

portfolio

ujjval panchal

architecture

furniture design

interaction design

Ujjval is an Interaction Designer and Architect. He recently completed his Interaction Design studies at Copenhagen Institute of Interaction Design (CIID). Prior to this, he graduated in Architecture from the School of Architecture, CEPT University, Ahmedabad, India.

Over the past six years Ujjval has worked with various architects and designers and for the last two years, has been practicing with three fellow architects in Ahmedabad. A major part of his interest comes from working with various alternative materials & crafts, new design methods and using new technologies/software. He has always been keen to investigate how design and technology can influence human behaviour and experiences.

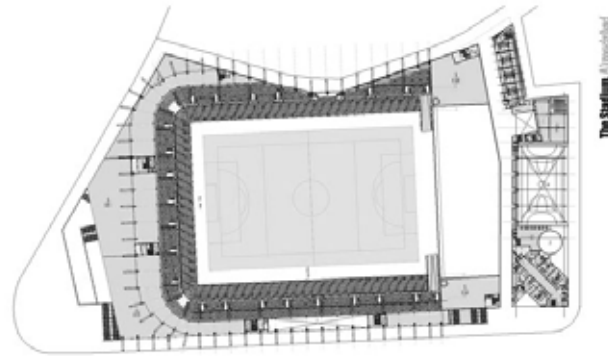
Ujjval is looking for opportunities to create beautiful experiences using various skills, materials and technology. As a culmination of his various interests, he sees a big opportunity and a challenge in combining interaction design and architecture to make intelligent spaces, objects and services that set-up an active dialogue between people, technology and the environment.

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architecture

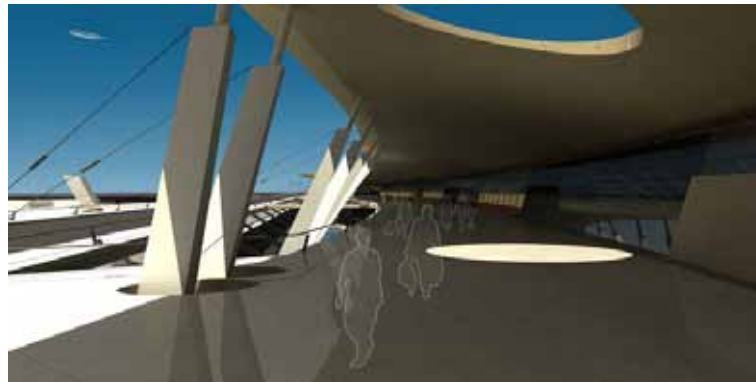
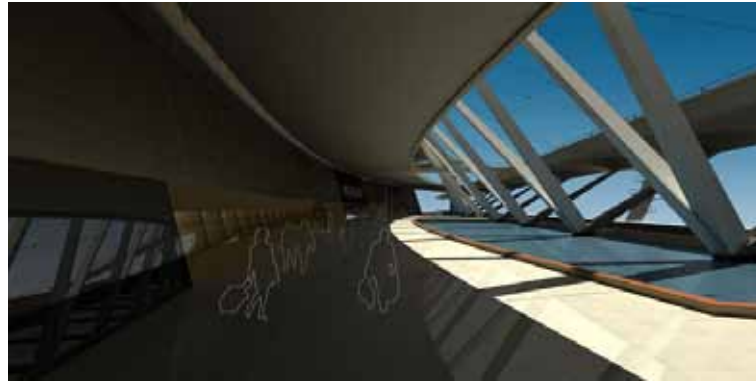
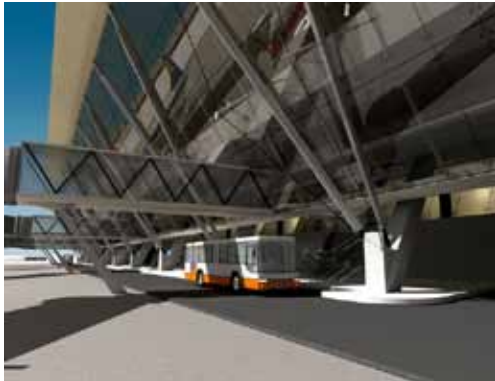
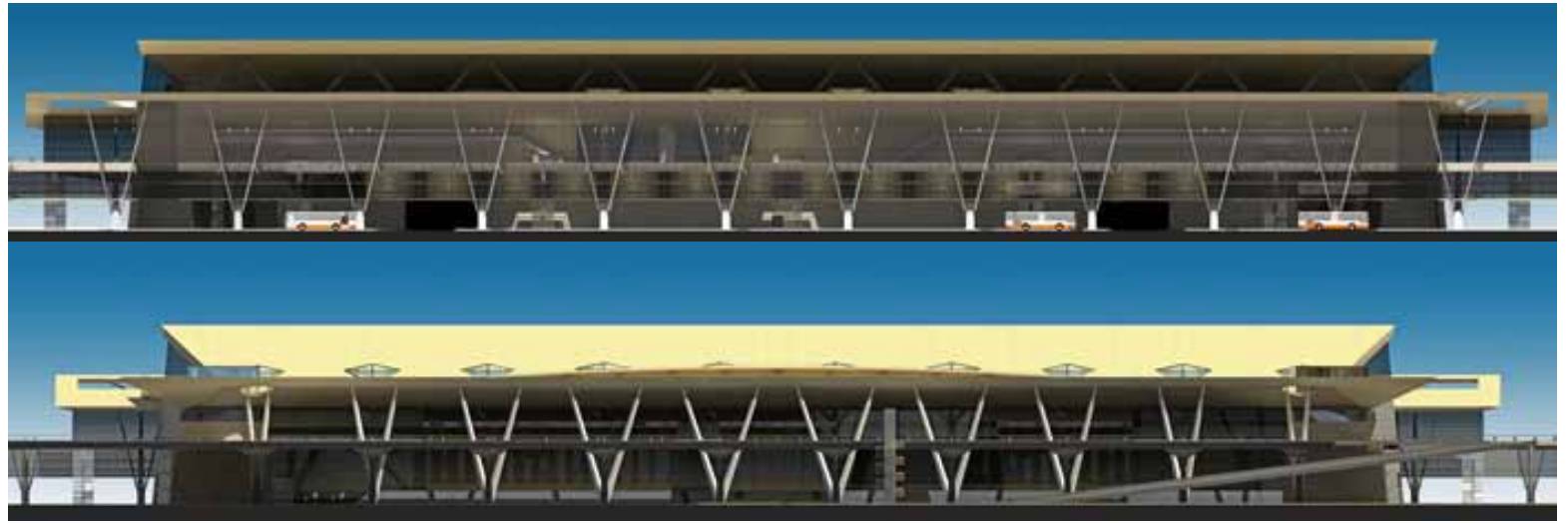
Football Stadium proposal, Ahmedabad

