

Germany's industry is now in a crisis, because much of our industrial base has moved to Asia. Along with manufacturing, low-level design jobs have moved along. Designers in Europe find fewer jobs, and we have to begin to think what went wrong, and how we can fix it.

One of the things that went wrong is the fact that designer did not develop a response to the demand for cheaper products. No design strategy was proposed to fulfill both the desires for cheaper quality products "made in Germany". Designers, their associations, their industry representatives in their design professors still adhered to the old and outdated paradigms developed at Bauhaus and Ulm. The picture we see in Germany today is that of a profession in decline, but there is hope.

Of course, we still have the automotive industry, with corporations like Volkswagen, Daimler Chrysler, BMW, Porsche and Audi. These and another few still are strongholds of German design.



If design in Germany wants to survive, we have to make a major effort to adjust our thinking and our services to the changing needs of society and of the markets. If we manage to devise a strategy to stay ahead of the low-cost manufacturing regions, and if we focus on the new challenges facing mankind and industry, we will still be in business tomorrow.

Let me now say another few words and then show a few examples that illustrate the work that is currently being done at our Berlin school of art and design which I feel is representative of the new era and the new kind of design challenges for which we are trying to develop the required expertise.

In the so-called information and communication age much of the former hardware manufacturing has shifted towards the providers of complex digital products and services.

In Berlin, our design students still follow the established and accepted rules of design, but we extend and apply them to the problem of human interaction with technology. The current paradigm is that the technical product should adjust to the human being, not vice versa. No longer will we read complicated instruction manuals; instead products will talk to us by means that we naturally understand. Products will exhibit behaviors and body language; humans will *intuitively* comprehend a product's workings and offerings.

Good industrial design is more than a nice-looking enclosure with buttons and a display. This product, an energy meter, is marketed in Germany. It was designed in Hongkong and manufactured in Zhenzen.

[Energy Meter]

We feel, however, that no product should force a customer to lie on the floor. European design will need to do better if it wants to have a future as bright as it once had.

Here are two examples illustrating where we think we need to go with energy meters.

[Magic Mirror]

[Lumino]

I hope my brief presentation gave you an idea of what industrial designers do, and of the development and situation of our discipline in Europe or Germany. This afternoon we will take a closer look at the services offered by industrial design.

3.3 Questions and Discussion

Summary:

One point that was stressed was the time factor of setting up a design department and how this can be frustrating for interested students. In this regard, Mr. Ginnow-Merkert made an open invitation to universities to get in touch with his school and organise exchanges.

Furthermore, participants were mainly interested in hearing what the German or European design trend is at present. Mr. Ginnow-Merkert stated the difficulty of extracting one single trend but that a move towards combining design and science towards a more human scale in addition to being more aware of environmental factors can be observed.

Q: A participant, working as a trainer for boys in the multimedia business stated that he sees frustration of his students. He sees it as very important to help the students to work as designers.

A: Mr. Ginnow-Merkert can understand the frustration of the boys and is glad that they feel the need of being educated in designing. Still, one has to be aware of the fact that setting up a design department is difficult and takes time. However, he states that for bright students there is always the possibility of getting funds for exchanges. This was meant as an open invitation for getting in touch with him and organising such an exchange.

Q: What are the characteristics of European Design Trend?
A: As trends have more to do with fashion than with product design, Mr. Ginnow-Merkert did not see it as his strength to answer this question. Still, he mentioned that trends appear in so many different areas that it is hard to point out one general trend. His answer would be that in Europe the trend goes to connecting design and science towards a more human scale. Also, he sees a trend towards Eco and not just outward appearance like material and colour.

Q: follow-up: What do designers in Europe look for: Being different? Technologically based?
A: Again, this is a question with a very complex answer. Of course, every designer strives to be different – otherwise he is boring. But, they try not to be randomly different. They try to consider human scale technology – doing a better job while simultaneously coming closer to the people.

Q: The participant, being educated in the design profession in England and having knowledge about what is going on in Bangladesh was wondering what foreigners, who do not know anything about the country can actually be of help in setting up a product design department.
A: During the seminar general answers will be found. Of course he is aware of the fact that there is not one answer that applies to every country – not even one answer that applies to Europe itself. It will become clear that so many issues have to be taken into account – which issues and the rational of design will be discussed.

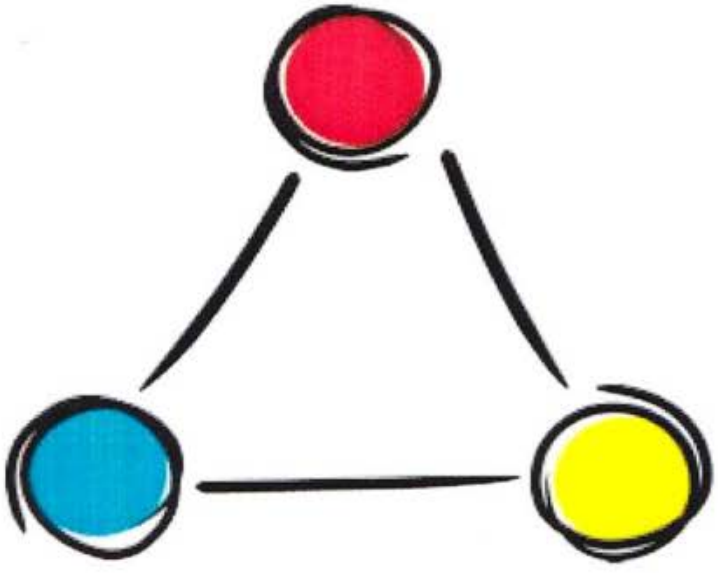
3.4 Presentation of Mr. Kun-Pyo Lee: "The Korean Experience"

Korea is still a developing country and therefore somewhat closer to Bangladesh than Europe is.
This talk will be about collaboration between schools, the government and the industry and its imperative for the promotion of industrial design.
One cannot focus on itself; the key issue for the three mentioned fields is to focus on working together.
This speech will be divided into the three sections:
I. What is the current situation in Korea?
II. How did they approach the matter?
III. Where is Korea going?

Brief Design history:
Craft Based Design:
1981 opening of harbour
1981-1945 Introductory Stage
1945 liberalization from Japan, Korean War
1946-1965 Chaos Stage (Introduction of Design Concept)
Applied Art Design:
1966-1975 Fostering Stage (Spread of Design Concept)
1976-1987 Growing Stage (Settlement of Design Concept)
Digital Design
1988 Olympic games in Seoul were a turning point as these games were a great option for entering theinternational market.
1988-1997 Take-Off Stage (deepening design activity)
1997 economic crisis (Korean crisis), crash of the economy which had the positive effect of a restructuring.
1997-today Transition Stage (Internationalization)

Role of Government, Industry and School:
(see slides)
The Industry:
Three issues influenced the current state of Korean Design in the industry:
For one, the Korean crisis was a turing point in the employment structure in the country: Before 1997 big companies like Samsonite hired all designers. After the crisis, a lot of small and medium sized enterprises emerged.
Second, due to globalization, a country cannot rely on its domestic market only. Korea opened its market to the world and started to export. Samsonite has for example franchises all over the world in order to satisfy the demand of its consumers.
Third, due to the influence of a very renowned politician, who made a statement about the necessity of product design, top management became aware of Design and its influence. Samsonite is again a good example: It was able to increase its turnover by 30% in just a few years by employing Product Designers.

The Government:
The Korean government invested a lot of money in the promotion of Industrial Design:
It for example
- Organises regular design competitions for students and also for children.
- Established Design Technology Centers in South Korea that share and exchange their knowledge. 10 Billion US$ were invested in each of these centres.
- An Industrial Design Promotion Centre was set up.
- The Government supports Research and funds projects.
- It makes sure that all three players (schools, government and industry) work together for the best result.



Triad Collaboration between School, Industry and Government for Development of Korean Design

Kun-Pyo Lee KAIST, Sep. 20, 2003. Dhaka, Bangladesh

Contents

02

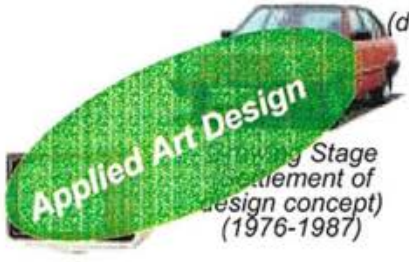
Why?

Current States of Korean Design

Brief Design History

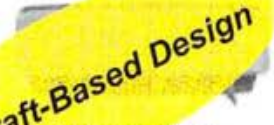
Digital-Design

Take-off Stage
(deepening design activity)
(1988-1997)



Applied Art Design

Fostering Stage
(Spread of design concept)
(1966-1975)

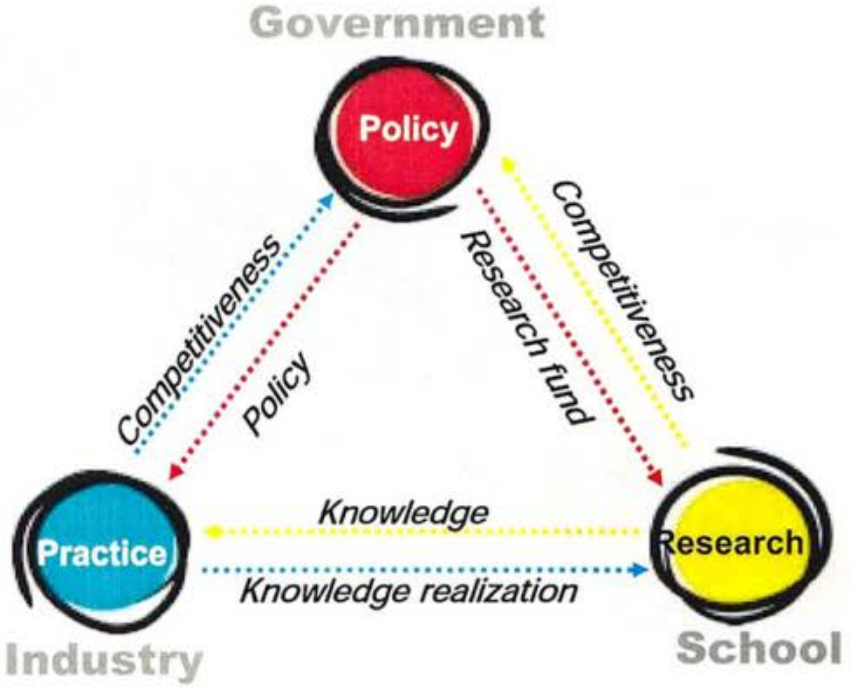


Craft-Based Design

Introductory Stage
(1861-1945)

03 Why?

Role of Government, Industry & School



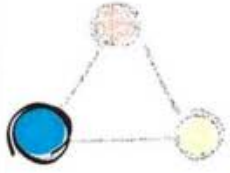
04

How?

Current States of Korean Design

Industry

- ***Emergence of Venture Capitals and Design Consulting Firms***
- ***Globalization***
- ***Design Awareness in Top Management***



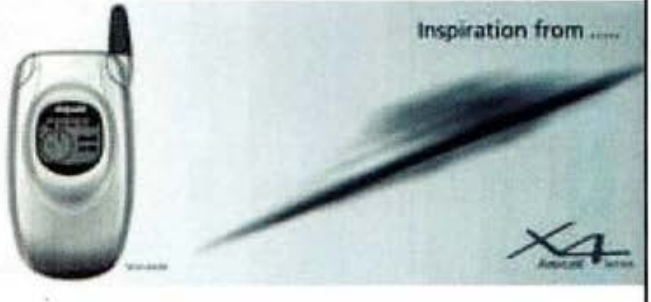
SAMSUNG

HYUNDAI

Successful Case 01

Mobile Phone SGH-T100

- 5.5 Million phones sold since May 2002
- Led global trends using high style design with emotional factors such as colors and materials
- Design as one of the critical purchasing factors
- 10~20% Design Premium



Improvement of Design Value

- Ranked 34th on 100 world corporation list (Interbrand Inc. and *BusinessWeek* in 2002)
- Brand Value increased by 30% to US$ 8.3 Billion (US$ 6.4 Billion in 2001)
- Main success factors
  - Moved aggressively into higher end products that carry fatter profit margins
  - Invested heavily to produce cutting-edge designs
  - Became the No. 3 producer of cellular phones with a premium-priced line that includes handsets with color screens

THE 100 TOP BRANDS

Winners

Samsung used bold designs to transform itself into a premium seller of consumer products. Baby boomers, meanwhile, pay Harley top dollar for a dash of rebel independence.

RANK	BRAND	2002 BRAND VALUE ($BILLIONS)	2001 BRAND VALUE ($BILLIONS)	% CHANGE
34	SAMSUNG	8.3	6.4	+30
91	NIVEA	2.1	1.8	+16
46	HARLEY-DAVIDSON	6.3	5.5	+13
31	DELL	9.2	8.3	+12
93	STARBUCKS	2.0	1.8	+12

Data: Interbrand Corp., J.P. Morgan Chase & Co.

Losers

The telecom debacle cut the legs out from under Ericsson and AT&T. Boeing still hasn't recovered from September 11, and Merrill Lynch got mauled by the bear market.

RANK	BRAND	2002 BRAND VALUE ($BILLIONS)	2001 BRAND VALUE ($BILLIONS)	% CHANGE
71	ERICSSON	3.6	7.1	-49
11	FORD	20.4	30.1	-32
17	AT&T	16.1	22.8	-30
82	BOEING	3.0	4.1	-27
25	MERRILL LYNCH	11.2	15.0	-25

Data: Interbrand Corp., J.P. Morgan Chase & Co.

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How?

Different designerss for different products

05 How?

Current States of Korean Design

Government

- ***Investment of Design Promotion***

Industrial Design Fundamental Project

06 How?

Current States of Korean Design

Government

- ***Investment of Design Promotion***
- ***Support for Design Education***

두뇌한국 BK21

Leading Education to Research-Oriented Graduate School

Funding total 13 million US dollars for each selected graduate school within 5 years

07 How?

Current States of Korean Design

Government

- ***Investment of Design Promotion***
- ***Support for Design Education***
- ***Sponsoring Design-Related Events***

ASEM

ICSID 2002

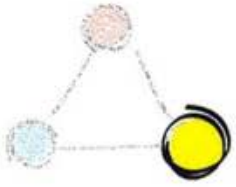
asian design conference

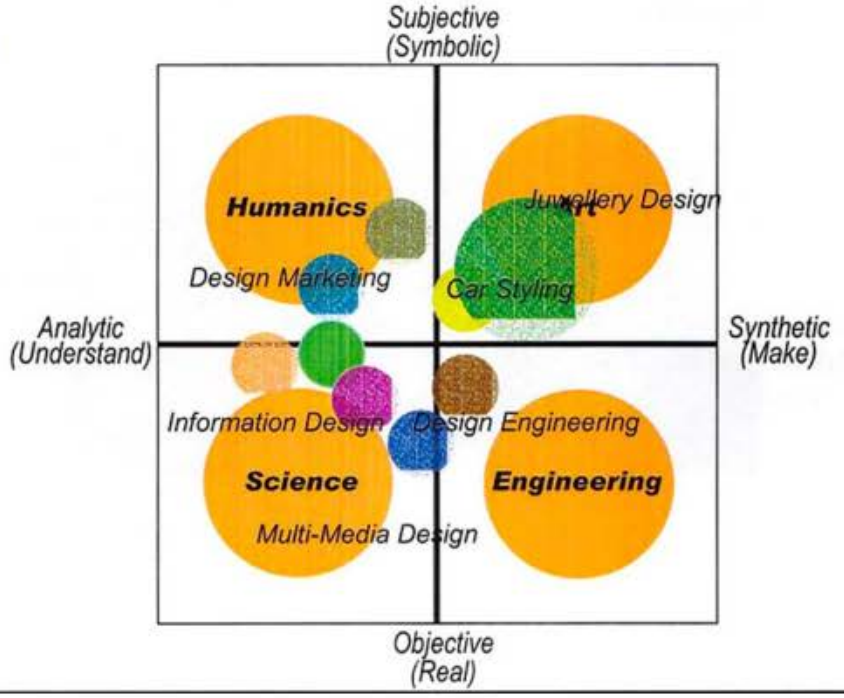
08 How?

Current States of Korean Design

School

- ***Large Number of Design Schools***
- ***Shifting from Art to Diversified Education***





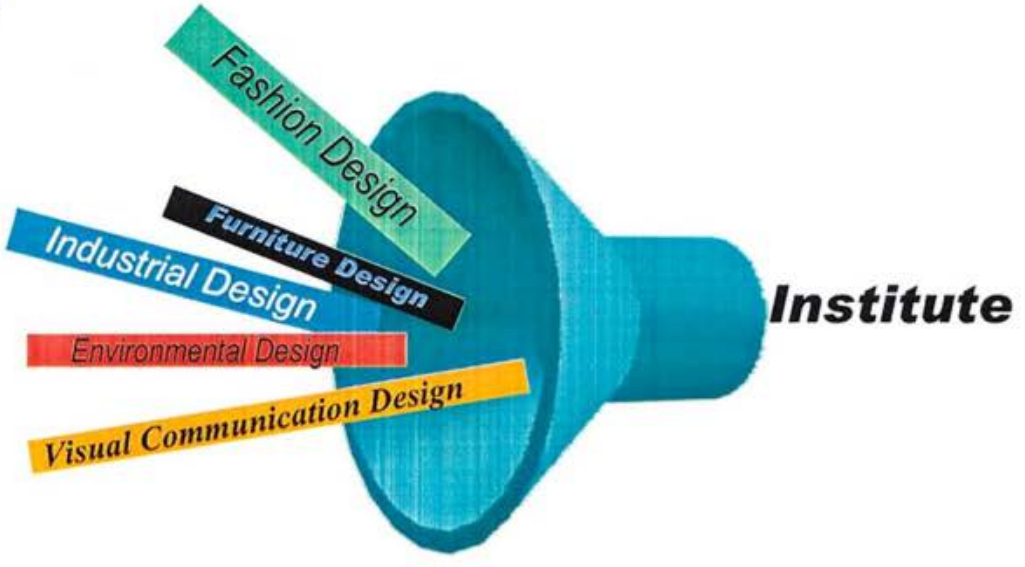
09

How?

Current States of Korean Design

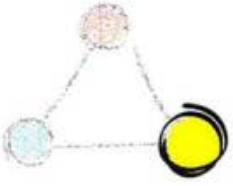
School

- ***Large Number of Design Schools***
- ***Shifting from Art to Diversified Education***
- ***Merging Departments into New Institute***



Current States of Korean Design

School



- ***Large Number of Design Schools***
- ***Shifting from Art to Diversified Education***
- ***Merging Departments into New Institute***
- ***Establishing of Doctoral Program in Design***

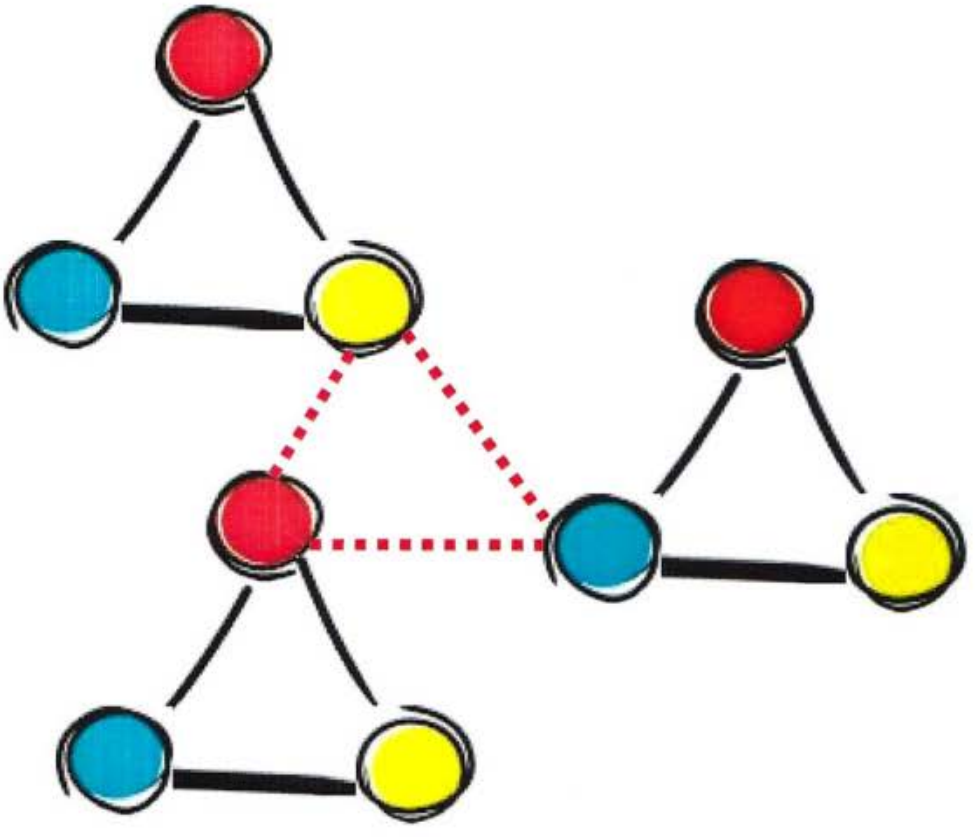
한국디자인학회

Korean Society of Design Science

12

Where?

Further Challenges: **International Collaboration**




thend

- It supports design education by selecting the best schools and funding them with a considerable amount of money. Requirements they then set are the reduction of number of regular students and the increase of number of postgraduate students (with the goal of increasing research activity).
- A Presidential Design Award was introduced.
- And much more...

Schools:
There is a large number of design schools in Korea but only a few that do Industrial Design. Of all Design Schools, 91% are Art Colleges, 4% Engineering Schools and 5% other. Still, one observes a shift from Art to diversified education: Departments are merged into one new institute – The Institute of Design.
This institute aims at combining all design disciplines. The discipline starts from practice, then becomes education for which theory is needed. In order to get this theory a Doctoral Program of Design was established. It focuses on developing the theory. Also, the Korean Society of Design Science is working on writing papers; they are not doing any design. They have now 2500 members and look for working together with other countries.

Questions and Discussion

Summary:
Due to the fact that in Korea the government, universities and industries seem to work nicely together to promote design, this aspect was the main issue. It was found that awareness in all sectors has to be created through seminars, design competitions, design associations and similar measures. Important for this is that there is no golden rule as to which approach should be taken – bottom-up or top-down. The initiative has to come from somebody, preferable from all sides.

3.5 Presentation of Mr. Gaurang Shah: "The Indian Experience"

Indian culture has a long history of "aesthetic sensitivity" and design exploration though called under various other expressions. India with a history of over 5000 years has developed its own language of color (linked to the diverse color palettes linked to each state), structure and form, which can be seen in myriad rituals, objects, art forms, performances etc. In the post independence phase, India did look at design as encompassing everything from making a better safety pin to planning a new highway system. The setting up of NID as a multi-disciplinary design institute in 1961 modeled after the best design institutions in the world along with other national centers of excellence in technology and management was indicative of the national political leadership's vision for Indian design. Design was considered of major

significance in India because it was expected to deliver standards of living to its huge population through being an active agent of change. Through design, relevant traditions were expected to be turned to current competitive advantage, which was considered an important benefit to countries with rich cultural heritage like India. However, this seems to have not been realized as it was originally envisaged owing to a variety of reasons.

India was a protected economy during most of the post-independent period until the early 90s. Many industry constituents did not find it essential to pursue innovation and product creation and aggressive marketing. This environment had a retrogressive impact in proliferation of design as a catalyst for growth as was originally envisioned. This had also limited the spread of design as a profession in the country. There has been no attempt to develop culture of innovation in most of the Indian companies though there are notable exceptions like Titan, Hawkins, Telco, Bajaj, Hero etc. However with the new liberalized policy structures under the World Trade Organization (WTO) regime ushering in lower duties and tariff structure, the stage is now set for increasing global competition and search for new elements of competitive advantage.

The rather well understood tactical levels of design activity deal with the visible aspects of product, its aesthetic layer, and this is often misunderstood as the only significant contribution of the design. However, the role of design at the strategic level is less well understood and it is this new activity that needs to be nurtured and mobilized in the context of Indian design transformation. This is especially critical in the era of e-commerce and the knowledge based economy where the leadership issues in the marketplace are determined by a complex set of attributes that need to be synthesized into great products There has been no attempt to develop culture of innovation in most of the Indian companies though there are notable exceptions like Titan, Hawkins, Telco, Bajaj, Hero etc. However with the new liberalized policy structures under the World Trade Organization (WTO) regime ushering in lower duties and tariff structure, the stage is now set for increasing global competition and search for new elements of competitive advantage and services that will change the very nature of the competitive economy to which design attempts to value add. The rate of change in the marketplace of the globalised economy is so great that design now becomes a continuous value adding activity that needs commitment and involvement of different levels of policy making and implementing units at both national (federal) and state levels. This calls for strategic initiatives at both macro and micro levels.

It is in this context that a pronounced policy by the Govt. in the form of a National Design Policy can spur interest in design investments in industry and to encourage the catalyst's role of design services as a whole. The Indian
Government has made massive investments in both the sectors of science and technology. India's Science and Technology Policy 1987 states "Technology must suit local needs and to make an impact on the lives of ordinary citizens, must give constant thought to even small improvements which could make better and cost effective use of existing materials and methods of work. Our development must be based on our own culture and personality". If we go by this statement, it is clear that the objective cannot be achieved either by technology or by science alone. Design, being an integral part of product development process, needs to be incorporated into the policy statement. The setting up of a Techno-Design interface group last year by the Govt. of India's Dept. of Science and Technology indicates a new direction. While India has an estimated total of over 70,00,000 engineers and technologists, the number of trained professional designers from leading institutes are reckoned only around 3000 which is highly inadequate.

While IITs, IIS and other institutions together have admitted an estimated 1,65,000 students in 2002, in the major design institutes like NID, IDC of IIT and IIS only about 300 students per annum are admitted for professional design education. Thus the gap between ideas, innovative

concepts, technology and real product / service in the market place is therefore widening rapidly resulting in insufficient indigenous brands and standard products for the diverse cultures within India.

Few of the industrial sectors where design is being utilized in India actively to make a difference in the market as well as to the users are automobile, watch and jewellery industries and the nascent IT sector. Auto companies are clearly deriving the benefits of their design and product development initiatives. The sale of cars, which was only 2,09,203 in 93-94, increased to 6,38,632 in 1999-2000. During the same period the sale of scooters and motorbikes rose from 8,33,547 and 4,69,010 to 12,53,880 and 17,96,783 respectively. The success of India's own car, Indica of the Tata group's Telco is a clear indication of the possibility of emergence by Indian brands driven by a combination of design and technology. Among other four-wheelers, Tata Sierra and Estate are Indian design firsts on the road with compatible form and function. Bolero and Scorpio from Mahindra & Mahindra are other significant design achievements.

Another case is that of two-wheelers. A Company like TVS refocused on product development and strengthened the mobike portfolio by raising fuel efficiency and relaunching MAX100 and introducing Victor and Fiero. (Slide – Scooty)It introduced 'Scooty' a new category between scooter and moped. Scooty is called best looking scooters on the roads today, combining the lightness of its design with a ruggedness associated with the bikes. Interesting graphics and silhouette adds to its fuel-efficient, functional design.

The design application in the Watch and Jewellery products has revolutionised these two industries. The successful Titan (Raga) Watches and Tanishq Jewellery are the good examples of Indian design, fusing ancient skills and modern science. The Raga range of watches, conceived as jewellery on women's hands, are designed with the inspiration of the traditional Indian motifs. The Tanishq jewellery are trendy and innovative with new concepts like 'jewellery for working women'.
The success of the above industries in fending off global competition augur well for future of design in India.

India has become an important player in the global IT industry. The size of the Indian IT industry has grown at a phenomenal rate from about 855 million US $ in 1995-96 to estimated size of 7755 million US $ in 2000-01. The power of Internet, is bringing I.T. in every day life of common person in India. The software industry of India has become a torchbearer for not only India's IT industry but even Indian economy's global ambition. There is considerable use of software interface design and exploration in multi-media, new media and web technologies now taking place in India creating new platform of text, graph, animation and film / video. The era of knowledge and experience design seems to have dawned owing to the India IT sectors' buoyancy.

It is clear from the above market structure of India that the biggest design challenges to create functional, safe, aesthetic and affordable products / services for the masses. Whether it is a three-wheeler or an STD/ISD booth or
vehicles for mass transportation, the design challenge in a country like India is enormous. An articulated design policy can attempt to encourage design solutions rooted in Indian culture and traditions, rather than "cutting the hat to
fit the head", is being forced upon today by many Indian manufacturers.

It is also to be noted that as per the Human Development Report 2002, India ranks 124th among 173 countries, though India has shown constant improvement on the Human Development Index. The country's human development index has risen to 0.577 in 2000 from 0.545 in 1995 and 0.511 in 1990. The index assesses countries on the basis of life expectancy of its people, their educational achievements and their ability to buy goods and access services. Here is where the design challenge lies. How to make the basic goods better designed for quality and affordability to

reach the masses? How to connect the huge population to the benefits of technology through the design solutions? These questions today wait for answers and only concerted effort by policy makers, and implementers can redeem the situation.

Design and Ecology

As a developing nation we have a tradition of sustainable development, significant number of environmental plans, policies and laws in place and an active contemporary environmental movement. In the manufacturing sector, the big companies can be differentiated from their SME counterparts in their attitudes and compliance towards their environmental track records. Although many companies do comply with the environmental standards and norms, this is not enough. Product manufacturing companies in general are slow to accept the need to have environmental management systems. The certification of ISO1400 now is providing with a certain type of impetus to the manufacturers to go for it as is evident from the growing number of companies opting for this. It must be pointed out, in general, that within companies, even in the departments dealing with the environment issues, awareness about ecodesign concepts seems to be on the low side.

As an approach, most Indian manufacturing companies are facing problems similar to their counterparts in say, Europe or America, i.e., inefficient energy utilization, bulky and heavy products, excessive packaging, usage of scarce raw materials and so on. In other ways, for example, Indian products have a different 'end of life' problem. Traditionally and even to this day most products in India tend to have a very long life cycle. This cascades down to different rungs of economic niches and hierarchy. Products are handed down, sold, traded in the informal sector till such a point is reached that they are cannibalized and put to use for the spare parts to be used as inputs by the service sector. Eventually, it is only the residue of this process and unusabilty that makes it end up in the cycle of material reprocessing.

The resource base in India is being stressed with the increase in the purchasing power and wasteful consumption linked to market driven consumerism. Liberalization of the economy has accelerated the pace of industrialization leading to ecological and environmental problems already familiar to the West. As an Institution of national importance a need is now felt to introduce this at a postgraduate level with specialization in Ecodesign. This would be offered to graduates of Product Design, Engineering and Architecture. We are working towards this first by creating a certain knowledge and resource base in all the domains of product improvement, product redesign, functional innovation and system innovation in the context of the ecodesign vis a vis the values, culture, markets, industry, infrastructure and environmental issues of the country. Also towards this NID hopes to initiate a networking of the stakeholders –from technologists to Industries to Designers to Governmental bodies and agencies.

Under the aegis of Department of Science and Technology (DST), Government has also set up the National Innovation Foundation (NIF) which aims at encouraging the grassroots innovations and products that best suits the patterns of sustainable development of the country. The National Institute of Design and GIAN (A voluntary Organization working under NIF) has been closely working together and has formed an elaborative studio GRID (Grassroots Innovations and Development) with the aim to bring in the design intervention to these grassroots innovations and concepts so as to convert them into eco-viable and marketable products. We have developed so far at least four products in the past one-year with this approach.

Generally, not much work or research has been done in the area of ecodesign and related areas. However, The Indian Institute of Technology (IITD) Delhi has in collaboration with the Delft University of Technology (DUT) Netherlands, and with INETI, a Portuguese research institute initiated a programme to create an ecodesign network localized for Delhi. This is called the Indian European Ecodesign Programme (IEEP) and is a three-year collaborative project partly funded by the European Commission. IEEP has the

objective to promote ecodesign, exchange and development of ecodesign knowledge and expertise of people from New Delhi from scientific, business and manufacturing communities.

Crafts and Design:

We also see craft as an important context for design activity in India. It is an important one and it is a huge sector both in terms of employment generated and the revenue generated in both local and export markets. Today for instance the export form the handicrafts sector alone would be in the region of about 15,000 to 30,000 crores of Rupees, exact figures are not available. It is a critical sector in our country since we do not have much capital to invest in infrastructure and industry and crafts sector provides an avenue for a vast number of entrepreneurial people to fend for themselves with dignity and
satisfaction. We see craft as a channel through which we can generate enormous economical revival in India. So when we look at this area, we are not looking at craft as an activity of artistic expression alone but craft again as an industry that generates goods and products for a vast range of markets. Many people start getting all romantic about it and say that how the country has had a great 5000 years old tradition in the crafts. The only efforts that this attitude fosters is a focus on preservation and conservation. Our focus is not to bask in the glory of yesteryear but to look for its relevance in todays economy. Craft has a very important social and economic role today. Why are we not promoting the production of those products and systems that we need for everyday living through the craft route and the craft processes? Why is the country focusing on artistic handicrafts alone at the cost of promoting the crafts as a legitimate
avenue for the production of everyday products of local and export markets?

This perception is changing gradually due to some sustained efforts of our graduates working in this sector over the years and due to the efforts of the Institute in various Government forums.
We have been doing sustained work in the area of craft but we find that there is no design school in the country that stresses on making people capable to work in the area of craft design as an area of specialization in spite of the enormous potential and need.

Questions and Discussion

Summary:
No questions posted

Wrap-up by Mr. Bauer:

Through getting confronted with best-practice examples, carried-out projects and development issues, the necessity and complexity of Design became clear. Not only that Design is an issue that needs to be dealt with was pointed up but also that education institutes, industries and the government have to work closely together in order to get ahead and on the right track.

3.6 Presentation of Mr. Ginow – Merkert : "The need of Product Design"

This morning I presented a brief overview of what industrial designers could do for industry and how our discipline developed over the past 50 years or so.

This time I would like to talk about the services Industrial design has to offer so that you yourself may decide whether this discipline could benefit the Bangladeshi industry in general, or your business in particular.

I mentioned three categories of products or manufacturing scenarios, two of which could definitely benefit from industrial design as a business strategy.

Category 1 type products typically are standardized products like screws and bolts and PVC tubes to name a few. There is little variation in the way they look; aesthetics is of little concern. We just want these products to perform, we want a good price, and we want them delivered reliably and in the quantities we need.

Except maybe for the packaging, or when these products are exposed to the view, there may be little need for industrial designers. Industrial designers still could contribute to the streamlining of your operation or enhance your visibility on the Internet. They could also design your trade show booth and your information material, but that's not exactly the core of our business.

Category 2 products are those products that are manufactured and sold in your own country. There is product diversity, and you are facing some level of competition, foreign or national, or both.

An industrial designer will assess the competition trying to understand their strengths and weaknesses. He or she will analyze what we call the users' needs. Typically we will go out and meet with a number of users. We will observe and interview them. We will ask about their feelings and experiences with similar products, and we will try to understand which features they prefer, which they dismiss, and for what reasons.

We will eventually work with the product itself observing our own reaction to some of the problems we might encounter.

But we will not only meet with the end user. Many other people are involved in the success of a product. We call them the "stakeholders". There are people who service products. They may have certain feelings about the reliability and serviceability of a product that we may need to know of. An example is some of the research I did a few years ago into automotive sound equipment that needed to be installed in the trunk of a car. The service people told me that installation in a Honda took about 8 minutes because all the wiring and connectors were already preinstalled. For a BMW, however, the procedure took them two hours because they had to cut a hole through the metal wall behind the rear seats. They offered the same flat rate installation fee for all cars. It is not difficult to guess which car they liked better.

If this affected your product it would certainly help to learn from the service people.

We visit and talk to the sales people. Many years ago, we did a student project for Toys R Us, a big toy retail chain in the United States. We thought that we actually designed toys for children, but that did not seem to be the main concern at Toys R Us. They told us that first they look at how many square inches a toy occupies on the store shelves, and how much profit is to be made. So

the Dollars-per-square-inch ratio was one of the factors that needed to be considered in the design.

Our next insight was that not the children buy the toys but their aunts and uncles, or their parents. So the toy and its packaging had to appeal to them first. And the last in the chain were the children.

Conventional thinking would have told us that we'd have to do the best job possible to please the children. We may have never found out why the product failed in the market. It may have been not because of a lack of quality or design, or because the children didn't like the toys. The simple reason would have been the negligence with respect to the stakeholders.

Oftentimes there are mandatory requirements with respect to safety or environmental standards. You design a product that violates them, and your product fails.

There are companies that may not care to check the patent situation. The result could be a lot a taka spent on the development of the product only to find later that it is in violation of the patent law, with all the consequences that might result from such an offense.

We gain additional input from the expertise available in the company. There are people with marketing know-how who will tell us about the company's distribution channels and the cost at which we should sell our product. There are people who know about handling and shipping who can tell us if there are any packaging constraints.

And of course there are the technical staff who will tell us all about the machinery and production processes available to the company. We will interview them about potential alternatives and their consequences regarding cost and raw materials.

These activities in the preliminary phase will allow us to develop a **list of requirements** or specifications that we will discuss with our industry partner and which will be the foundation of the ensuing design process. I am sure Mr. Lee Kun-Pyo will shed more light on the process itself in his presentation later on.

From this point on, the industrial designer will develop a number of different concepts. He or she will take into account the requirements from the list, but then there are the soft variables. The product will have an aesthetic visual appearance. Its functions need to be defined. The way the user interacts with the product requires particular attention. The product is supposed to connect emotionally with the user. The tactile qualities need to be defined, and if there is sound involved, as sound carries information about the internal quality of product, the designer should be also be able to determine the acoustic features of the product.

Your designer will share his early concepts with you and facilitate a decision process that will lead to the selection of the best concept.

After you selected the concept, more work needs to be done. The designer will specify the details such as dimensions, materials, colors, product graphics and so on. The designer will talk to suppliers, in order to find the suitable components. A model will be built, and at the end of the process there may be a prototype. Some models or prototypes are so well executed that they are being used to print the catalogs and other information material early on thus cutting time off the total process.

Packaging could be a subject as well, and in the long run also the design of trade show booths and displays may become necessary.

The designer's job isn't over with the presentation of the final model or prototype. A well-qualified designer will be able to monitor the early production runs, suggest modifications, develop the product into a family of products, receive customer feedback and adjust the product to market demand when necessary.

The designer will also suggest additional products and markets the company could serve, based on her insight into the capabilities of the company as well as her interpretation of future market demands and opportunities.

When we come to talk about the **Category 3** type of products all the above still applies. Things are only made more complicated, because the company is less in touch with the foreign market and its demands.

The items marked in red are the ones that require minor or major adjustments to the foreign market situation.

An industrial designer may advise the local company about the user preferences in other countries. He or she may have attended national or international conferences in which issues of international design and trade have been discussed. Your designer may have enjoyed an education, which allowed him or her to spend a semester or two in a foreign country, or do an internship abroad, or even do his senior thesis with a foreign corporation. He may speak the language and may know how to communicate and negotiate with business people in that country.

Your industrial designer will know that people in different countries differ in their ability to understand abstract concepts or signage. They will know that there are certain taboos that you should take into account.

I once heard the story of Braun trying to market a coffee machine in Japan. People in Japan have small families and live in crowded places, so a four-cup coffee maker would suit them well. The product flopped. Somebody told them that the number four in Japan means death. Brown quickly adjusted the scale on the glass of the machine so it would brew five slightly smaller cups of coffee. The product sold marvelously.

Chevrolet once developed a car for the Mexican market. They called it the Chevrolet NOVA which to them sounded reasonably Spanish and which they associated with the words novel or innovative. The problem was that the Mexicans read it as "no va" which in Spanish means "doesn't work". Needless to say, their sales didn't either.

There are numerous examples of design blunders committed even by major companies only because they did not care to investigate the cultural differences of the countries they were targeting as their next market. Guess which profession could have helped them to prevent these costly foul-ups.

A cultural difference lies also in the fact that customers in many countries abroad respond unfavorably to design plagiarism. Plagiarism is considered theft and treated by society as such. Would you buy from a thief? Those products can only sell at an extremely low cost, if at all, which keeps the profit margin always below what it could be with original products and original ideas.

There are five more topics that I will mention only briefly because we'd be running out of time. We have already talked about some of the economic implications of industrial design.

The design discipline is the only generalist discipline in the complex structure of people and events leading to the market introduction of a product. Most of the other disciplines are specialist.

There is a definition of the terms *generalist* and *specialist*. It goes like this:

The specialist knows more and more about less and less until he knows all about nothing.

The generalist knows less and less about more and more, until he knows nothing about everything.

We try to stop just short of the final stage. But it pretty much characterizes the position of the industrial designer. With so many disciplines participating in the product development, who will make sure they all are heard in the process, resulting in a harmonious compound of all its elements.

By definition, a generalist cannot know as many details of one thing as a specialist. So we may not be that knowledgeable about the latest developments in plastic materials, but we know how to design a product so it is suitable for plastic manufacturing. And we know where to go for expert advice when we need it.

We may not know about the electric circuits that go inside the product, but we understand the electronic engineer when he tells us about insulation or mounting requirements.

We may not know, let's say, about the latest developments in blood pressure monitoring, but we know where to go in order to get the relevant information quickly.

These are only a few examples of the many variables that need to be balanced in the course of product development. Typically, in a small start-up company, the owner is the generalist. He or she will have to take care of all the activities mentioned above.

As the company grows, the administrative tasks will keep him busy, and somebody else will have to take care of the product development process. If this somebody is a specialist, he will see the whole process from his specialist point of view. Often times, *technical* staff gets to lead product development. It is no surprise that this causes many a product to fail. Look at the success of Nokia versus Siemens in the mobile phone business and you understand that it is the user-centered approach to design that gained Nokia it's dominance in this market. Consumers become increasingly frustrated with the products they can't understand and operate. A technician must not lead product development, because he is not trained to design a product from the user's point of view, because he is a specialist focusing on technology.