This was a proposal project done with Arya Architects(Dec-2009), for football stadium at Kankaria Lake, Ahmedabad. Arya Architects were in charge of designing supporting facilities, sports institute, hotel building and other supporting amenities beside the stadium. I was responsible for illustrations and modeling for final presentation.



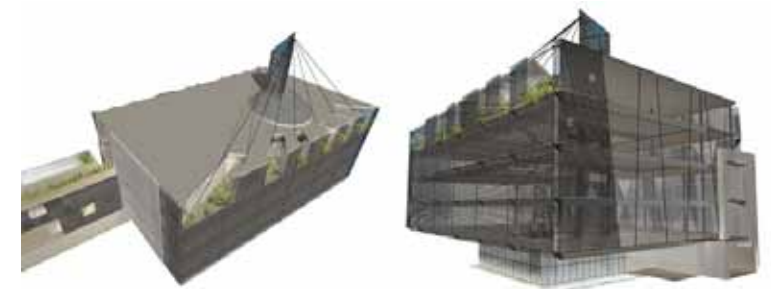
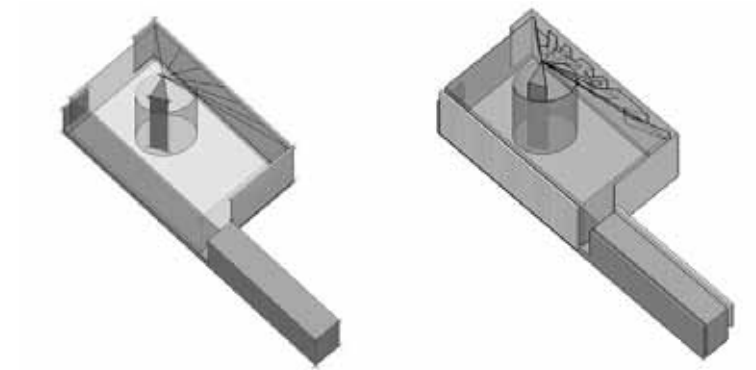
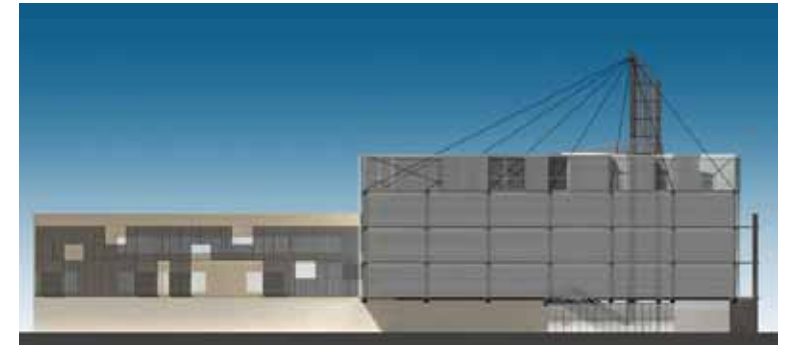
Extension to NSCB Domestic Terminal, Kolkata, India