Many companies thrived while their owners and founders ran the business. Max Grundig was the founder of Grundig Corporation, the biggest manufacturer of TV sets in Europe. Max Grundig ran the company like a tyrant, controlling every single aspect of the operation on a daily base. My friends in their design department told me that Max when he did not like the design of a new prototype, he would throw it out of the window. The company thrived. In the 1970's, Grundig employed some 40ooo people.

When Max Grundig died, there were no successors. The bureaucratic structure grinded on without leadership and vision, slowly coasting to a halt three months ago when the company finally ceased to exist.

Other companies hire smart young MBA's whose first concern is their contract and their severance pay in case they are fired. With no insight in product development and absolutely no generalist perspective of the operation it is no surprise that many of these companies went belly-up.

In the absence of generalist leadership, the industrial designer is the choice expert to bridge the requirements coming from different directions in a corporation. Innovation and creativity help him to find seemingly impossible solutions to a problem. Having worked for a number of different companies, having solved problems in a number of different technologies, and having listened to

experts from different disciplines, designers find unconventional solutions through lateral thinking and by means of unconventional methods.

In some cases we still observe situations where management does not realize the power of industrial design. They place industrial design in the engineering department or on a hierarchical level below marketing, for example. That is a gross mistake, because industrial design cannot employ its generalist potential under such circumstances. Industrial design works best when in charge of product development and project coordination, but only when the industrial designer you hire is properly trained.

The need for design also hinges on another subject.

Industrial design teaches students not only a general perspective of the field and its surroundings, it also turns their view onto the possibility of becoming an entrepreneur themselves. The methods and skills taught in an industrial design program and the insights the students gain through a series of guided projects enable them to become inventors and visionaries.

When I helped Colombia, a country in South America, to build its first industrial design program, the question was asked, what do we need all those designers for. We don't have that many industries in our country. Watching Colombia from a distance, and talking to my former colleagues during a recent visit to that country I realized that many of our Colombian graduates started their own businesses, thus contributing to a positive development of their country's economy. When I left Colombia in 1983, there were five universities offering industrial design programs.

My university in Bogotá alone had 250 students in their industrial design department. Now there are 10 universities with an industrial design program, and the eleventh one will start to operate in 2005.

Nobody can predict whether a program that is successful in one country will also succeed in another. But for Colombia it worked. For Germany it worked, For India it worked. For Korea it worked. For China it works. And for many other countries it does work.

Industrial design has not only shown the potential to contribute to the economic growth of a country. The university where I taught in Colombia had a strong social focus. Their social concern led to a program that was dedicated to solving problems for people in the rural areas and marginal areas of the big cities. It was geared towards improving the quality of life of the rural population so they would not flock to the big cities in such large number. There was cooperation with Colombian NGO's similar to the Bangladeshi BRAC. Few of the student projects had to do with aesthetics or high-tech. Instead they tried to solve problems related to hygiene and education, to the use of appropriate technology, to food production and distribution. There would be plenty to do in Bangladesh along these lines, and the fact that you have BRAC encourages me that industrial design in Bangladesh could also make a contribution to the issues so emotionally discussed in Cancun.

I hope I have been able to address some of the arguments indicating a need for design in Bangladesh.

One last word before I finish. A highly qualified educational program in industrial design and the level of international exchange that would be required as a part of quality design education also enables students and graduates to accept job offers abroad. In this case all the investment in educational infrastructure is lost which only the richest countries could afford.

In order to avoid this, the proper political, economic and organizational environment needs to be established so that designers educated in Bangladesh will be in a position to contribute to the needs of the country.

Thank you!

3.7 Presentation of Mr. Kun-Pyo Lee: "The potential of Product Design"

Potential of Product Design

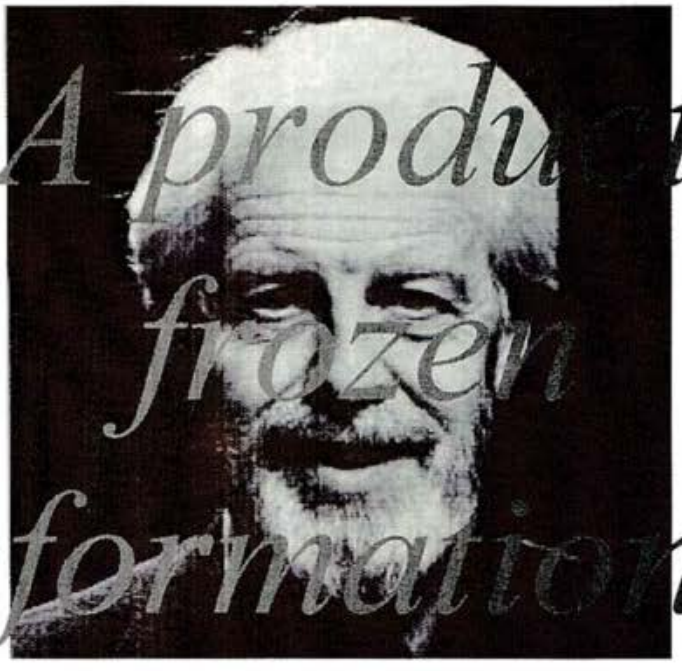
Seminar on Product Design Education in Bangladesh, Dhaka, Sep. 21. 2003 KAIST LEE Kun-Pyo

Contents

01 Why?

Product as Information

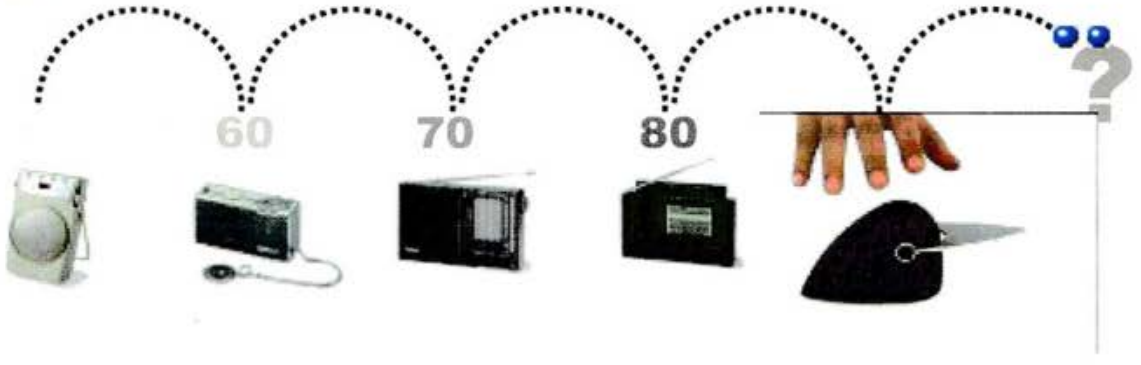
“A product is frozen information.”



Prof. Jay Doblin (1920-1988)

01 Why?

Development of Products



Hand	Head	Heart
Comfortable	Understandable	Satisfiable
Ergonomics	Cognitive Eng	Emotional Eng.
Form Follows Function	Form Follows Flow	Form Follows Fun

01 What?

Definition of Design

"What do you come up with the term Design?"

02

What?

Definition of Design

"What do you come up with the term Design?"

03
What?

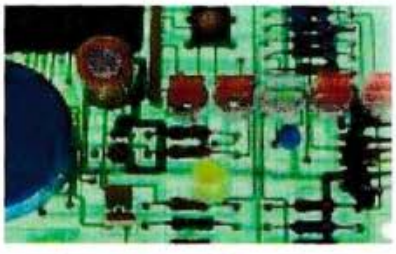
Definition of Design

"What do you come up with the term Design?"

04 What?

Definition of Design

"What do you come up with the term Design?"



Drawing

05 What?

Definition of Design

"What do you come up with the term Design?"

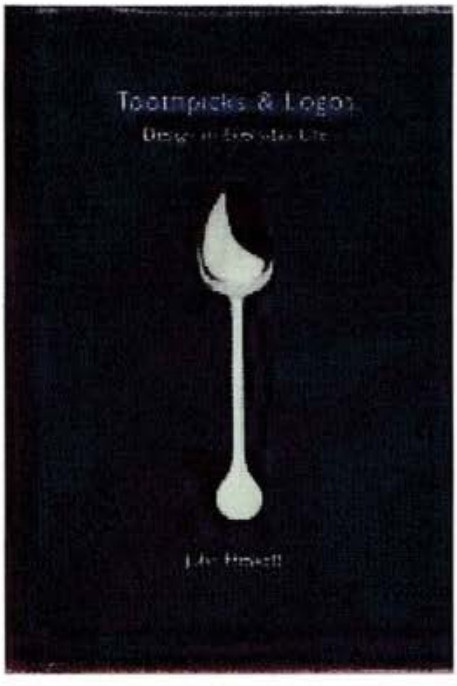
Diverse Meanings of Design

"Design is to design a design to produce a design"

"The new VW Beetle revives a classic design."

07 What?

The Meaning of Design



"Human capacity to shape and make our environment in ways without precedent in nature, to serve our needs and give meaning to our lives."

08 What?

Different views over product lifecycle

Plan

Work

Mechanical Product

Merchandizing Goods

Tools

Culture

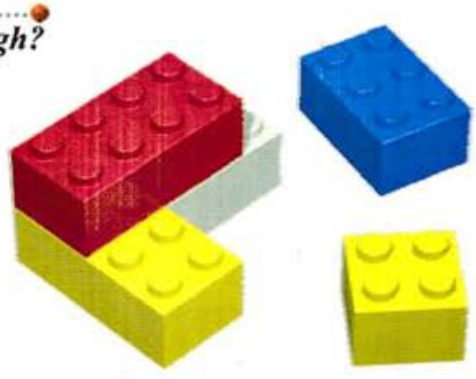
Product Planner ····▶ Designer ····▶ Engineer ····▶ Sales Person ····▶ User ····▶ Society

04 What?

Different views over product lifecycle

Product Planner

Can it make breakthrough?



Different views over product lifecycle

Designer

How does it look?

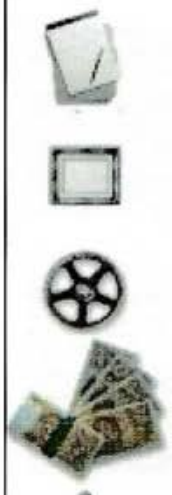
Different views over product lifecycle

Engineer

Does it work?

Different views over product lifecycle *Sales*

Sales Person

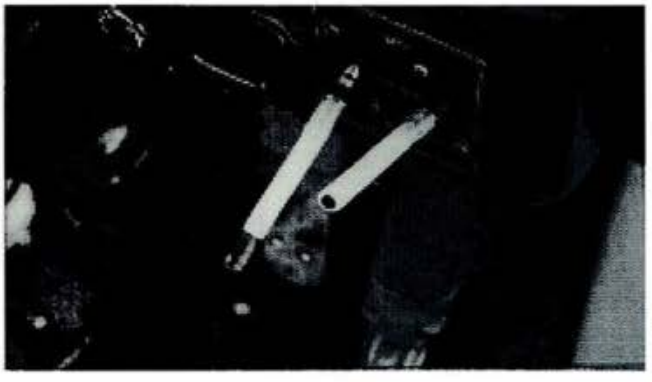


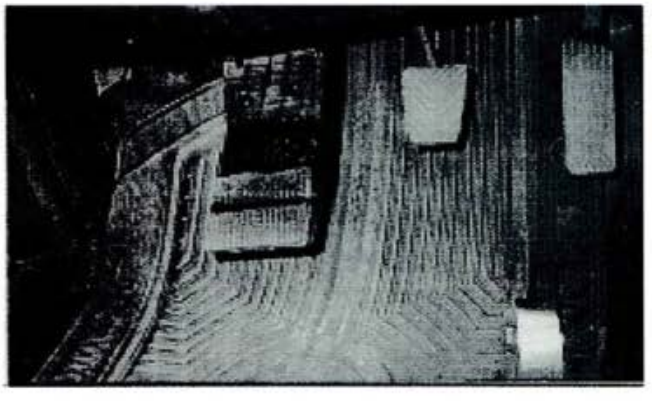
Does it sell?

Different views over product lifecycle

Users

Is it comfortable?





13

What?

Different views over product lifecycle

Users

Is it understandable?

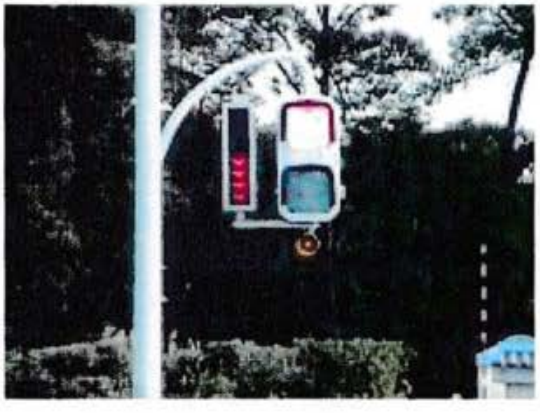
Different views over product lifecycle

Users

Is it understandable?

Different views over product lifecycle

Users

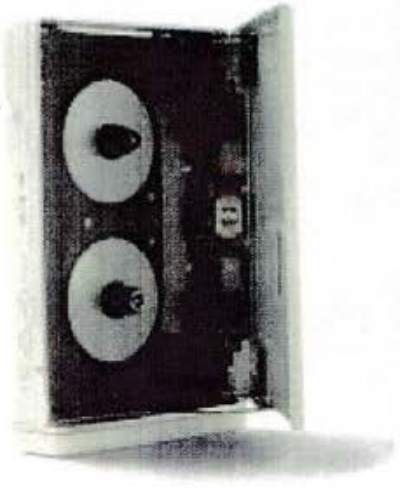


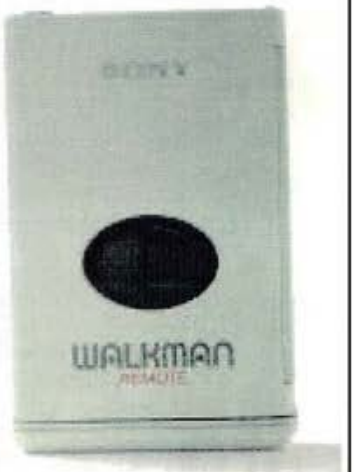
Is it understandable?

Different views over product lifecycle

Users

Does it fit my image?





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What?

Different views over product lifecycle

Society

Does it fit culture?

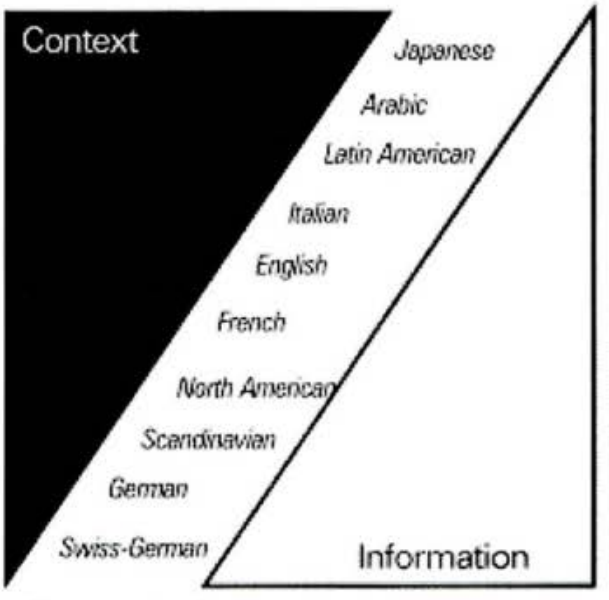
Different views over product lifecycle

Society

Does it fit culture?

Different views over product lifecycle

Society

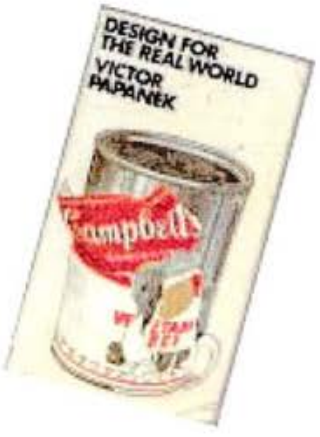


Does it fit culture?

Different views over product lifecycle
Society

Kimmenysket

"I think that even the most successful designer can afford one-tenth of his time for the needs of men. It is unimportant what the mechanics of the situation are: four hours out of every forty, one working day out of every ten, or ideally, every tenth year to be spent as a sort of sabbatical designing for many instead of designing for money."



Is it good for nature & society?

Different views over product lifecycle

Society

If you could turn the earth population into small community of 100 people keeping the same proportions we have nowadays, it would be something like this

http://luccaco.com/terra/terra.htm

Is it good for nature & society?

How?

Culture-Centered Design


thend

4.1 Workshop Introduction

Workshop I: **"What should be the typology of product design education base?"**

Workshop II: **"Creativity"**

Discussion of **basic - questions**:

- What is our (different?) definition of creativity?
- Can we find to common characteristics?

Statements about the **quality of creativity** by Mr. Shaha and Mr. Faerber: Wherefore do we need creativity?

- Do only artists and designers or craftsmen need it?
- Isn't creativity also necessary in social communities and what is its quality?
- Isn't creativity the pre-condition of self-consciousness and human dignity?
- Doesn't it help to find your own conception for any kind of work?

The scenario of **creativity in education process** by Mr. G. Shah

How does one inculcate a sense or an attitude of " creativity " into our education systems?
The participants will explore and try to find other questions and problems, which are linked with it.

Synthesis of our first steps to understand what we are dealing with.

The **Workshop**

Short examination about **living-conditions of plants** under different circumstances.

If we compare **creativity** with **a living plant**:

- What are the **living-conditions of creativity**?
- What is necessary for growing, to blossom and to yield fruit?
- What is the right **"earth"** to strike roots in it?
- What is to compare with **"water"** for growing and changing shapes?
- What's about **"air"** for blooming and communication with flying insects?
- What can we compare with the **"warmth of the sun"** to bring up sweet fruits?

Cursory review about the **cultural pre-conditions of creativity** all over the world.

Discussion about the fulfilling of these conditions in the
Education-System of Bangladesh:
What do you think are the main problems? (Please write them down on cards)

- In which of our four categories we shall fix our problem-cards?
- Is there a difference between common and private schools?
- Do all problems deal with school or does it start in the earlier childhood?

Practical consequences how to bring more creativity into BD´s education.

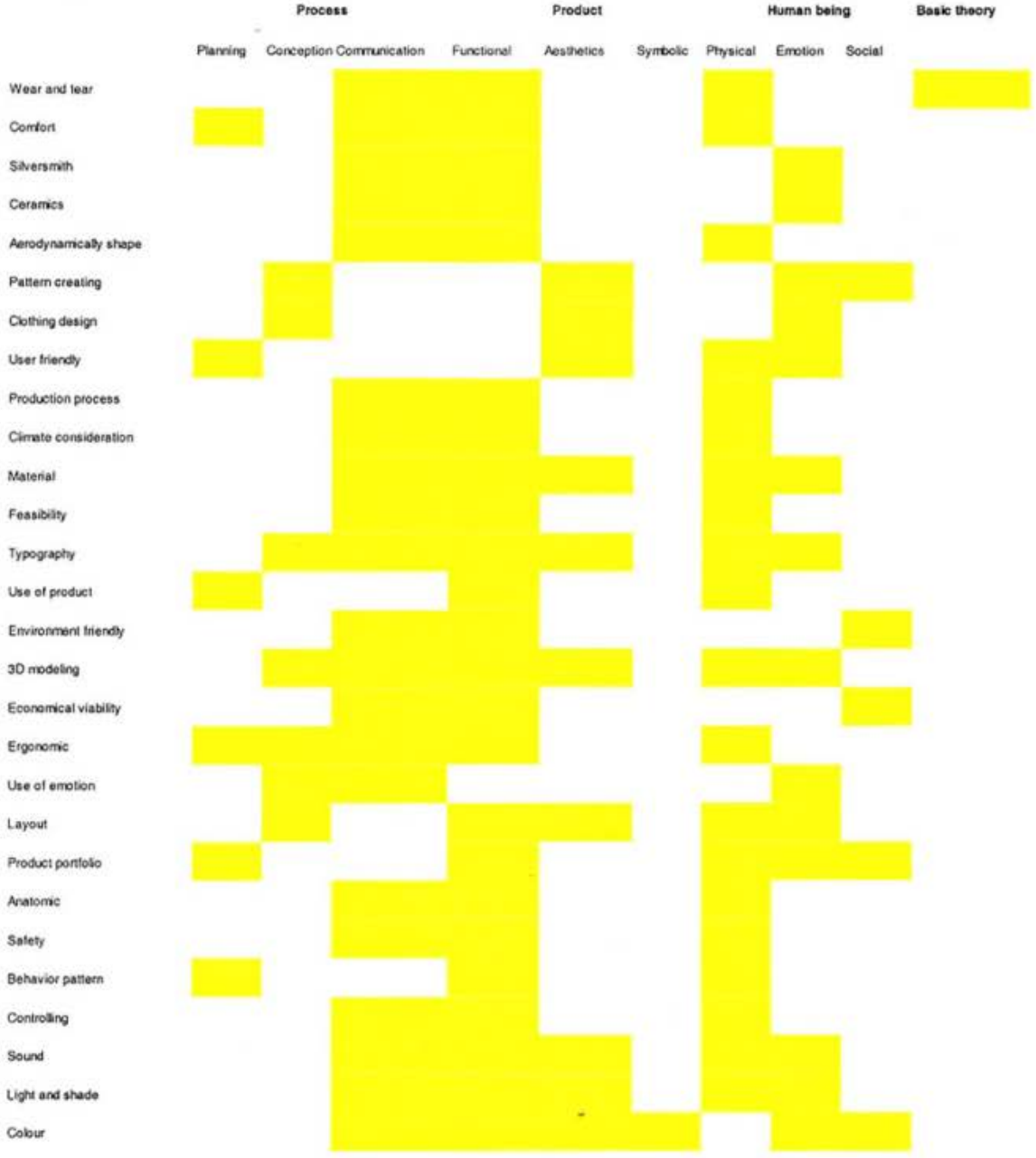
Proposal: Let us speak about **realistic ways and contacts**. The question of "How to practise it?" will result out of contacts and must include their special experiences.