This was a competition project done with Arya Architects, Ahmedabad. Arya Architects were invited to propose architectural design for new international terminal at Kolkata airport in 2007. I was part of design development and presentation team. My major task was to generate and develop architectural and structural elements for the entire project by three dimensional modeling. Later all the models were used for 3D illustrations and rendering for final presentation.



INSDAG Corporate Office, Kolkata

This was a competition design project for corporate office building, Institute of steel development and growth (INSDAG), Kolkata. Arya Architects were invited to participate for architectural design proposal. My major task was to generate and develop architectural and structural elements for the entire project by three dimensional modeling. Later all the models were used for 3D illustrations and rendering for final presentation.

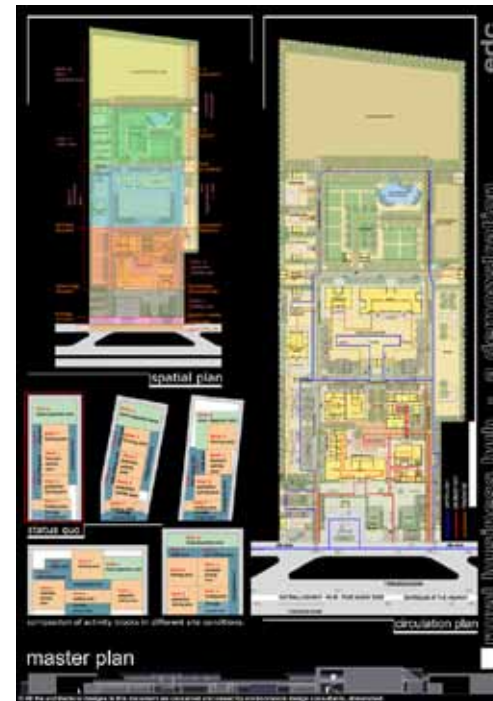
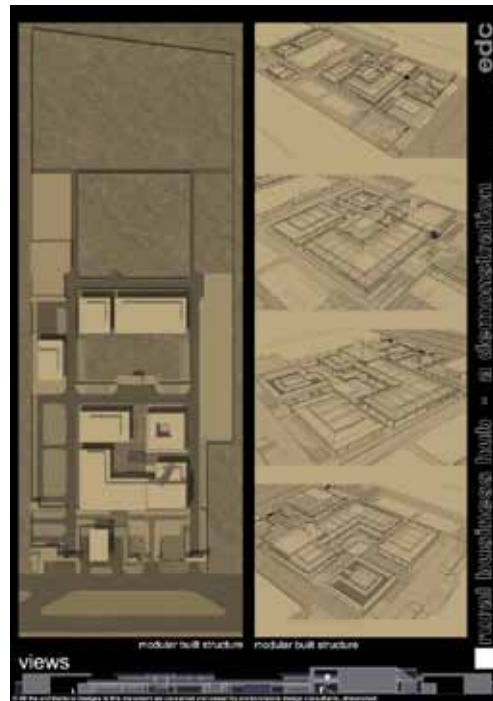


Rural Business Hub, Reliance India

Reliance Industries, one of the largest companies in India, were preparing for the biggest network of business hubs for food, agricultural and other supplies across the country, 2007. Their aim was to create a network to connect smallest villages in rural India to the largest metro cities, exchanging daily supplies and amenities. Reliance Rural Retail Hub was a procurement and supply chain for food, milk, sugar, vegetables, agricultural products, medicines, fuel and other daily supply across.

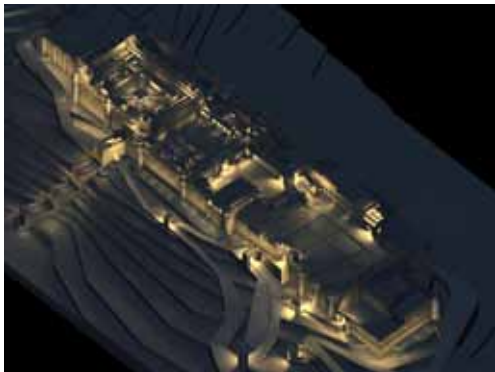
Together with EDC, 72by3 architects were given a challenge to propose planning and designing for Rural Business Hub Model for 1600 replicas across India. EDC was responsible for strategic master planning and 72by3 was responsible for all architectural design and construction details.

EDC - Environmental Design Consultant
Akshay Bhargav & Mansee Bal- landscape architect / Development Strategist
72by3 architects
Ujjval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry



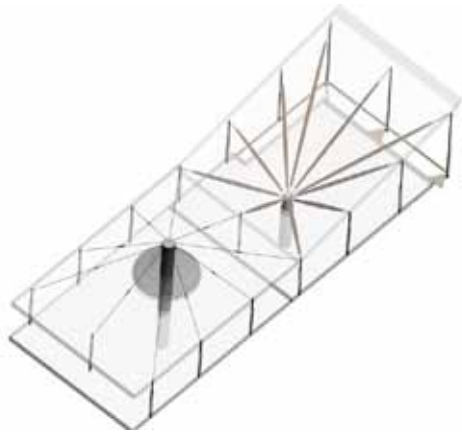
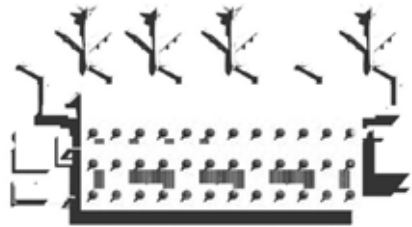
Amber Palace Conservation Project, Jaipur

Amber is an ancient Rajput fort and palace complex in north of Rajasthan, India. Mrs. Minakshi Jain and Arya Architects were hired for documentation, restoration and conservation planning for Amber fort (2006). Through documentation and damage reports were prepared over 6 months. In the second phase of the project, detailed reports were made for conservation and development. I was responsible for preparing 3D models for architectural analysis and proposals, illustrations and informative videos for future services.



NSCB International Terminal, Kolkata, India

This was a competition project done with Arya Architects, Ahmedabad. Arya Architects were invited to propose architectural design for new international terminal at Kolkata airport in 2004. I was part of design development and presentation team. My major task was to generate and develop architectural and structural elements for the entire project by three dimensional modeling. Later all the models were used for 3D illustrations and rendering for final presentation.



Ambaji Urban Development Plan

This project was managed by Urban Design Research and Development Cell at CEPT University (CRDU). Ambaji is a highly visited pilgrimage town with thousand of visitor every day. The project aimed at giving a better image to the town by addressing site specific issues with their need for future development and improved physical surrounding. I was part of construction drawing, illustrations and presentation team.

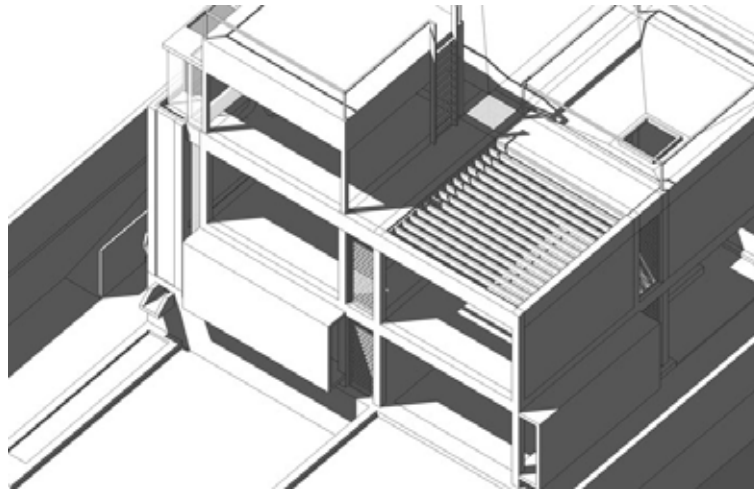
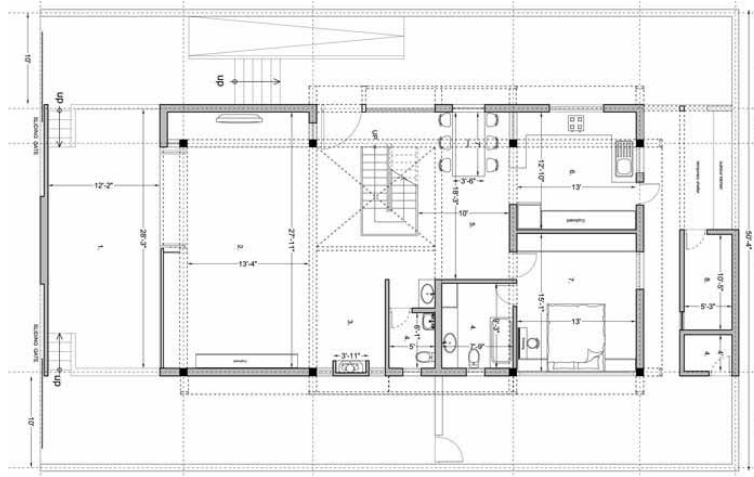


House for Mr. Vipul, Ahmedabad

This was a residential design project for Mr. Vipul at Ahmedabad. We were responsible for architectural design and construction details.