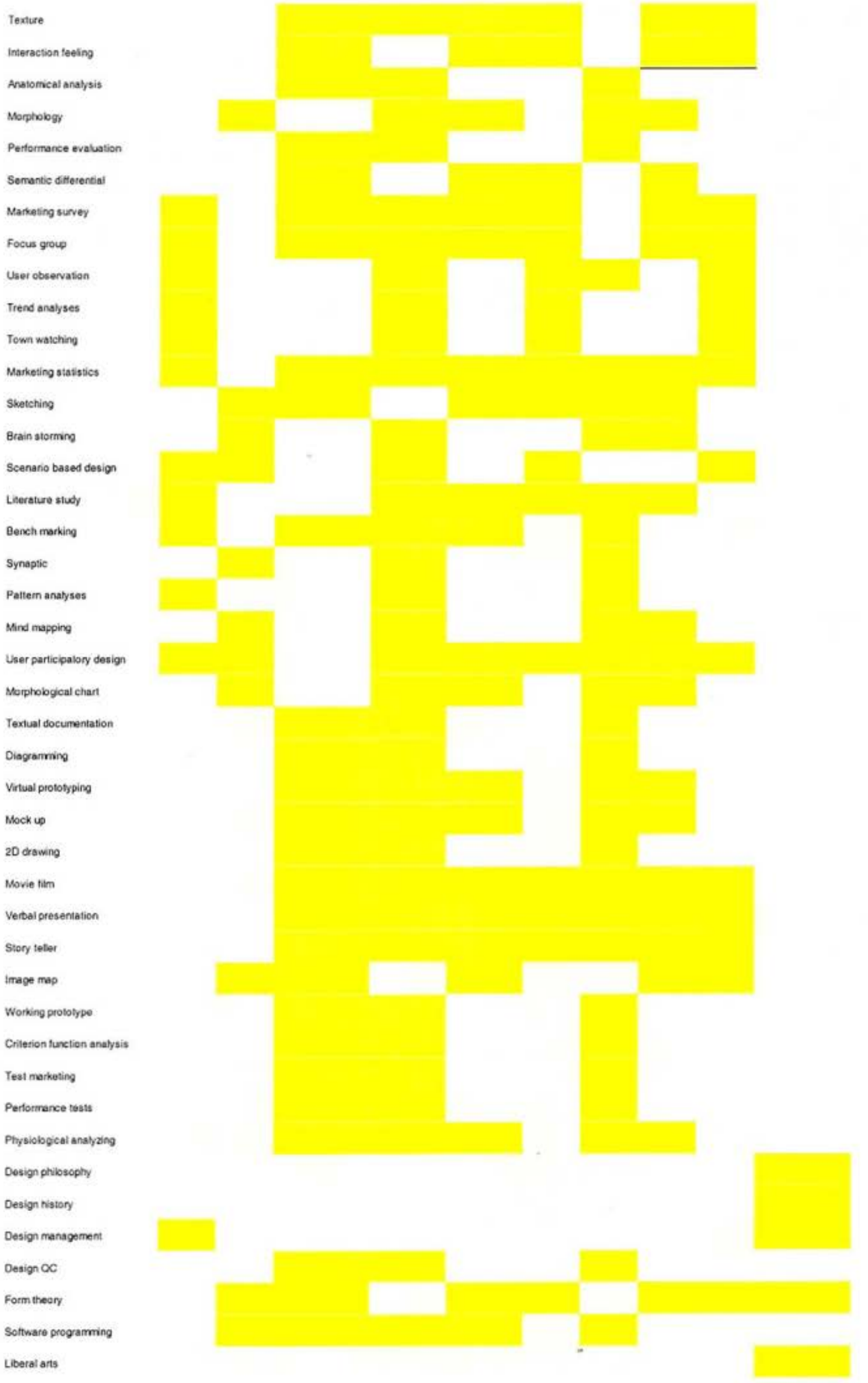
- Is it better to go a governmental way or to work with NGO´s?
- How can we reach the many different Private Schools?
- Can we ask BRAC, which has a very well installed pedagogical network?
- Shall we use the contacts of GTZ – CPEP project fo thr governmental way?
- Shouldn't we include the important education of Rabindranath Tagore?
- Shall DTC offer special seminars for teachers about creativity?
- Which of these steps are realistic for DTC to realize?
- Who wants to keep active together with DTC in these points during the next time?
- What's about the creative and worldwide working Waldorf-Education?

Workshop III: **"What can be the role of an industrial designer in the growth of a manufacturing company?"**

4.2 Presentation of Workshop-Findings

4.2.1 The first workshop that was presented was under the guidance of Mr. Kun-Pyo Lee, titled **"What should be the typology of product design education base?"**
Six participants attended the workshop and Mr. Saif Ul Haque moderated it.
They approached the mentioned topic by first looking at the most general methods of Design Education, the Functional-Aesthetic-Symbolic method. By discussing this and reviewing other methods as well it was found that there are three main driving forces for Design Education: The human being and all its facets (be it its culture, emotions, social standards...), the FAS design method (Functional, Aesthetic, Symbolic) and the setting-up of a design process (looking at user needs, technical aspects...).
The next step was a brainstorming to identify design methods and to then categorize them according to the before found driving forces. These were then clustered and course names as well as pre-requirements found and put together to study programs, whereby the Bangladeshi scenario was kept in mind.
The last step that was taken was to place the programs in terms of its academic content and to segment schools.




Texture
Interaction feeling
Anatomical analysis
Morphology
Performance evaluation
Semantic differential
Marketing survey
Focus group
User observation
Trend analyses
Town watching
Marketing statistics
Sketching
Brain storming
Scenario based design
Literature study
Bench marking
Synaptic
Pattern analyses
Mind mapping
User participatory design
Morphological chart
Textual documentation
Diagramming
Virtual prototyping
Mock up
2D drawing
Movie film
Verbal presentation
Story teller
Image map
Working prototype
Criterion function analysis
Test marketing
Performance tests
Physiological analyzing
Design philosophy
Design history
Design management
Design QC
Form theory
Software programming
Liberal arts

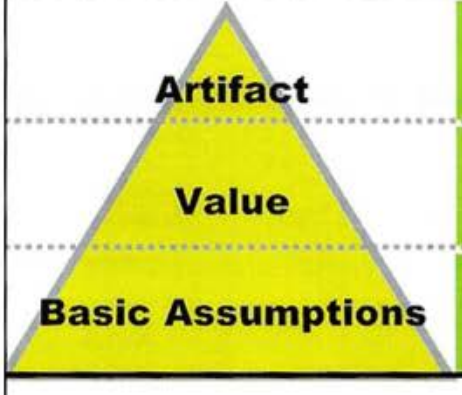
Different Methods for Design Education

Kun-Pyo LEE, KAIST *Product Design Seminar, Dhaka, Sep. 21, 2003*

07 What?

Design Methods and Development of Technology

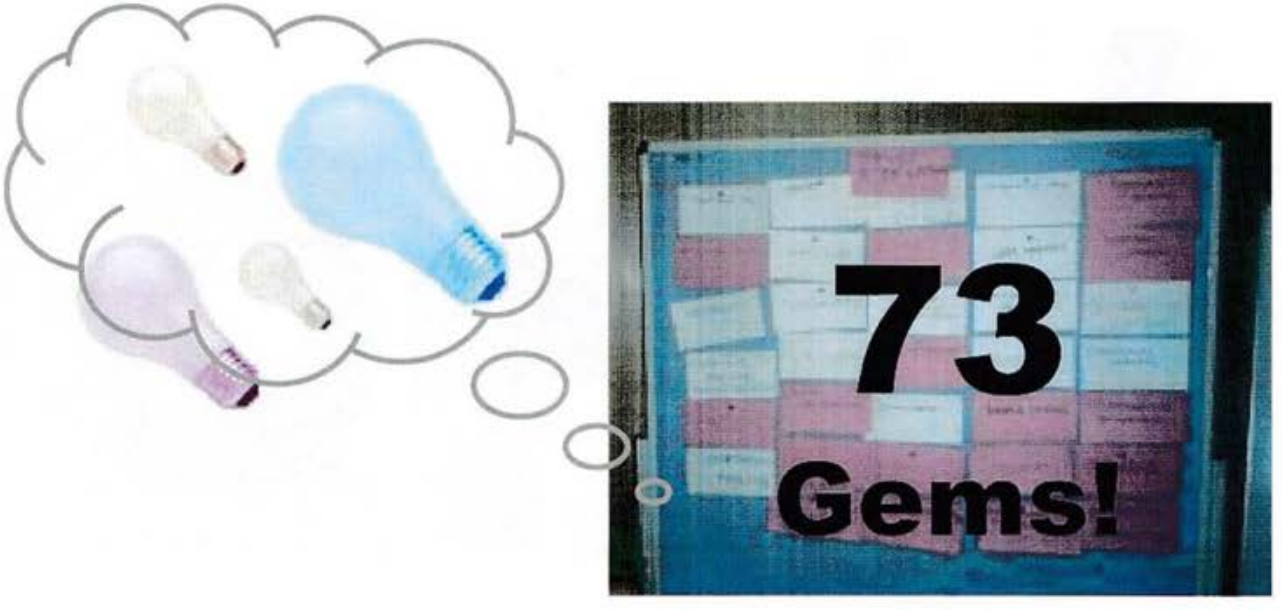




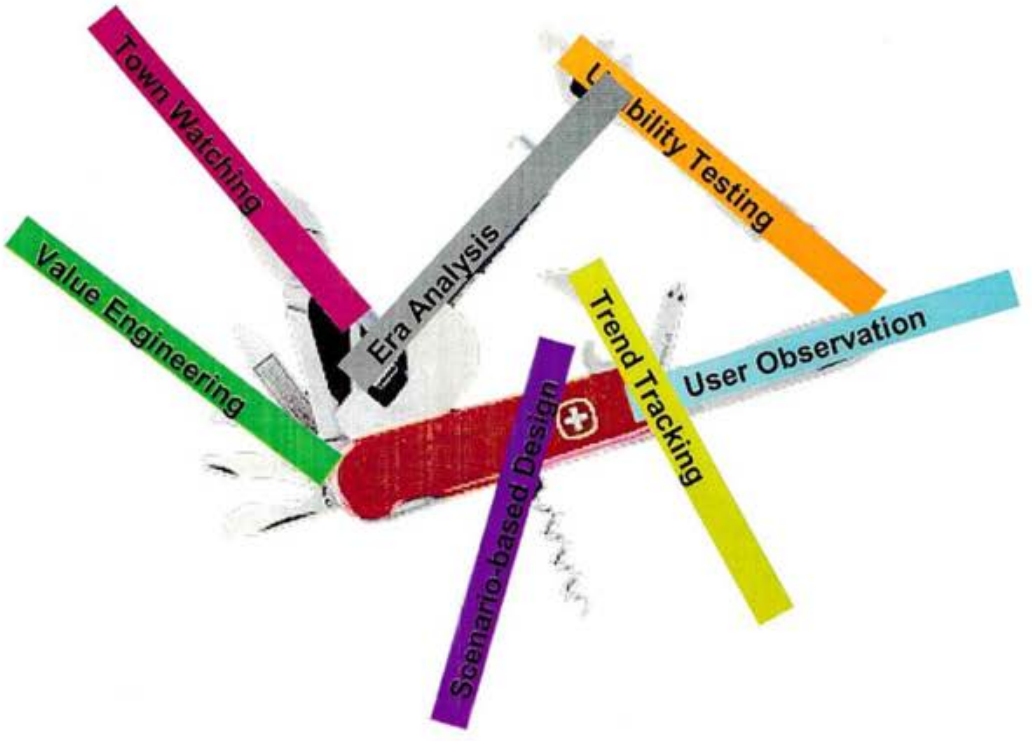
F	Craftsmanship	Ergonomics Engineering Design	Interface Design
A	Inter-Personal Belief	Drawing	Emotional Design
S	Taboo	Survey, Interview	Ethnographic Methods

Driving Forces for Design Education

Brainstorming Design Methods

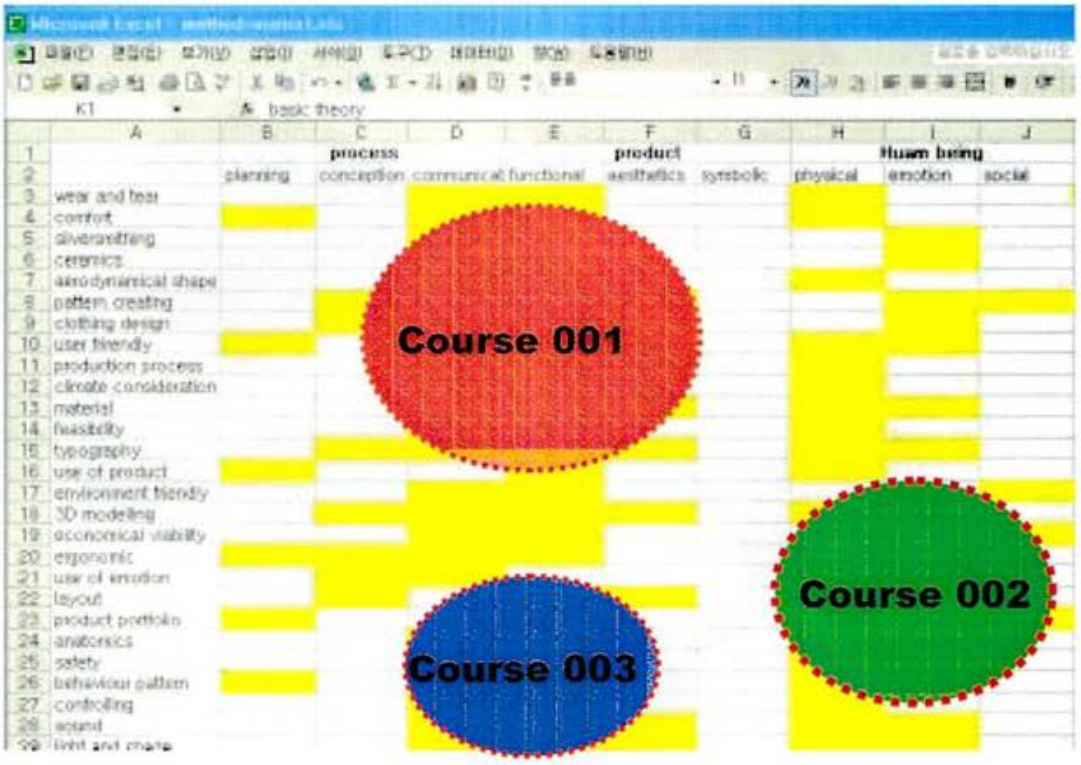


Listing Up Design Methods

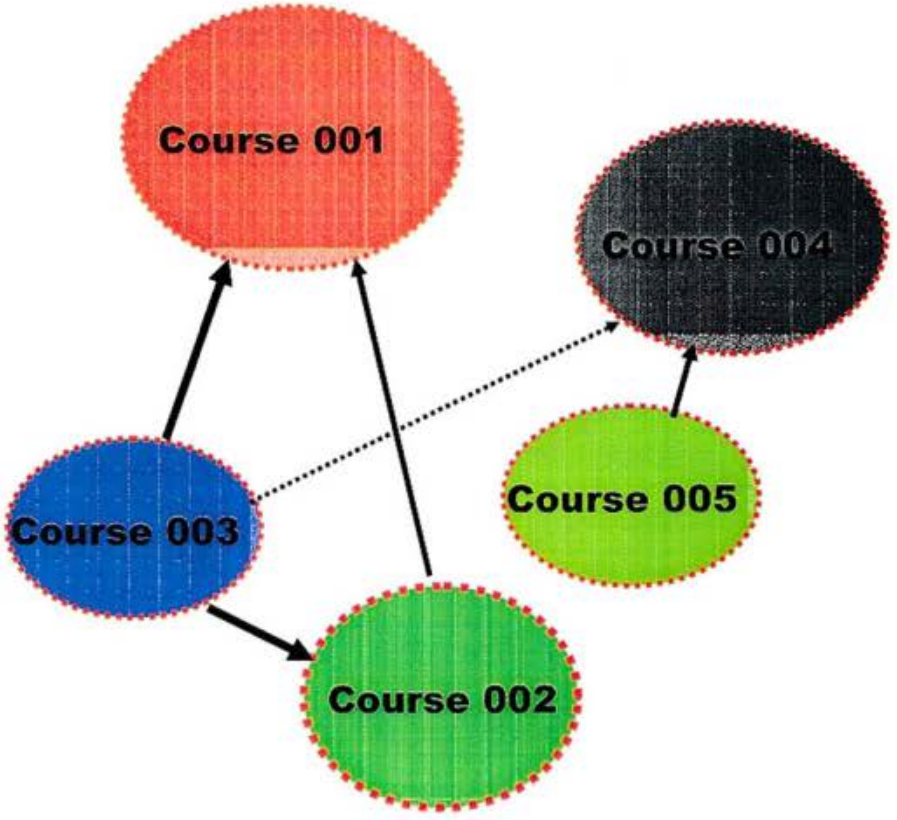


Categorizing Methods for Design Education

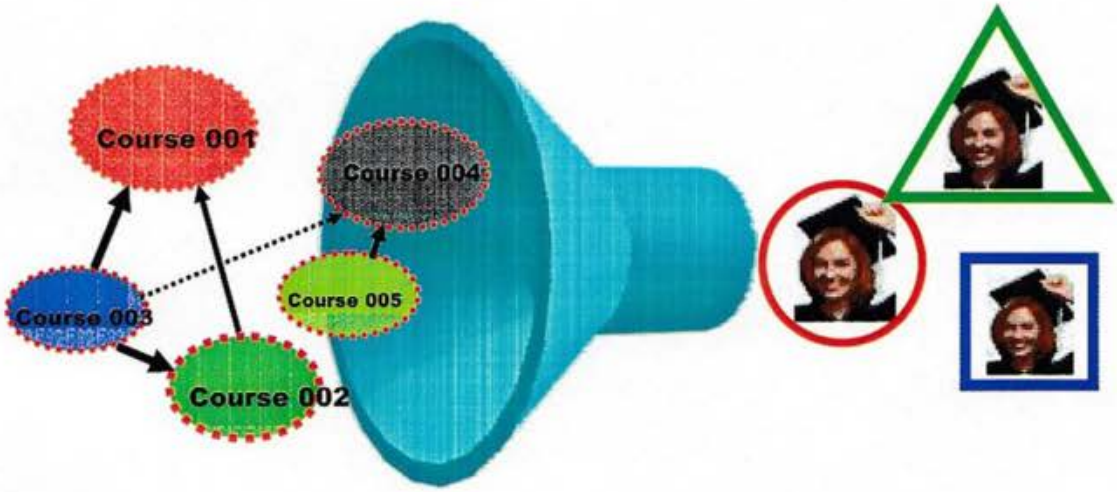
Further Works 01: ***Clustering and Naming Courses***



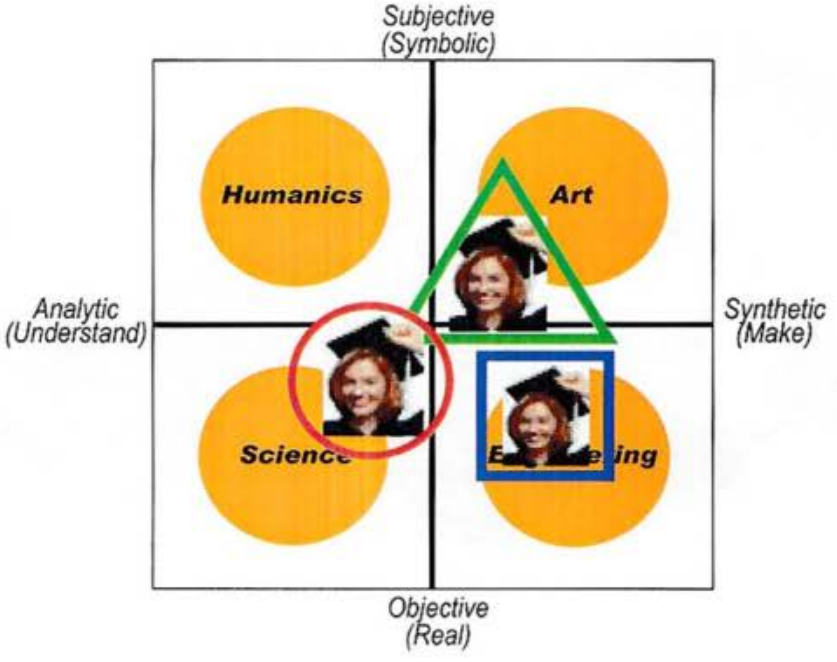
Further Works 03 : ***Screening through Bangladesh Scenario***



Further Works 03 : ***Screening through Bangladesh Scenario***



Further Works 03 : Segmenting Schools




Participants, Shared, Motivated,
Committed, and Fun!

kplee@mail.kaist.ac.kr

4.2.2 The "Creativity" –Workshop presentation :

The workshop was guided by Mr. Gaurang Shah, Peter Färber and Shekar and addressed mainly the questions of what creativity is and what can be done about the lack of creativity in Bangladesh.