72by3 architects (2007)

Ujval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry

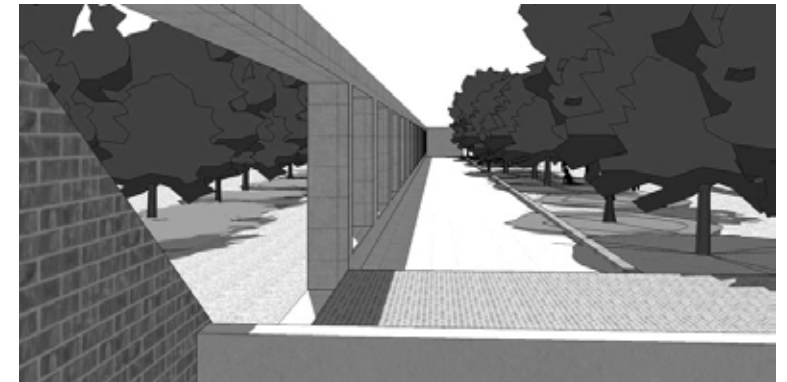
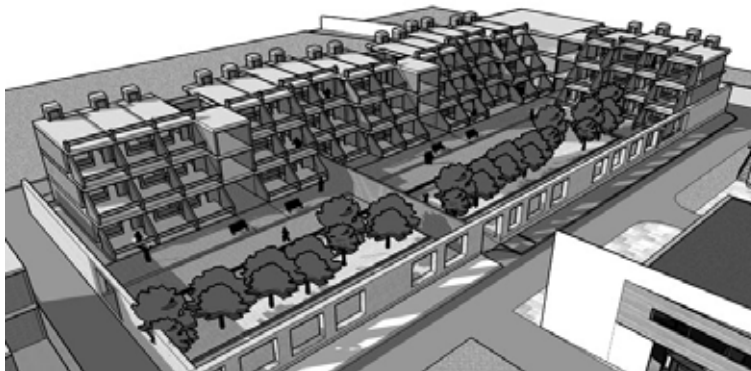
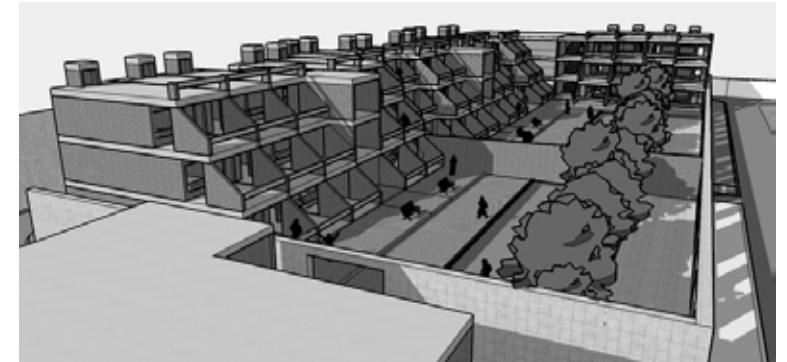
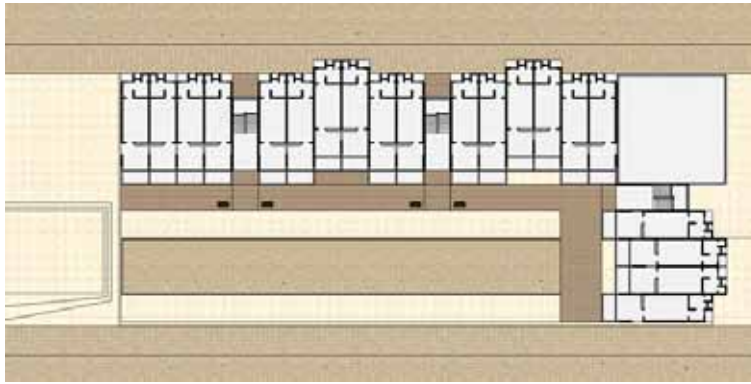


Hostels for Swaminarayan International School, Borsad, Gujarat

There were three main phases in this project - school building, hostel blocks for students and other infrastructure for school. We were given task for designing hostel building for 300 students and site planning for future development. We were responsible for architectural design, construction details and site inspection.