The methodology followed in this workshop was one of exchanging ideas, discussing and documenting just a few key-findings.

The starting point of the discussions was how the participants defined creativity. All different kind of definitions were given:

- Creativity is spontaneity
- Creativity is combining heart and brain
- Creativity is sensitive imagination
- Creativity is a discipline that makes people focus on improving situations

Just to mention a few.

All participants of the workshop agreed upon the fact that there exists a lack of creativity in Bangladesh and that it desperately needs to be introduced.

By picturing a flower in a vase, a parallel was shown: Creativity, like flowers, needs a certain environment to prosper. If this is not given, creativity cannot unfold itself. It needs a place and a knowledge base as knowledge enhances creativity.

Next to this it was found that creativity needs time: By pressing children to learn too much in too short amount of time, the appearance of creativity is suppressed.

Also, children should be motivated and encouraged to be creative, maybe even through a system of rewards.

After having clarified what creativity is and what it needs in order to prosper, the workshop group tried to find out what is wrong in Bangladesh. The method of mind mapping was used, the findings categorized and conclusions drawn. The results can be seen in Appendix... .

Last, possible solutions of how to tackle the problems were discussed. It was found that in the long run overall governmental policies would have to be changed. In the short run, the following could be done:

- Arrange round table meetings with policy-making bodies, whereby the media should be involved
- Work with private schools: take sample classes and after 6 to 12 months confront the governments with the results
- Arrange seminars for teachers and school management (preferably for schools from all different social classes)
- Continue the exchange of ideas through the establishment of a research cell. This way one can learn from what has been achieved (or done wrongly) by others.
- DTC could in all this take the role of a consultant, organize the seminars, act as a pressure group and so on.

4.2.3

Last but not least, the workshop discussing **"What can be the role of an industrial designer in the growth of a manufacturing company?"** presented its result. The conductor was Mr. Ginnow-Merkert and Arman Chowdhury moderated it.

Their first goal had been to get an idea of the Bangladeshi industry and its structure. All for Bangladesh important industries had been listed and then those that designers could not cater to eliminated. The final list included the following industries:

1) handicraft
2) leather
3) packaging
4) light engineering
5) toiletries
6) ceramics
7) garments and accessories
8) processed food

Exemplified by the handicraft sector, the group then discussed how a designer could have an impact in the industries. In the mentioned sector, they stated, producers have always been reluctant to changes, which develops from the fact that products grew with the culture and have their roots in history. The need was seen for designers and artisans being exposed to each other, maybe on a common platform, in order to understand the other's viewpoint. The role of the designer should then be to maintain the culture while creating a new product.

The workgroup also discussed the mistakes manufacturers do at present: they employ designers just on need-basis. This means, they seek for their help only in the last moment, when it is actually most of the times too late already. They are apparently not aware of the fact that product development is not a matter of changing the outward appearance of a product but an ongoing and complex process. They did not yet fully understand the role a designer can take in their enterprise and what he or she can do for them. It was stressed that the questions: "What service can a designer offer to a manufacturer?" and "What can a manufacturer offer to a designer?" desperately needed to be answered and made clear to all involved parties.

Finally, questions that had been left unanswered due to lack of time were posed:

- What strategies can and should be used to inform the industries?
- How to develop the skills in manufacturing and product design?
- What strategies can be followed to overcome resistance? Who will oversee the quality level of design as a study program?
- The first students will not graduate before 5 or 6 years – what can be done in the meantime?

Questions and Discussion:

Summary:

The discussion mainly focused on figuring out in which Bangladeshi industries designers could become involved and how they should be educated for doing so: Should there be many different design education, tailored to the different industries or does Bangladesh need designers that have a general basis? Participants seemed to agree that Bangladesh for one desperately needs designers and secondly is ready to educate these themself. Not so clear was the answer in regard to what kind of designers the country needs. It was voiced that Bangladesh, with all its industries, should also have designers specialized in different fields. The more strongly represented opinion was that teaching design is more about teaching perception of a wide span of conception. It is about making technical functions understandable up to the aesthetics of the end product. A designer has the task of bringing all this together, no matter where he exercises his profession – in Rome, Hong Kong or Dhaka. It is about being open to collect ideas, comprehend them, play with them and all this while being aware of the existing market as a whole and not separate market segments.

One of the Resource Persons suggested a compromise: That one could think of a system of schools for designers for all different segments of the industry (ceramics, leather...), but all of which are under one roof so that combinations can be created and that students and teachers can work together. It could be a school that educates designers and is able to adapt to the upcoming needs of the country. It is not that the country has to follow the school but that the school has to follow the country and adapt to circumstances.

In the context of creativity and design it was mentioned that one should not ask the younger generation to blindly follow – be it foreign markets or set structures in their own country. They should rather be encouraged to go their own way and develop their own ideas, as this is the one way in which Bangladesh can establish itself a place in the international market. A participating manufacturer was giving one example where this approach had worked: He had taken a traditional hat made of bamboo and converted it into a lampshade – with great success.

5.1 Presentation of Mr Chandra Shekhar Shaha: "The Bangladeshi Scenario"

I will start with a common word "NEED"

It is the lifestyle of a human being which creates NEED.

And to satisfy these needs **generation of products** takes place.

In this product generation there are certain motivating factors. These are-

1. Surroundings
2. Human habits
3. The society itself
4. The production situation
5. The cravings of the producer
6. The production techniques
7. Material availability
8. The whole planning
9. The time context
10. Affordability
11. **Professional resources.**

Among these criteria some of them are directly related to culture, lifestyle and some of them related with the economic and technological advancement which cannot be changed overnight. But all of them can be taken and must be taken into consideration to bring out a product which is unique in different context and potrays identity. And that's where the last point professional resources takes the upper hand. I will not go into the details of these points, rather focus on this specific point from Bangladeshi perspective.

Now lets take a look in the products scenario of Bangladesh. Like other countries we have huge local needs and also huge possibility in export markets.

In the local markets --- the production sectors are –

1. City based – where SME's and some product based industries are working. And these initiatives are taken by private sectors or by NGOs.
2. And village based – which totally depends on handloom based weavers and crafts based artisans.

For the export markets, -- production is done by different categorized production sources which consists of village based artisans and different material / product based industries.

Now lets take a look how these products or their production in Bangladesh takes place. In this point I like to light upon some basic questions.

Question no 1: how the decision of making of any product or selecting the type of it is taken?

To answer this I find out several points.

1. Entrepreneurs just takes a decision according to their personal whims or understandings.
2. NGOs- takes decision when they feel that a certain product needs to be developed or gets a fund from doner agencies for a certain given subject.
3. Buyers form other countries gives a designed object just for production or exporters just follow the selling trend according to the choice of the foreign market.
4. Many boutique houses are producing according to the local market needs.

Question no 2: which is a sequencial question of the former one is that—

How does the professionals get involved directly or indirectly in this process of production.

To search the answer I find that the appointed design professionals or the so called designers working for SMEs or export based NGOs are mainly from the background of art college. If we take a close look to last 10 years we will see that the number of working professional from design based institutes is very low.

Lets face the design education scenario of Bangladesh.

There is a commercial design and crafts department in the art college which have been working from the beginning and still continueing. Besides this, we can see that in last 5 years a new trend has emerged concerning different curriculum based design education. Dhaka based several design schools and one design university is the reflection of this trend. But there is a big question circling arround the quality of these institutes.

Lets talk about some examples now.

From 1978-2002 one specific organization, AARong made a remarkable change for establishing an attitude of Bangladeshi brand focusing only on handloom and handicrafts. And this success story influenced lots of other private enterpenuers to work in this sector. In last ten years we can see a fair amount of boutique houses who are enhancing this attitude. So we can say that a brand setting trend has started. It is very nice to see that many of them are aware of the need of the designers and trying to involve them. Aarong again played the role of a pioneer again.

The same situation we can find if we study the success story of OTOBI. I am not going into the details of their design philosophy or even critisize it, but I will say that these examples have illuminated certain awarenees to some extent.

The need of a designer is understood by them whether rightly or wrongly.

A certain kind of professional attitude has started.

Employing designers has also started.

If a proper design education starts in Bangladesh right now, I am very hopeful that in the next five years we will stand in a position from where Bangladeshi products will dominate the local markets as well as export market with its own identity and characteristics. But in this point, the role of **government**, **enterprenuers** and **design schools** and the co-ordination among themselves is very important. We should look critically in this reality and guide the subject design education into the desired goal.

6.1 Panel Discussion: FEASIBILITY

Attraction to students:

Mr. Gaurang Shah:

National Institute of Design opened its doors in 1961. Before this act, the Indian government had invited an American citizen to study the situation concerning design in India. After a few months, his findings were published under the title "Indian Report". It takes a broad an holistic look at the situation and stresses the need for industrial design in India.

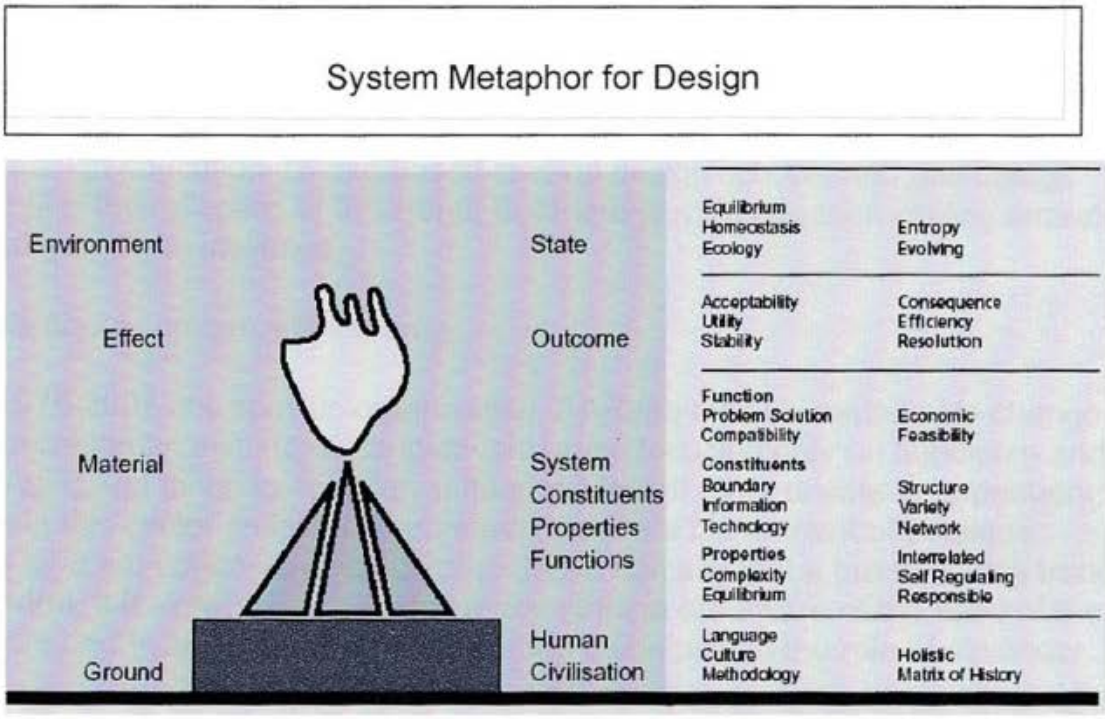
As soon as the report was received, its ideas were implemented: A few young people with a background in fine arts, engineering and other subjects were invited to become students at NID – their study was fully funded. The basic idea was to train the first generation of teachers at NID. The program took six years. During these years renowned people from all over the world came to support the education of designers in India. Simultaneously, a team led by a French architect planned the city of Chandigar. Both teams stood in close connection and regular interaction took place.

The greatest problem that was faced was the reluctance of the industry to commit to design. This was due to the fact that the economy was protected and their life therefore relatively easy. Even today, many industries see design just as cosmetics – a way of changing the surface of a product, something that can be done quickly, cheaply and at the last moment. More trust is given to technology and management than to good design and as a consequence, investment is low.

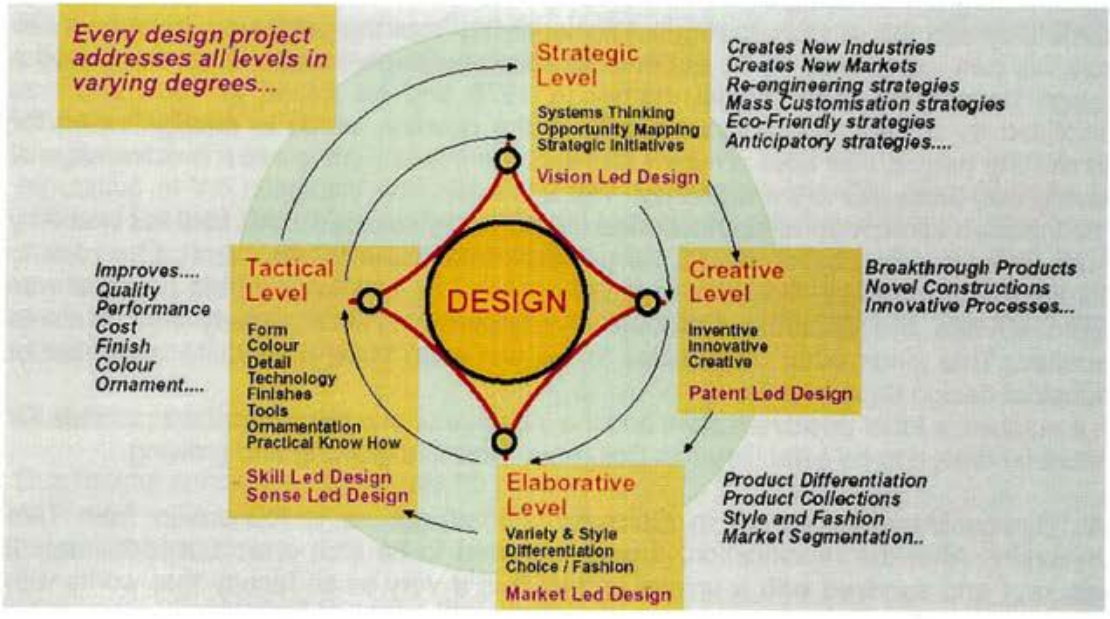
Nevertheless, there was also support from the industry: Especially one wealthy family of institution builders pressed very much for the introduction of product design as a study discipline.

The first graduates from NID faced no problems in finding a job. One of them, Mr. Shah ended up with an automotive industry. At first, it was not clear where he should be placed – with the R&D, Design? Gradually, his work evolved and he established himself a place in the company – now there is a whole department of industrial designers made up of 20 people, from which 15 are from NID.

Nowadays graduates from NID still find jobs easily with mostly big companies, but also small industries start to open up industrial design departments. Graduates also tend to set up a consultancy together with professionals from other disciplines.



Levels of Design Interventions: The New Industrial Design



Mr. Kun-Pyo Lee:

Design schools are mainly due to the wrong reason attractive to Korean students: In Korea, as well as in Japan and China, Confucianism is predominating; parents sacrifice themselves for the education of their children, they see them as a life-time investment. Hence, everybody wants to enter universities. But not everybody is able to take up studies like medicine, law or math so they figure they just enter art universities of which the design schools are a part. So, to put it harshly, all those without intelligent capabilities enter art schools. Also, universities do not always have the most noble motives when opening up a design department: They believe design can be done without big investments and so they go for it.

From 1980's on the Korean government tried to educate highly professional designers. They selected a few numbers of students for a scholarship in the United States (of which Mr. Lee was one). The education being fully funded in addition to the fact that if chosen for the program male students were exempted from military service made and still makes this program very attractive.

In 1986 the government realized that they needed educated designers able to communicate with the other disciplines and hence they set up a design department linked to science and technology. There, the design education is linked to all different fields like marketing for example.

Mr. Hartmut Ginnow-Merkert:

Mr. Ginnow-Merkert graduated in 1973 from the first university to introduce a university diploma program for design.
As he only saw the school growing but not evolving from the beginning, he cannot talk from his own experience there, but in Columbia he was part of the team that set up a design department. The project started in 1978 and he joined in 1980 and was initialised by a very reputable university in the country, which is mainly known for generating people that later on work in the government. This gives the advantage of having very close ties to the regnancy.
The initiative came from an architect who did not really succeed in his field but was very much interested in product design. He gathered information abroad and came back to Columbia, full of ideas. Because of close connections to the dean, his proposal was approved and the department set-up. By 1983 there were already 250 students enrolled. This made other universities follow and soon there were quite a number of industrial design departments.
In a nutshell, a lot of positive factors and the initiative of one person made it possible for industrial design to be established in Columbia. Now it is growing and growing.

Mr. Ginnow-Merkert's school in Germany started out as a foundation from Ulm University. After the reunification, it was supposed to be shut down but fortunately it was kept and survived with a unique profile: It is a very small faculty that works with very small groups. This gives many opportunities: Time for individual students can be anted up and the professors are not bound by college policies.
Other things the school does in order to be attractive for students, is to find partners that sponsor projects, lend know-how and offer up-to date design problems. In the upper semesters, students are prepared for the fact that soon they will have to work alone in the "real-world". This preparation takes place in the form of structured, mandatory internships as well as theses in cooperation with enterprises, sometimes even sponsored ones. Also, international cooperation is a major point of focus of the Kunsthochschule Berlin-Weissensee.

Questions and Discussion:

Summary:
In the discussion, it was stressed by all Resource Persons that in order to make design education attractive for students, students need to be aware of what design is in the first place. In this context Mr. Lee stressed the necessity of mentioning design in primary school already, make it a topic in art classes for example. Otherwise, if students do not have an idea what design is about, they have no reason to choose it as a study program. Mr. Ginnow-Merkert questioned this view by an example: he mentioned that in the United States, powerful moves are made in high school already to enhance design education. In Germany on the other hand, design is not necessarily a topic in early education and still, universities get more than enough applications for their design departments.
In general it was found, that a great number of factors influence student's study choice: Financial aspects, job opportunities, reputation of the program, facilities, the social environment... to name just a few. A participant mentioned that once a survey had been conducted in Bangladesh, which aimed at finding students' incentives when deciding for a program. It was found that choosing for a study program was done more or less on random bases. Considering that for example in Architecture 6000 applications are handed in for 50 places, this does not come as a surprise. It was suggested to conduct another, more specific survey on the issue of decision factors of students when making their study choice.

Attraction to universities:

Mr. Kun-Pyo Lee:

Mr. Lee sees the attraction to universities in the diversification of the study programs offered – design introduces a soft version of a scientific study.

Mr. Ginnow-Merkert:

He stated that introducing industrial design as a study program could increase the reputation of the university and also bring about economic benefits. Nevertheless, he stressed the fact that a university should not look for its own benefits but rather how it can benefit society. A university should see what the country needs and then try to implement a possible solution. This was done in Germany and other countries in the case of product design. If it is found that Bangladesh is in need of designers then universities should go for it as well.

Questions and Discussion:

Due to time constraints, there was no discussion.

Attraction to the industry:

Entrepreneurs were asked to voice their opinion:

It became very clear from the statements of manufacturers that they are in need of designers and very much aware of what a product designer could do for their company. Several mentioned that they tried to hire one/some already but were either not successful in getting response to their advertisement at all or hired somebody who was not really able to respond to their needs. Still, it was mentioned that entrepreneurs may be concerned about whether designers will stay with them, be loyal, or maybe rather take off after gaining knowledge and then becoming a or joining the competitor.

Later on they were asked what they are actually looking for in a designer:

Several aspects were listed in this regard:

- They would like to have criteria based on which they can assess a designer
- A designer should understand the local demand as well as what comes in from abroad
- A designer should come up with its own, innovative ideas that are cost-effective as well
- A designer should have the ability to communicate with people

Questions and Discussion:

Summary:

Given that everybody agreed upon the fact that Bangladesh only has a chance to establish itself a place in the international market if it improves its design and comes up with own ideas, the main focus of the discussion was how design could be promoted in the country.