72by3 architects (2007)

Ujjval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry

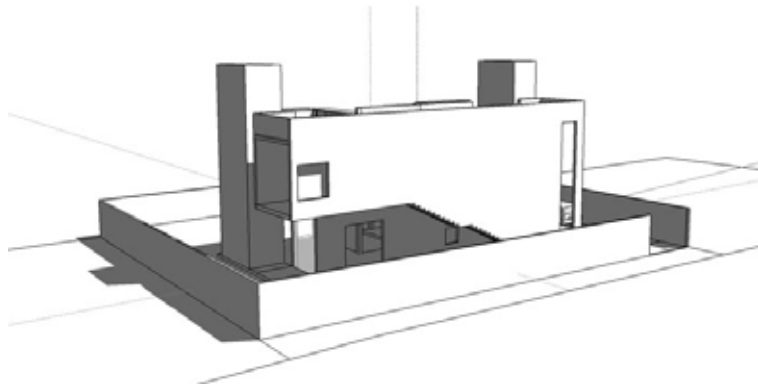
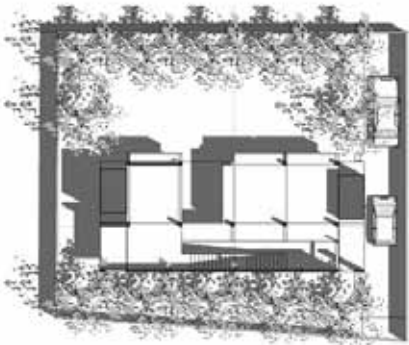
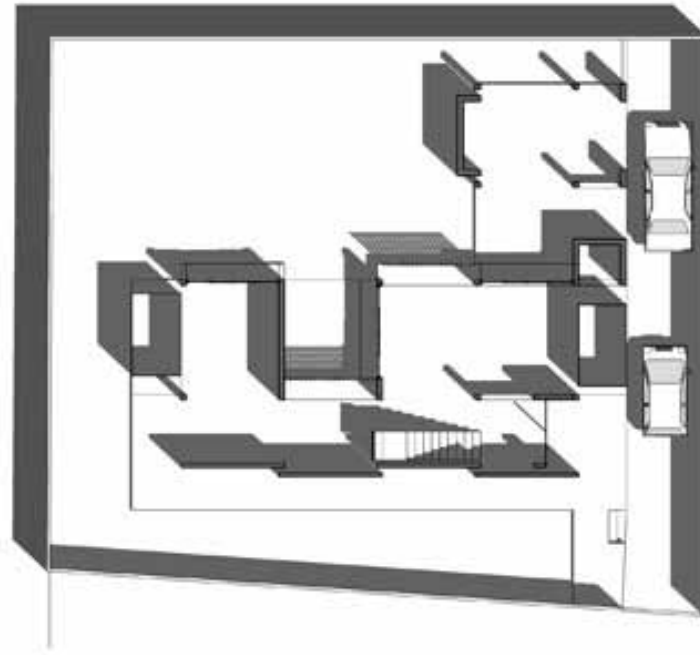


House for Mr. Ramesh Bhatt, Ahmedabad

This was a residential design project at Ahmedabad. We were responsible for architectural design and construction details.

72by3 architects (2007)

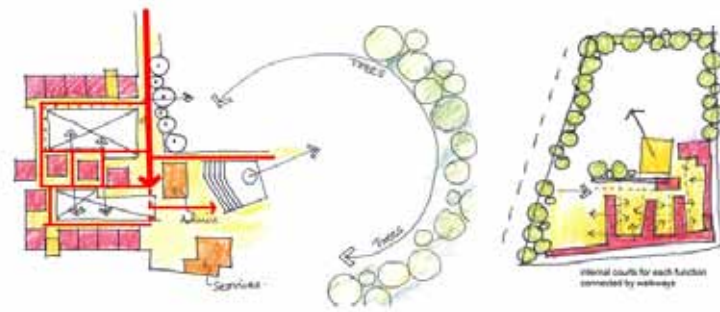
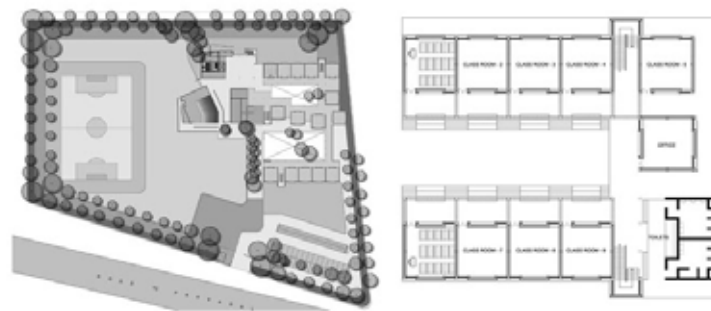
Ujval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry



Paswadal School Primary and secondary school, Patan

This was a primary and secondary school building project, to be completed in two phases. This school was initiative of Paswadal village trust near patan, for poor village kids. Initial phase was to just develop few classrooms for primary school and later secondary school. We were responsible for site planning, architectural design, construction details, site super vision and project management.