Mr. Gaurang Shah:

In India, the government set up a committee that looks at new ideas (which do not necessarily have to come from designers) and decide whether they are innovative and rational. If they find that it might have a chance in the market, it gets support and also help in aspects like protecting intellectual property.

Mr. Kun-Pyo Lee:

In Korea, the government takes a major role in promoting design: The ministry of trade and commerce set up the Korea Institute of Design Promotion, which has now over 150 employees.

Initially, young foreign designers were invited, who stayed for one or two months and solved design problems of small and medium seized enterprises. Nowadays, local designers do these jobs. The enterprises do not have to pay for the service until their sales go up and they can afford to do so.

Mr. Ginnow-Merkert:

In Germany, unlike in Korea, very little is done for SME's.

Good chances for designers to become known though are the numerous design competitions. If a student wins such a competition, this gets published in magazines. Next to getting publicity, it also helps the students very much if they can state these awards in their portfolio.

In the discussion after these statements, mainly the Export Promotion Bureau was addressed as it was felt that they obviously would be the right contact for design promotion in the country. EPB expresses its willingness to work on it and stressed what they do already: Fairs are organized (20 in the upcoming year) of which four are single country fairs. Also, EPB had tried before to set up a Design Centre but was not able to do so due to lack of support. Another constraint they face is a limited budget. This was stated in the context of doing market research. EPB was willing to engage in the matter but needs the support from for example the industry. It was suggested to form an association, which bears the cost for research together – it could not all come from the government alone.

One other suggestion was made from Mr. Lee's side: He informed that there exist travel fairs that could be invited to come to Bangladesh.

Finally, Mr. Bauer offered to provide DTC';s services: Develop a design on cost-sharing bases to companies that have goods suited for export. He then asked EPB to assure a place in international trade fairs for those firms that actually invested in R&D and product design. EPB's reaction was positive and they were open for further discussing this idea.

6.2 APPLICATION:

Mr. Färber:

Creativity is a very important topic. Creativity is something that comes from inside the human being; it gives ideas and is the driving force for changes.

Through the workshop, Mr. Färber learned that there is no place in Bangladesh where creativity can come up. This is further supported by the fact that teachers need to take up second jobs in order to be able to support themselves.

Mr Färber sees it as essential that creativity gets its place in school education as a whole and not only in art classes (which is oftentimes not even given there). It is all about how you teach children – they have to get the opportunity to bring in their own ideas and not only to follow the guidelines given by authorities. Making these necessary changes is not costly, only methods have to be changed.

Mr. Ginnow-Merkert:

He believes that children are deeply affected by the way they are taught and raised. His daughter first visited a kindergarten in the United States: It had many different rooms, all serving a different purpose – one for drawing, one for sleeping, one for jumping, an outdoor area... This way, the children went through all different kinds of activities during one day. The family moved then back to former East Germany and the kindergarten there was the exact opposite: Childrean had to keep quiet, talking was forbidden during lunchtime... all in all it was more like a prison than like a kindergarten. Conditions like these can, in Mr. Ginnow-Merkert's view, harm the development of creativity.

Mr. Lee:

Creativity is deeply rooted in the culture and social structures of a country. It is not something that can just be taught in a workshop. He sees, that also Korea still has to learn in this regard. To exemplify this, he mentioned that tests are generally Multiple Choice and emphasis is given on competition.

How should students be selected?

Gaurang Shah:

At NID, an interested student has to pass through the following application procedure:

(1) Fill out the admission form, which consists of 6-7 pages and includes questions concerning the student's background, its ambition...

(2) Students selected in the first round are called for written tests (there are seven centers in India) where they are assessed in regard to their potential of being a designer. Previous grades are not considered anymore in this stage.

(3) Those that pass the tests satisfactory are invited for a one-day working session, where they for example have to show how they deal with material and also personal interviews are made.

Presentation by Mr. Lee:

Design Education at KAIST

***Product Design Seminar**, Dhaka, Bangladesh, Sep. 22, 2003*

Contents

01

KAIST

KAIST *Korea Advanced Institute of Science and Technology*

K

of

02

KAIST

KAIST *Korea Advanced Institute of Science and Technology*

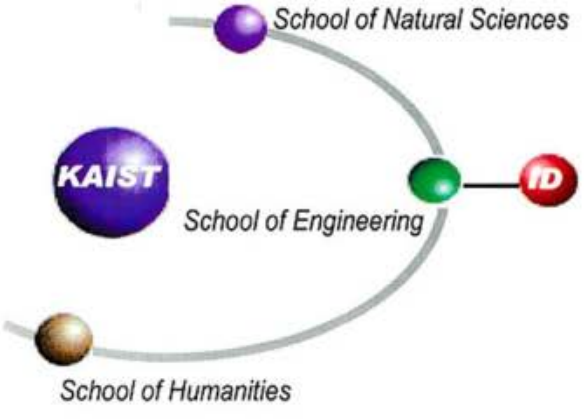
Under Grad.	2,600
Graduate.	4,000
Faculty	368
Departments	15

- *Belongs to Ministry of Science and Technology*
- *Tuition fees are waived and Room&Board funded*
- *Ranked to top in science & technology universities in Asia by* ***Asiaweek*** *1999, 2000.*
- *"KAIST wins praise in external review"* **Nature**, *July 29, 1993.*
- *Korea's best performance in faculty research paper publication.*
- *Research Grant (2001): US$ 150,000 per faculty member*

03

KAIST ID

ID at KAIST



04

KAIST ID

ID at KAIST Brief History

1986 ***KAIST ID** Established*

1990 *First Graduation*

1991 *Post-graduate Program Launched*

1997 *Korea-Japan Design Symposium*

2002 *Doctoral Program Launched*

05 KAIST ID

ID at KAIST Students and Faculty Members

Under Grad.	100
Graduate.	40 (15 Ph D.)
Faculty	7
Research Lab.	7

Design Media Research Group
Assistant Prof. Lee, Woohun

MD. Kyushu Institute of Design (1993)
PhD. Kyushu Institute of Design (1996)

06

KAIST ID

ID at KAIST Recognition

특별기획

산업디자인학과

홍익-KAIST-국민-서울大順

"The Department, compared to most Industrial Design programs in the United States, is outstanding and has the potential for world class recognition with an industrial influence"

- ABET Report, 1992 -

Accreditation Board for Engineering & Tech.

07

What?

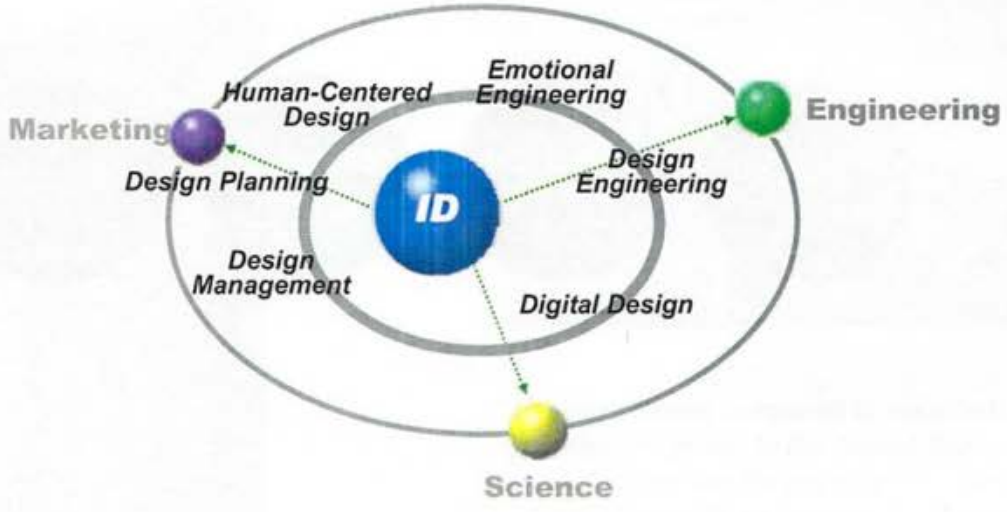
Features of KAIST ID Education

08

What?

Features of KAIST ID Education

Interdisciplinary Program-No Department



09

What?

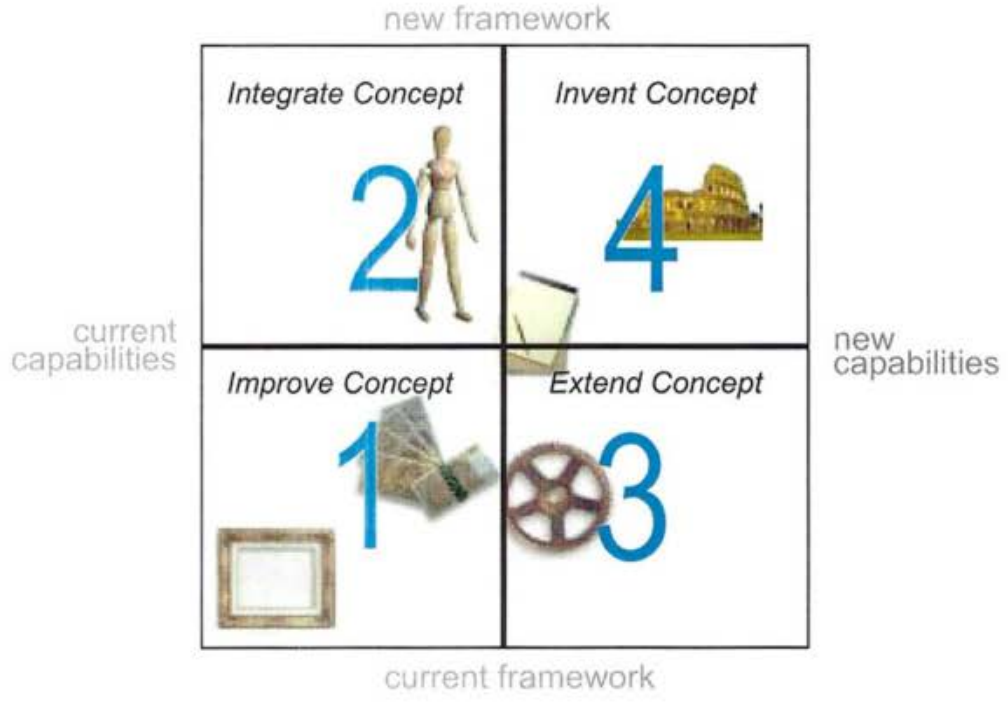
Features of KAIST ID Education

Emphasis on situational context rather than object itself

12

How?

Different methods for different products



12

How?

Different methods for different products

new framework

Integrate Concept  2	*Invent Concept* 4
Improve Concept  1	*Extend Concept*  3

current capabilities

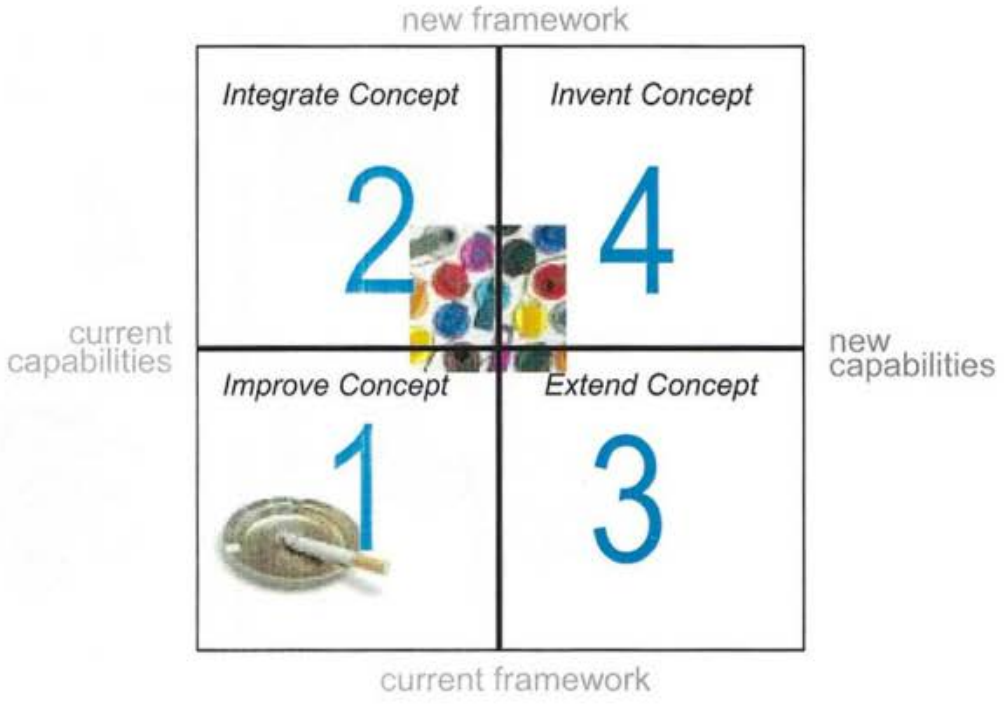
new capabilities

current framework

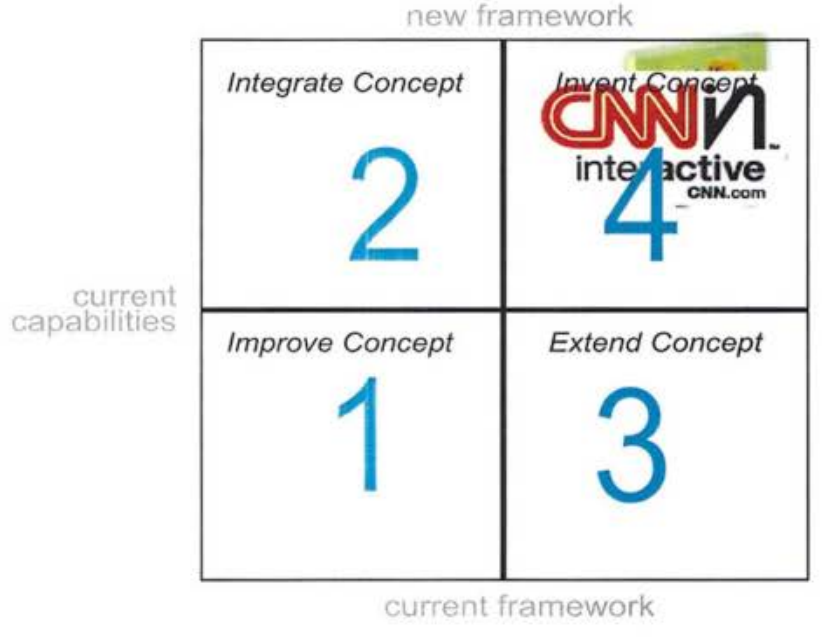
12

How?

Different methods for different products



Different methods for different products



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How?

Different methods for different products

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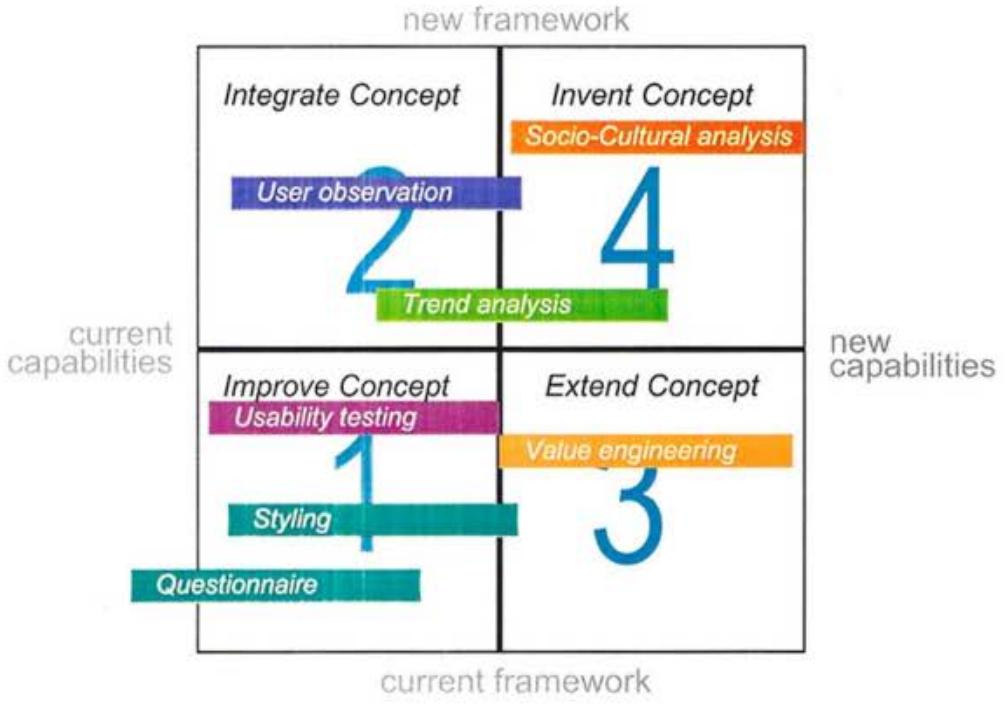
How?

Different methods for different products



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What?

Features of KAIST ID Education

Emphasis on collaborative project between school and industry

10

What?

Features of KAIST ID Education

Emphasis on collaborative project between school and industry

10

What?

Digital Media Innovation Center

Usability Lab. with full equipment of for evaluating interaction design

Video ethnographic tool kit for observing human behavior

Digital Media/Contents research facilities with Internet broadcasting equipment

11

What?

Features of KAIST ID Education

International Collaboration

KAIST

清華大學 Tsinghua University

Carnegie Mellon

ILLINOIS INSTITUTE OF TECHNOLOGY 1890 IIT CHICAGO

千葉大学 Chiba University

TUDelft

Staatliche Akademie der Bildenden Künste Stuttgart

State Academy of Art and Design Stuttgart


thend

7.0 Report by the resource persons

The following are the observation & recommendation as provided by the resource persons after conclusion of the seminar.

7.1 Report by Mr. Hartmut Ginnow-Merkert

General observations (DTC)

The Design Technology Center in Dhaka is a well-organized and well-managed institution that stands out by its professional appearance and operation. Managers and staff are competent, highly motivated, and efficient. The support for the foreign resource persons was exceptional.

General observations (Seminar)

The seminar was well structured, well managed and well organized. The location was appropriate and the environment suited the purpose well.
The term "Product Design" used in the seminar announcements could be misleading. "Industrial Design" is the standard term used internationally, while the term "product design" is also used by engineers and marketing in a different context. There are only national societies of *industrial* design, not of product design. The international roof organization of all the national societies of industrial design is the ICSID, which stands for "International Council of Societies of Industrial Design". It would be a good idea to avoid confusion by exclusively using the term "Industrial Design".

Seminar focus

Participants represented industry, trade, the public sector, high schools, and universities. The diversity in their backgrounds and interests made it difficult to address the audience properly. The creativity segment did not really seem to be a logical part of the issue. It would have been preferable to address the creativity issue / high school teachers in a separate event.

Seminar participants

The topic "Formal Design Education" implied the target audience to be mainly educators. Even though there were a few university members, they did not seem to represent the decision makers or universities in question. The DTC employee in charge of invitation did make a point in that he had tried hard to reach the appropriate persons but there was little response. The problem may have been the general lack of interest due to the fact that nobody knows what design is about. This lack of awareness is not limited to Bangladesh, it is a general problem with the discipline itself and lack of ability to represent and promote itself to the larger community.

There were only a small number of participants representing industry.

The impact of the seminar could have been greater by

a. Selecting the participants more carefully

b. Focusing the seminar more narrowly

c. Advertising the seminar more aggressively

Participants (continued)

This, however, is easy to say from the detached perspective of a resource person; the positive outcome of the seminar showed that in spite of some of the deficiencies the goals were met. The participants were dedicated, and they took a vivid interest in the cause.

Preparation (Resource Persons)

Knowing neither the audience nor the particular situation of the country prior to the seminar, it was quite hard to appropriately focus the lectures/presentations for the seminar or the workshop itself.

The presentations prepared before the trip to Dhaka proved to be less relevant after this resource person was given the opportunity to visit several of the small businesses characteristic of industry in Bangladesh. Fortunately, due to the extra days planned for Dhaka ahead of the seminar it was possible to modify and adjust the presentations in time for the seminar.

Even though I have visited and lived in developing countries before, I could not imagine the medieval working and living conditions I encountered in Bangladesh.

Seminar

The dynamics of the seminar, its workshops, its presentations, and discussions were quite satisfactory. Not surprisingly, the participants seemed to know little about industrial design at the onset of the seminar. After the first few periods of Q&A, the discussions became more vigorous. Towards the end of the seminar there were several passionate statements made by the participants in favor of needing industrial design in the country and its swift introduction.

Workshop "Market Demand"

The workshop theme assigned to this resource person was about "Market Demand". The question in need to be answered was whether Bangladesh would need industrial design. In the presence of industry representatives who find nothing immoral or illegal in plagiarism, this question is of the essence.
The workshop was part of the seminar; it ran in parallel to two more workshops conducted by other resource persons.

Due to the fact that none of the workshop participants seemed to have prior knowledge about industrial design, the workshop provided an orientation concerning the types of industry that could benefit from design input and those which don't.

Using the *Brainstorming* method, the workshop participants identified a number of industries typical of Bangladesh. The list generated in the process may not be statistically significant. It reflects, however, the participants' understanding of the economic situation of their own country. The list was extremely helpful in the development of an industrial design program structure (Annex: "List of Industries").

Workshop "Market Demand" (continued)

In the next phase of the workshop the previously generated list was grouped into three categories:

Category 1: Products that don't really need industrial design (e.g. PVC-pipes, horns and hooves, nuts and bolts)

Category 2: Products for the national market facing national or foreign competition (e.g. paper products, lighting fixtures, furniture)

Category 3: Export merchandise and products with an export potential (e.g. bicycles, furniture, leather products)

While category 1 products could be safely ignored for the time being, categories 2 and 3 appeared to be the most promising candidates likely to benefit from industrial design expertise.

In the course of the discussion an auxiliary type of products was discovered that need design attention: packaging. Packaging applies to all three categories. The packaging industry was therefore added to the list.

Many of the industries on the list could be grouped into types of industry employing similar materials, processes and technologies. The grouping proposed here is only preliminary. Before making this list part of a recommendation for an academic industrial design program further research and discussion are required.

These are the (preliminary) product groups occurring in Bangladesh today as identified and summarized by the workshop participants:

1. Handicrafts
2. Leather products
3. Packaging
4. Light industry
5. Toiletries
6. Ceramics
7. Garments & Accessories
8. Processed food

It was noted that all the industries were expanding except for leather products (stagnating) and handicrafts (declining).

Industrial design is the proper discipline to address these issues, as well as to boost the acceptance for national products in the national and foreign markets.

Workshop participants

The fact that three workshops were running in parallel allowed the participants to better focus on their favorite workshop subject. The Market Demand workshop started out with six participants representing the leather, textile, and garment/fashion industries. While the workshop progressed, it was joined by more participants representing light industry, a hand-made paper company, and the Bangladesh Export Promotion Board. The participation of the EPB in the seminar and workshop was particularly important as it has the power to move things in Bangladesh. Their support will be very useful. The discussion was vivid and productive.

At the end of this workshop (at noon of day two) the participants were asked to provide feedback by answering the following questions:

a. What has the seminar accomplished so far?

b. Which are the questions this seminar on Industrial design should still address?

The responses to question a. clearly indicated that the participants now had a much better understanding of Industrial Design and its potential benefit to them and the entities they work for.

The second question addressed the concerns that also became evident during the seminar itself. Some of these concerns are:

- There is a general lack of awareness of Industrial Design, in industry, government, and the general public.
- The participants are concerned about the introduction of TRIP (Trade-Related Intellectual Property Right) and possible government actions starting in 2005.
- The benefits of design need to be demonstrated and communicated more clearly to the Bangladeshi industry.
- There need to be more training programs to produce skilled workers.
- How would an industrial design program in Bangladesh be set up? Who would be the authority to do it right?

Some of the questions were addressed during the remainder of the seminar while others remain. The issue of industry and public awareness is the same in the technologically advanced more countries, and there is no easy answer.

Workshop findings and summary

The workshop produced an interesting picture of the industry situation in Bangladesh that could not have been extracted from the dry numbers of a statistical spreadsheet.

Industrial design caters to the needs of the market, the manufacturing, and the population characteristics of a country. This may mean high-tech products like cars and mobile phones in a country like Germany, or harvesting and agricultural equipment in India. Accordingly, industrial design contemplates problems surrounding issues of technology, usability, aesthetics, interface and such. This is pretty much the case for all the countries in which industrial design has been established several years or decades ago. From that fact a universal understanding of what industrial design is and does has evolved among the technologically developed countries.

This definition does not hold for Bangladesh.

An industry is not necessarily a factory with assembly lines and robots. Industry can be a single person or a group of people using manual labor to produce multiple copies of a product. Fortunately for Bangladesh, there still is a lot of manual labor that by no means should be replaced with imported technical equipment or machines.

Industrial Design in Bangladesh will manifest its relevancy based on its ability to address the industry structures described above. There is no use in designing cars and mobile phones in a country that can barely generate bicycles suitable for exportation. So any design program in Bangladesh will need to have an original structure building upon on the particular situation of the country and exploring its strengths that are evident in the wealth of materials, the crafts, the emerging small industries, as well as the creativity available there today.

It would constitute a major mistake to simply transplant a foreign industrial design program structure into the Bangladeshi cultural, social, academic, and industrial environment, even from a country as close as India.

Please find an Industrial Design program structure proposal in the annex pages.

Introducing design education in Bangladesh

- thoughts and recommendations

An industrial design program should reside inside a university. Design education around the world takes four or five years until the first degree is reached enabling graduates to offer a meaningful service to industry and society. Anything shorter would not be considered an honest design education at all.

There is some validity in the establishment of shorter programs, however. There should be programs for *continued education* that would give mangers and engineers a quick tour of design enabling them to understand the nature of design, to interact with designers, and to choose the right design consultants.

There may be a need for short *training programs* that would enable participants to perform as an assistant designer.

Summer school programs and *design camps* for high-school students could help to qualify and select students for the ID program.

Beyond a four- or five-year undergraduate program there should be a *Master program* in industrial design, and even a *doctoral program* focusing on design research and other advanced design-related issues would have a place in Bangladesh.

The most urgent need, however, is the introduction of the undergraduate degree program.

While it is likely to take another six or seven years before the first graduates will become available, there is a wide time gap that needs to be filled with qualified design services. This is a problem in need of a clear answer.

There seem to be several institutions in Bangladesh already vowing to fill the gap with short-term programs claiming to educate industrial designers. The risk is that these programs may cause a lot of failure and disappointment that could prove to be particularly harmful in the introductory phase of industrial design in the country.

Future actions

The participants of the seminar rightfully proposed several steps that would contribute to a successful start of Industrial Design.

Mizanur Rahman, managing director of the Crescent Group (light industry) proposed a design competition sponsored by his company. A great idea, as long as he seeks professional guidance regarding the international standards that govern design competitions established in the international design community (e.g. ICSID).

Some participants seemed to agree on the formation of a professional society of industrial design. Another good idea, but there have been many societies in other countries that failed as a response to lack of funding, of membership, of idealism. This has to be done right, or it will fail. The only industrial designers society that really seems to work well and to provide a good service to its members and the community as a whole is the Industrial Designers Society of America (IDSA).

"Adoption" Proposal

As a small contribution to the issue of quickly offering some qualified design input to Bangladeshi industry, I would like to offer the following "adoption" program:

- Organized and managed by the DTC, a group of 6 to 8 senior industrial design students from Germany (e.g. KHB) visits Bangladesh once a year, accompanied by their instructor.
- A group of interested industries in Dhaka (initially no more than 15) applies for the opportunity to be considered for the adoption program. They will be required to commit some resources to the project.
- The student group visits all the industries during a one-day tour (they may have to pre-select and split up based upon interest and aptitude).
- Each student selects and adopts one industry based on potential, and via a selection process yet to be defined.
- Students and a delegate from each business (their future "junior designer"?) work for two weeks developing a new product or product line based on the industry's needs, its possibilities, and the criteria established by the industry. The work is coordinated and supervised by the design instructor and DTC staff who ensure the highest professional standards possible under the circumstances. There will be an intermediate presentation to the industry management after the first week. Work will take place at the DTC or another site suitable for the purpose.
- The results are exhibited at the end of the two-week workshop, with invited guests representing industries, the media, universities, and the public sector. A website will be dedicated to the adoption program.
- After the students return to Germany, they may continue to cooperate via the Internet.

The adoption program would require some funding (air travel and accommodation). The students would work for free, their "reward" would be a unique experience, plus academic credit.

The program would spread the word about design and produce results fast, thus addressing some of the issues discovered in the seminar. It is hard to predict its potential for further development, but it certainly warrants a try.

Annex

- Industrial Design program structure proposal ("page 01" through "page 05")
- Presentation paper "European Experience" (not included)
- Presentation paper "The need of Industrial Design" (not included)
- Workshop "Market Demand" (outline)
- List of industries representative of Bangladesh (produced by the "Market Demand" workshop)

List of industry types in Bangladesh (unedited, from the "Market Demand" workshop)
Hartmut Ginnow-Merkert October 2003

- PVC pipes
- Plastic chairs
- Soap
- Metal furniture
- T-Shirts
- Cookies
- Leather products
- Sports wear
- Clay products
- Jute products
- Furniture covers
- Umbrellas
- Foot wear
- Women's wear
- Men's wear
- Voltage stabilizers
- Batteries
- Rickshaws
- Bicycles
- Boats
- Tricycles
- Strollers
- Baby products
- Baby furniture
- Lighting fixtures
- Home furnishings
- Ceramic show pieces
- Artificial leather products
- Tapestry
- Terracotta products
- Basketry (Grass, Hogla)
- Nakshi Kantha
  (products made from recycled saris)
- Home textiles
- Jewelry
- Toys
- Cane, wicker furniture
- RMG
  (Ready Made Garments)
- Wooden kitchen ware
- Coconut shell products
- Hooves, horns
- Processed food
- Pharmaceuticals
- Light industry
- Tiles
- Sanitary wares
- Toiletries
- Garment accessories

Target group:	Industry representatives/proprietors Economists Engineers Marketing experts Educators with a special interest in design ...
Goals:	To establish a profile of those industries that could actually benefit from industrial design To provide some orientation for academic/educational institutions

Day 1: Determine the type of Bangladeshi Industry (current situation)

- Please name at least ten different Category **1** products currently made in Bangladesh
  (Brainstorming, 10 minutes)
- Discuss each of the Category 1 products,
  Does every one of them belong in this category?
  (Discussion, 15 minutes)

- Please name at least 30 different Category **2** products currently made in Bangladesh
  (Brainstorming, 15 minutes)
- Discuss each of the Category 2 products,
  Does every one of them belong in this category?
  Mark the ten most important products for the local (Bangladeshi) market
  Criteria: volume, economic impact, amount of foreign competition, development potential, etc.)
  (Discussion, 30 minutes)

- Please name at least 20 different Category **3** products currently made in Bangladesh and sold abroad
  (Brainstorming, 15 minutes)
- Discuss the list of Category 3 products,
  Does every one of them belong in this category?
  Mark the five most important products for the export markets
  Criteria: volume, economic impact, amount of foreign competition, development potential, etc.)
  Are all these products doing well in the foreign markets?
  (Is the volume rising? Falling? Stagnating? Are any of them threatened?)
  Possible reasons for the above?
  (Discussion, 30 minutes)

Day 2: Determine the potential of Bangladeshi Industry *if assisted by properly educated industrial designers* (future situation)

- Please discuss the following questions:

Which of the Category **2** products listed earlier could be a candidate for Category **3**?

What are some of the current deficits that keep them from becoming export products?

Are any of these deficits related to "bad design"?

Do you know of any Category **3** products that failed in the export markets?

Could any of these failures be attributed to bad design?

Is there a chance for recovery by design?

Do you know of any Category **2** products that failed in the local market?

Could any of these failures be attributed to bad design?

Is there a chance for recovery by design?

Is there another product category not addressed in the presentations?

Which raw materials are available for the Bangladeshi market that could be turned into value-added products?

Which raw materials are available in Bangladesh that could be turned into value-added export products?

Are there any import products that could actually be made in Bangladesh?
What could be the contribution of industrial design?

The innovative potential of industrial design could actually be used to improve the living standards for the underprivileged, to solve ecological problems, to improve health, housing and education, to develop new models of living and working, to address some of the concerns voiced at the Cancun meeting. Do you feel there is support available in Bangladesh for a non-profit product category?

Industrial Design Program Structure*

Proposal by Hartmut Ginnow-Merkert October 2003

General structure

Four-year program leading to a bachelor degree in design.

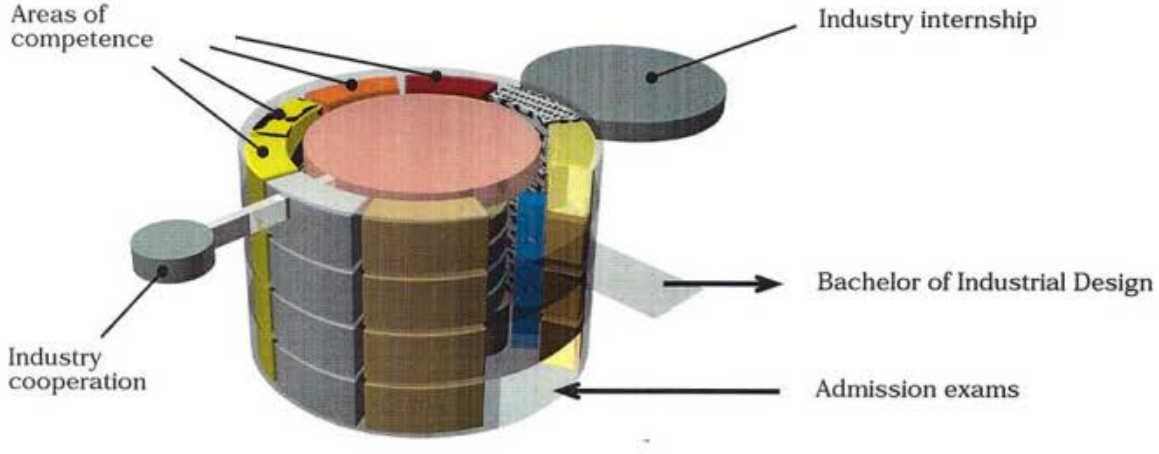
The program is optimized for the specific situation encountered in Bangladesh. It is supported by several areas of competence representing and integrating the pricipal types of manufacturing and technological know-how existing in the country. A holistic design program integrates these areas of competence thus liberating the synergetic forces and bringing about innovation and uniqueness.

The areas of competence may fluctuate depending on need and development. Some areas may disappear, others may be added. Initially, several of the areas may be located outside the program.

The structure is transparent; cooperation with industry and non-industrial entities is highly recommended throughout the entire program. A mandatory industry internship and industry-sponsored projects promote a realistic view of the country's situation and help to match industry and graduates to optimize efficiency and employment.

The core of industrial design education is the design studio course. Studio courses are hands-on creative projects by which design students learn the skills, gain experience, and develop their creative abilities. Studio courses balance the current needs and a visionary outlook required to maintain an innovative perspective.

Theory and science complement the program. Design education in Bangladesh should respect and build on the country's unique multi-ethnic, cultural, and social background. Theory courses and project orientation should reflect the situation in Bangladesh.



* This proposal does not include structures for postgraduate and doctoral programs, for continued education, summer school and other academic programs which should be considered/developed in conjunction with this undergraduate program.

Admission

A careful selection of the students will help to establish a high-quality design program. Students should demonstrate creative thinking and innovation skills. A higher-than-average ability of spacial perception will be useful, as well as some sketching and illustration competence.

Most important, however, is the motivation a student brings into the program, their intellectual capacity, and their ability to cooperate and to accept input.

Admission procedures are conducted by design faculty who may have received some psychological training for the purpose.

Academic staff

Another component of a successful design program is, obviously, the academic staff. Initially it will be difficult to fill the teaching positions with faculty trained in industrial design. The mere fact that a returning expatriate studied abroad is by itself not an indication that he or she may be well qualified to take a leading role in the definition and installation of an industrial design program suitable to address the needs of the country.

The burden of establishing a quality design program will rest with the first academic dean, or program director, charged with the structuring of the program and its details, as well as hiring the teaching staff.

Environment

A design program thrives best in a rich, multidisciplinary, multicultural environment. The complexity of a large university provides ample access to information, know-how, and infrastructure. The existence of a new design program needs to be communicated throughout the entire university, along with information about its benefits and services. Cross-disciplinary cooperation needs to be promoted aggressively in order to break the traditional barriers between the divisions.
Industrial Design has to show its capabilities and potential through its continuous presence on the university campus, in the media and on the Internet.

An Industrial Design program requires its own and proper building on the university campus. Shop ("competence") areas need to provide easy access and should be kept open throughout the day.
Industrial Design has specific needs as far as shop machinery and tools are concerned. Much of the work requires space and areas for light assembly of hand-made parts as well good lighting. Model making and prototyping machinery have to be available in the immediate vicinity.

Year 1

The first year of the program is dedicated to design foundation. A number of short projects introduce students to general concepts of design, to the basic media and techniques, to presentation and model making, to materials, processes and technologies. Computer courses will be taught as well as illustration. Projects will involve all the competence areas, separately and combined.

The first year program includes visits to factories and crafts shops; there will be presentations and lectures given by representatives of industry and government agencies (e.g. export organisations).

At the end of the first year there will be a school-wide exhibit of student work open to the general public and with guests from the public sector.
Students will need to pass an exam, in order to advance to the 2nd year level.

Competence areas

consisting of shop space and qualified staff teaching materials processes, advising students at all the academic levels, facilitating access to and interaction with industry.

Competence areas are:

Wood / Bamboo / Wicker
Ceramics / Terracotta
Plastics
Textile / Garments
Metal / Jewelry
Leather
Graphics / Packaging
Computers / 3D
Visualization / Modelmaking

This list requires further discussion.

Theory courses

History of design, culture, arts
Aesthetics
Anthropology
Ergonomics
Materials and processes
Sciences, research
Eonomy, Marketing
Languages

This list requires further discussion

Projects

taught by qualified industrial design professors able to provide structured teaching of design process.

Year 2
Year 3

The second and third years consist of a sequence of 4 semester projects. The projects increase in their complexity, and the challenge grows. While the earlier projects may address simple products involving one competence area, later projects may try to bridge several areas and finally address questions of future relevance and research.

Projects include excursions and industry cooperation. At least one project will take the students on an excursion outside the country, if at all possible. Guest lecturers from industry and the public sector bring their views into the program. Students are encouraged to attend design events, trade shows and transdisciplinary conferences. Partnerships with design schools abroad contribute an international perspective through student and faculty exchange, workshops, and seminars.
A semester abroad will be facilitated and encouraged.

Students will need a certain grade point average, in order to proceed to the senior level.

Competence areas

provide access to shops, assist with model and prototype making, establish links with industry, organize guest lectures, conduct workshops and auxiliary courses, organize exhibits, inform about relevant trade shows and conferences, maintain discourse with universities abroad.

Theory courses

History of design, culture, arts
Aesthetics
Anthropology
Ergonomics
Materials and processes
Sciences, research
Eonomy, Marketing
Languages
This list requires further discussion

Projects 1 - 4

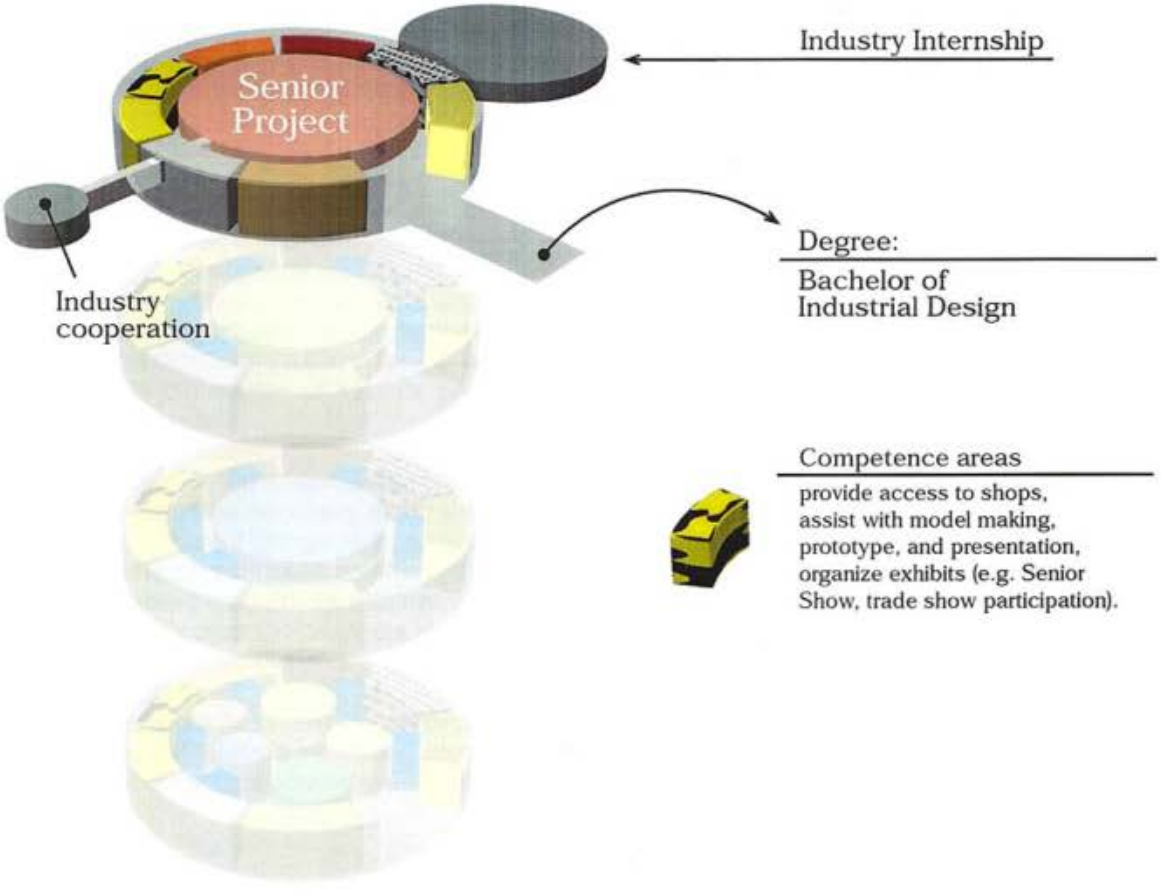
taught by qualified industrial design professors able to provide structured teaching of design process, to provoke visionary thinking, to challenge students and to further trans-disciplinary cooperation.