72by3 architects (2007)
Ujval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry

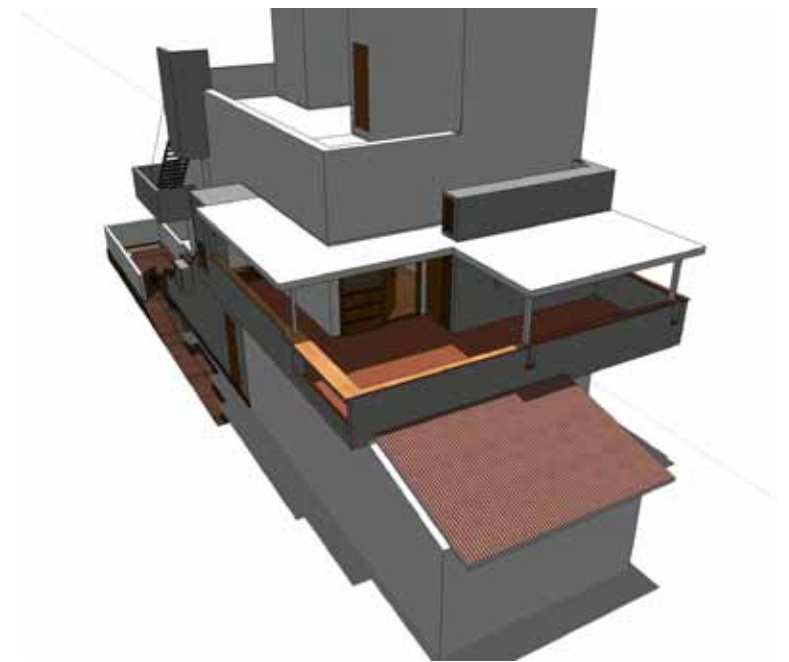
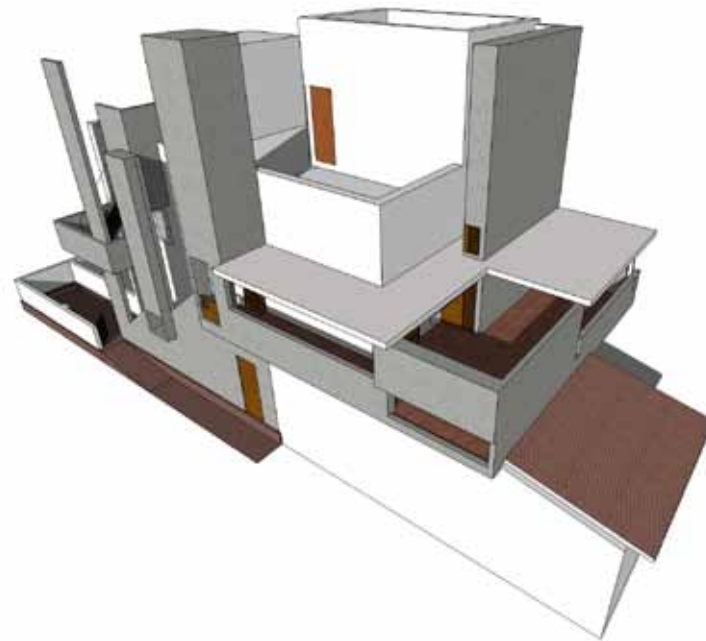
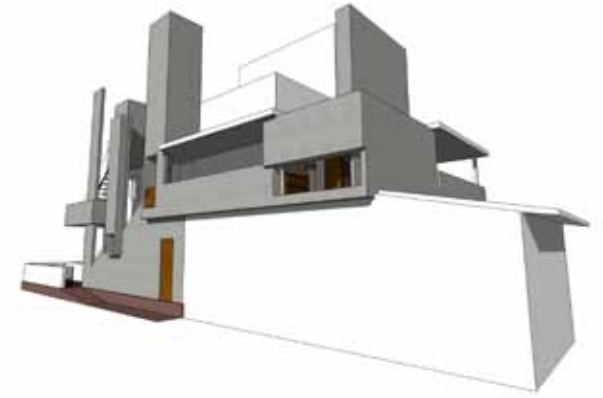
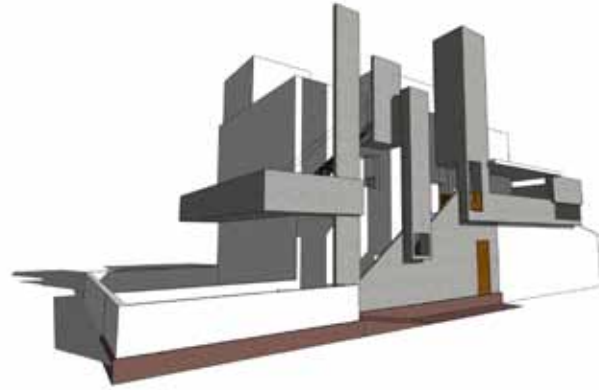