Year 4/1
Internship

The first semester of the final year is dedicated to a practical work experience. Industry and the public sector provide internship opportunities; students will gain work experience; industry benefits by getting to know designers and their work. The school helps students to find internships, monitors and evaluates them. Internships may lead to senior projects and employment.

Year 4/2
Senior
Project

The second semester of the final year is the Senior Project. This project is entirely defined, structured, organized, and managed by the student him- or herself. Senior projects may be sponsored by industry; they should include a theoretical component in which the student demonstrates his or her reasoning, research, and philosophy. The Senior Project is presented to the faculty and student body; upon its successful conclusion the student is granted a Bachelor of Industrial Design Degree (B.I.D.).



7.2 Report by Gaurang Shah

Report on the Seminar in Dhaka between 20.09.2003 through 22.09.2003

First, DTC needs to be complimented and congratulated for having organized this pioneering seminar in Bangladesh on **"Formal Product Design Education in Bangladesh".** Design is becoming a strong and emerging force especially in the developing countries. In the context of globalization and the removal of trade barriers with the onset of WTO in 2004-2005 it becomes all the more imperative for countries like Bangladesh to develop capacities and potential for competitiveness and effectiveness in the product development process. A good design to delivery process along with innovations of products is the key to a successful measure in any manufacturing organization.

The seminar endeavored to highlight primarily three important issues pertaining towards looking at the relevancy and formalization of Product design education in Bangladesh. These issues were:

- Relevancy and feasibility of such a paradigm
- The Market
- Creative Thinking

The kind of participants at the seminar was generally appropriate for such a discussion, i.e., people from the fields of education, at different levels and entrepreneurs. Couple of high ranking officials from the Government side dealing with the domain of exports was also present through most of the seminar. This I really appreciated and wish more people who could matter from the Government side had participated.

Initially one got the feeling that awareness in the participants about Design as an activity and a profession which had established itself fairly well elsewhere was somewhat on the low side in Bangladesh. There was a common perception or a mental picture of a designer and that his or her capabilities were based on the model of an "artist". Somebody who is involved only in the surface treatment or "beautification" of things in general.

However, as the seminar progressed, by the excellent presentations of Professors Lee and Ginnow – Merkert, and through our subsequent panel and other discussions, most of the misconceptions and myths were gradually dispelled from the minds of most of those who were participating and a clarity about the profession of design emerged. This is to our mind is more or less adequate for the purposes of the seminar and its objectives. The fact of the importance of design as a *problem solving activity* was firmly established. This was further repeatedly reinforced in the course of various presentations and interactions with the participants by the resource persons.

One of the major achievements of this seminar, I feel was that everybody tended to conclude about the necessity about the need and relevancy of such a discipline in Product Design in the context of Bangladesh. Although the approach to this needs to be different from other models of design education in different countries. This is in the sense that it has perhaps to be a materials based programme with the
other appropriate inputs in terms of design skills, technical know how to support this and skills of communications.

It is our hope that this seminar plays the role of harbinger towards a movement and a sustainable effort towards increasing recognition of the importance of design to ultimately of Bangladesh and the national economy and to the "quality of life" in general.

Discussions were also held with the participants about the relevance and importance of R&D approach in industry especially keeping in mind the SMEs and other entrepreneurs. The role of design in this context was also explored in some depth.

In other words, a spark was kindled, which may lead to further thinking in the minds of the participants about the absolute relevancy about the need to have an established and thriving profession of Design in the country.

Further, it came out in the discussions that there prevails a feeling of "creativity" being somewhat at inadequate levels starting right from schools. I tend to think otherwise. This is based on my interacting with different people and observations of what little exposure I had of industry in Dhaka, albeit in the small scale sector. I found it amazing and heartening how people with very limited resources solved their problems very creatively and I daresay with ingenuity.

In this side workshop we explored along with the participants fundamental issues of creativity such as aspects about what we understand about creativity and the processes that lie behind this and thereby leading to some sort of understanding into the nature of creativity itself. As a counterpoint, thought was also given to *what is not creativity*, which lead to some insight and understanding on the part of the participants.

In the workshop on creativity some of the participants involved in school education were already doing some good work in this area. The problem is how we make this approach more prevalent especially in the Government run schools and other educational institutes at different levels. One of the important things we realized in this was, *creativity* does thrive. Because of the rigid approaches in the structuring in the education system not only in Bangladesh but elsewhere also, this tends to dissipate with the pressures of dissemination of knowledge and information in our education systems.

In this, how do we incorporate into our pedagogies a culture or a system which encourages individuality through creative processes and as an approach to learning. In this various avenues were explored by the resource persons along with the participants about ways and means of achieving this.

Recommendations

In order to consolidate the results of the seminar one recommends that the following approaches may be tried out by DTC. This is not to say that this could be piecemeal kind of a series of actions or activities but as a multipronged approach which we are convinced would be more effective and sustainable in the long term.

Demo Projects

In this, in order to convince and establish a kind of a credibility as to the power and potential of the design approach we suggest at least one project which DTC can facilitate and one which can demonstrate in real terms the efficacy of product design and what can it do to transform the product quality, the functionality, usability, and ultimately the marketability of a given product.

This, I strongly feel needs to be taken up not only in one particular sector of industry but in various other spaces also. Some of the areas can be:

- **The Industry Sector** itself including SMEs

- **The Crafts Sector** including jute, bamboo and cane, terracotta etc.
- **The Public domain**, i.e., working closely with the authorities towards design and development of facilities or better infrastructure components for the benefit of the common man and towards the

In the industrial domain, a product and its manufacturer needs to be chosen carefully from within Bangladesh itself. The designers who would actually work on this need to make their process very transparent. This means that the selected manufacturer and stakeholders also need to get actively involved in the process leading to a new product or a product system. Also, prior to this undertaking a detailed survey needs to be done of the industry and sectors within this to arrive at a better understanding of the Bangladeshi scenario. This would also give added insights into the state of the nation's economy and patterns. Needless to say, this effort needs to be closely documented and publicized as a live demonstration of the potential of Industrial design.

We also see craft as an important context for design activity in Bangladesh. It is an important one and perhaps it is a huge sector both in terms of employment generated and the revenue generated in both local and export markets. So when we look at this area, we are not looking at craft as an activity of artistic expression alone but craft again as an industry that could generate goods and products for a vast range of potential markets.

In this domain of crafts, initially a set of areas in terms of priorities which may be allocated, certain crafts or crafts clusters need to be identified first. Hereto, simultaneously, the need for a careful and an extensive documentation needs to be carried out which records amongst other things, the socio-economic contexts of the crafts and the crafts persons involved in these, range of products, tools, access to markets and distribution systems needs to be initially studied.

The need for high visibility and high profile for design during the demonstration phase needs to be strongly established. This exposure is not necessarily only for those people who are the policy and decision makers but also to the "man in the street", who can see the difference being made in small ways to his life. This is best achievable through a series of very quick demonstration projects starting with let's say, products which are in the areas of public utility such as transportation
systems, toilets and other such public amenities.

Education

Design education can be implemented in carefully chosen colleges which already are offering courses in the allied field of Architecture. This could be either in Government institutions or privately run colleges. This again needs to be carefully identified keeping in mind the infrastructure requirements. Depending on the feasibility of the endeavor an undergraduate programme in Product Design may perhaps be looked at. In this course, the structure which we propose for reference could be something like:

Possible Undergraduate Scenario for Product Design Education (Bangladesh)

SEMESTER	SKILLS	DESIGN	ART	HUMANITIES	TECHNOLOGY	APPLICATION
1 & 2	• Drawing • Photography • Presentation Skills • Workshop Skills (Hand Tools)	• Basic Design • Design Theory • Design Methods (Design Concepts & Concerns) • Elements of Form	• Art, Music, Film Appreciation	• Language Skills: English • History/People • Studies: Design in Society	• Materials • Processes • Technical Studies	• Design Task/s
3	• Presentation Skills • Computer Skills • Workshop Skills	• Elements of Form • Ergonomics • Detailing (TAD)	• Aesthetics, Art B'desh Traditional	• Elective (Science, Society, Culture)	• Material, Process • Technical Studies	• Project 1 • Ergo Project 1
4	• Workshop Skills	• Elements of Form • History of Design • Ergonomics	• Elective 2	• Management, Marketing	• Material, Process	• Project 2 • Ergo Project 2
5	• Workshop Skills • Advanced Computer Skills	• Elements of Form	• Self Study	• Product Planning	• Industrial Training	• Project 3 (Systems)
6						• Project 4 (Final)

In the given proposal all the inputs have been categorized into five major domains of – Skills, Design, Art, Humanities and Technology. The pedagogy for each one of these domains will require to be worked out appropriately and fittingly. "Application" means the testing of whatever inputs have that been given to the aspiring designers. We propose a semester system with the first two semesters being the "Foundation ". These initial semesters help to make a changeover of people from different backgrounds into an integrating whole. The basic physical and cognitive skills, Design concerns etc., would be imparted during these two semesters.

With respect to initialization of such a programme we strongly recommend first that the principle of **'Training the Trainers'** be adopted. This means that initially a carefully identified group of people having background in areas like Architecture, Engineering, Arts etc., be selected for a comprehensive course in Industrial Design at an appropriate school anywhere in the world. These people would then become the first group of trainers and potential faculty members for the proposed course structure.

Intellectual Property Rights

As we are all aware, in recent times the topic of Intellectual Property Rights has been generating wide-ranging discussions and debate. Intellectual Property Rights (IPRs) have the potential to influence almost every sphere of human creativity. Today there is an increasing awareness on the issues and implications of the new trade regime brought about by the World Trade Organization (WTO) and the inclusion of Intellectual Property Rights (IPRs) within its purview.

Therefore, in light of this important issue, there needs to be an effort on the part of DTC to bring about the various aspects pertaining to the intellectual property rights especially in the context of design. This may be initially done in the form of seminars or workshop highlighting the importance and relevance of the need to be aware of this area in today's context. This could be possibly be followed up by DTC opening a small cell which could give free consultancy and counseling in this area.

Networking Possibilities

In view of the recommendations briefly made above I suggest the following ways for networking at least with my Institute i.e., the National Institute of Design located in Ahmedabad in India:

Demo Projects

- There is a possibility of NID's Faculty and students working in all the three areas already mentioned.
- As a first step, we could make it a regular practice for NID's students to be in Bangladesh for documentation of selected crafts groups.
- In the crafts sector NID may work with selected craftsmen and help them in product diversification exercises such that they are capable of a wider market access.
- Appropriate projects pertaining to the industry sector or the public domain may be sponsored by DTC as NID's Diploma level projects which will essentially be executed by our students with a faculty guide being attached to them.

Education

- NID would be pleased to offer training in the area of industrial design to select aspirants for the same for Bangladesh. This could be either in our regular courses or depending on the number of people we could tailor make a course to fit their training requirements.
- Further, if they need specialised training elsewhere also, NID could help identify appropriate places in India or abroad for the same for them.
- NID could assist any institute, university or organisation wishing to set up an educational base for design in Bangladesh. This could be in terms of human resources development, infrastructure setup etc.

Intellectual Property Rights

Finally, NID could provide the necessary expertise in the area of IPR to conduct awareness workshops and seminars by providing the faculty.

Gaurang Shah
Coordinator, Product Design
Faculty of Industrial Design
National Institute of Design

7.3 Workshop report by Mr. Peter Farber:

In our workshop on **Saturday afternoon** there were 10 participants:

2 art teachers,
2 teachers of Lake head-Grammar-School,
3 architects (two of them teaching at The University of Asia in Dhaka),
1 French manager of a street-children-project in Dhaka,
1 head master of a government school and
1 teacher of a fashion-design-school

The guides of the creativity-workshop were:

Mr. Mithun as moderator,
Mr. Shaha,
Mr. Gaurang Shah,
and Peter Färber.

At first we got a task by Gaurang Shah, to think about very simple things like: pen, glass, teacup or so. We should work for 5 minutes and than make proposals, how to make the product better. This technique is called: **Morphological Forced Connections**.
After that G. Shah asked what to do, if we would have thought all about the same thing and everybody would come to another conclusion. He explained the method how to combine different adjectives.

Then Mr. G. Shah talked about the Nine Different Types of Intelligence by Howard Gardner:

1. Interpersonal (wisdom about the own body and personality)
2. Musical
3. Interpersonal (good communication skills)
4. Spatial (visual imaginations)
5. Kinesthetic (athletic and sport and dexterity)
6. Linguistic
7. Logical / Mathmatical
8. Natura (intuitive possibility to take interlinks)
9. Existentialism (abstract thinking like philosophers)

We had a discussion about it and found, that normally in schools only the mental intelligences of point 6. and 7. are used. But they are linked with the **left side of our brain**, where our **logical and abstract thinking** is located. The **right side of brain** is linked with **holistic thinking and emotions**. For a creative learning process it is necessary to go in **both ways, not only one way**!

At the end of our first meeting I gave them as homework for the next day, to write a **definition of creativity** on a card.

On **Sunday morning** we got their cards and put them on the pin-wall:

CREATIVITY is:

- Spontaneity
- comes from inside of a human being and it gives ideas and force to change his surrounding in a new way...
- is the ability to perceive & produce in a way other than what one is taught and it is

the natural ability to look upon, construct, deconstruct as one desires rather than to fulfill what is needed

- Holistic thinking
- Is a kind of discipline which makes people to focus to a better situation
- Is the art of assimilating ideas and thoughts and giving it a concrete shape
- Sensitive Imagination
- Is processing a unique response to a stimuli through using bits of pre-learned information, as raw materials
- Is the reflection of the thinking mind. It can be nourished through exploring into different ways of doing things
- Is combining heart with brain

After a short discussion about it I invited them to **paint a picture of a vase with flowers in it** in two minutes. When we saw the different pictures, they should imagine how they would have changed after one week with always fresh water.
So we found as living conditions for plants, that they mostly need earth, water, air ,light and warmth and that also their shapes depend on these Elements.
Then we compared these **living conditions** with those **for creativity**. The participants found the following correspondence:

Warmth - A warm atmosphere of love between adults and children for good motivation
Light - Aims given by parents and teachers and good communications
Air - Many possibilities to express themselves
Water - Time and interesting tasks for all ages
Earth - Learning basic skills in nature and surrounding with many sensory impressions

Then Gaurang Shah guided us to compare these world-wide living-conditions with the education system in Bangladesh. We separated in two groups and started a **Mind Mapping** on big sheets of paper.
In the following discussion, the participants were full of bad experiences as pupils and as teachers:

- The bad economic situation, that many children have to work and also teachers can't survive only by one job
- In richer families the children are spending much time by looking TV and playing Computer Games
- Pupils mostly have to repeat the teachers exercises, as well in art classes!
- Very much homework and lots of boring books
- In Private Schools parents treat their children to learn the main subjects very strongly
- Own ideas are not allowed and can lead to bad examinations
- There's not always a warm atmosphere in schools, so they have a high dropping-out rate

We ended our Workshop by asking the question:

What can be done?
What are realistic steps for DTC?

Possibilities:

- Establish a research cell for study case, evaluation, existing situation and previous attempts
- Curricula Development for pilot projects and teacher training
- Seminars by DTC in Creative Teaching

- Round-Table-Meetings with Politicians exploiting Media to create awareness (jointly hosted by DTC)
- Work with Private Schools as consultant
- Take one Sample-Class in as demonstration project for teachers and students
- Different types of schools should be considered

With every projects Media should be involved!

Valuation of Creativity Workshop:

All participants agreed that creativity is a very important topic for education in Bd.,
Discussions and engagement were pleasant. There wasn't enough time for the workshop. There could have been more participants. Invitations

8.0 Report By the moderators:

Architect NR KHAN:

Session: Feasibility

In this session the different speakers were asked to present the beginnings of Product Design Education in their respective countries, with the intention to find insights into those first steps, which could provide the direction required for the introduction of Product Design Education in Bangladesh.

The first speaker who was called on was Gourang Shah. Product Design Education in India started out with a report produced in 1961. The initial direction was provided by Charles Aimes. It was at a time when India had put it's main thrust into industry and technology. People with a background in engineering, fine arts, and sculpting were invited to become stipend students who were then sent abroad for training. The idea was that this first batch was created with a view of training the trainers. These people eventually went on to establish Product Design Education in India. What was interesting to see over here was how a fast track method was put into place to spearhead Product Design Education and to revolutionize the industries.

The next speaker to be called upon was Kun-Pyo Lee who started off by giving us the staggering figure of 300 departments with over 100,000 students now in the discipline of Product Design Education in Korea. The Koreans are strong believers of the Confucius philosophy and for most people education is a lifetime investment. Initially people in the discipline of arts in Korea were seen as those who could not make it elsewhere. Also the universities that had art education were not taken seriously. In the late '70s when Korea was growing rapidly, the government felt it needed to change the situation. A national scholarship was set up and every year two students were selected to go abroad and receive higher education in Product Design. This was how the government took the first initiatives to form Product Design Education to support its rapidly growing industries. In 1986 they took a further step to educate designers so that they could talk with other disciplines i.e. marketing, engineering etc. Here we can see how the economic development of Korea created the burning need to have in-house design to compete in the global market. It also shows the quick response of the government to set up a mechanism to start off this discipline.

The next speaker was H. Ginnow-Merkert. He spoke on how rapidly Product Design Education took off in Bogotá where Product Design Education went from one department to another three departments in only one year. And most of the people were not only depending on jobs to be handed down to them but rather went out to set up their own enterprises, detect opportunities and fill them. Over here what was interesting was the concept of "own enterprise", because in any feasibility study we usually come up with the question of "who will be the employer?" and underestimate the potential of entrepreneurship. Professor Ginnow-Merkert then went on to describe Product Design Education in Germany. In his school ten to twelve students are admitted who go through a strenuous selection process but whose education is totally free. Professor Ginnow-Merkert also pointed out that in terms of trying to understand the feasibility or benefit of Product Design, society has to ask itself what it considers to be beneficial. Society itself will have to come up with a strategy to survive as a society. Society will have to evaluate what value it imparts to beauty, design, what it considers attractive etc. With these thought provoking words the session concluded.

The Bangladesh Scenario

The Bangladesh scenario was presented by Mr. Shekhar where he proceeded to present the condition of Product Design Education in our country. He pointed out how gradually, need and lifestyle has created a climate for design in recent times and he also pointed out how a lack of

properly trained designers is an impediment for local products to be attractive to consumers and also our products to have a penetrating effect in the global market. In describing the local scenario he said that:

i. Some entrepreneurs have their in-house designers who are basically involved in copying and modification
ii. The NGOs and some donor agencies are providing funds and assistance in some areas such as jute products, recycled products etc.
iii. Some industries are only reproducing designs sent by buyers.
iv. The boutique houses of the country have gone on with their own innovative ideas to satisfy local needs.

In most cases designers working in the country are of fine arts background from our Art College with no proper training of Product Design and hence they are in no position to affect change.

He stressed on the immediate need for proper training to not only deliver more attractive products but also to preserve and modify our local craft and to develop with the proper understanding of the target group.

The next session was a session where the moderator called on the different speakers to present the different approaches of Product Design Education of their respective institutes. Gourang Shah presented NID approaches to Product Design Education. He also talked about how the department of science and technology provides support with generous funding. He has also talked about how a resource cell called "Gyan" has been set up to identify resources of crafts and craftsmen in villages. Mr. Kun-Pyo Lee talked about the government's strong support and how Korea has set up the Korean Institute of Design Promotion. The government also plays an active role in matchmaking between companies at home and abroad with local designers. He also talked about the awards and scholarships that were available for young designers to make their mark.

The next session was a brainstorming session with outlines presented by the different speakers as to what steps could be taken to develop a curriculum.

The last session was an interactive session between all parties led by the moderator as to what further steps need to be taken. Among the most important steps that need to be taken, it was a common consensus that the following are vital:

1. DTC could play a strong role in promoting the understanding of what the proper conditions are of nurturing creativity in early education which will not only nurture creative people but will also force society to re-evaluate what value it imparts on creativity.

2. Product Design exhibitions should be held and should be supported by local industries and the government to promote designers which in return will become the lifeline of the local industries to have the right type and more attractive products in the market.

3. A fast track method could be employed where initially designers could be trained at the postgraduate level.

4. A database needs to be created which will log the different crafts and craftsmen, which could be used as resource.

5. One of the most important issues was to find a way of how proprietary rights or copyrighting a product would be made easy and it was felt that DTC could play a vital role in this matter.

Notes

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