House for Mr. Jignesh Soyanter, Ahmedabad

This was a renovation and re-design project for Mr. Jignesh's residence at Ahmedabad. We were responsible for architectural design and construction details.

72by3 architects (2008)

Ujval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry

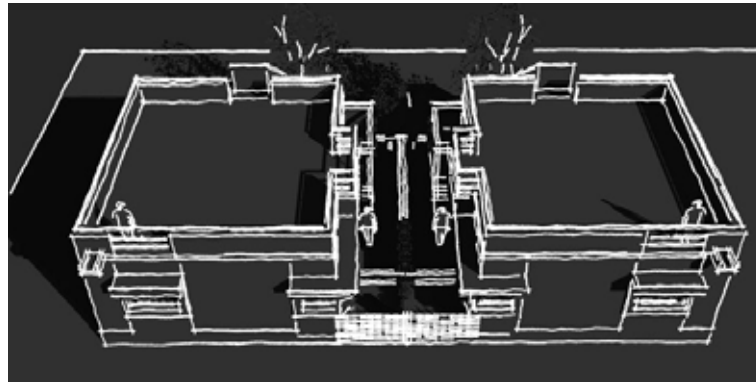
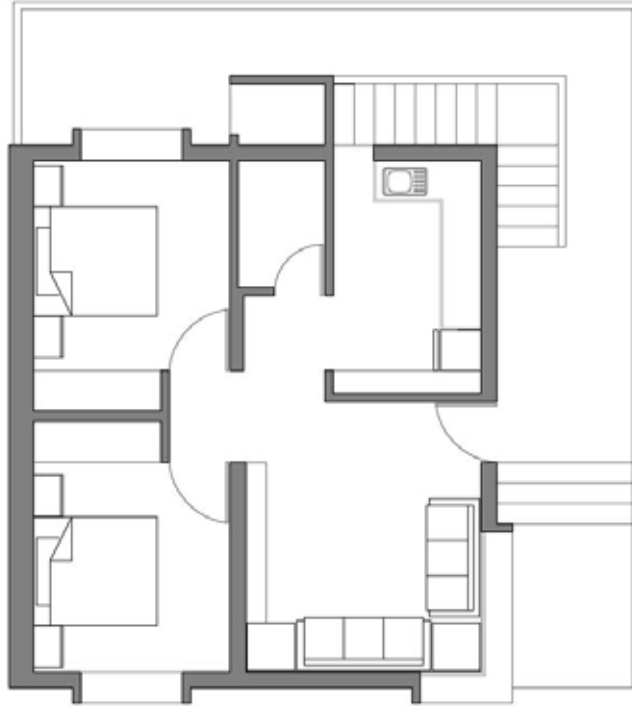


Twin House, Gandhinagar

Twin House was a low cost housing prototype project at Gandhinagar. We were responsible for architectural design and construction details.

72by3 architects (2008)

Ujval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry

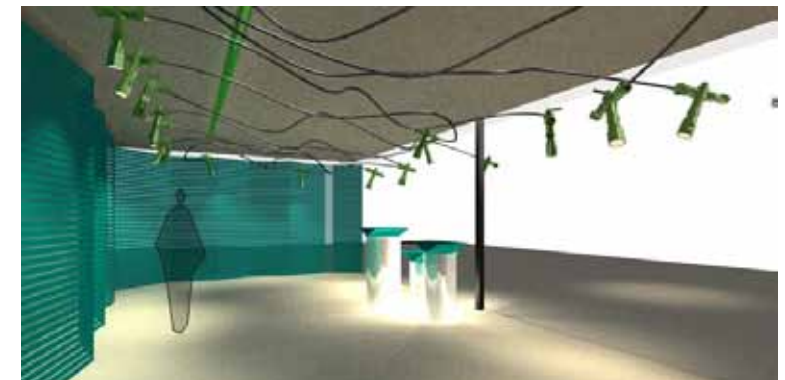
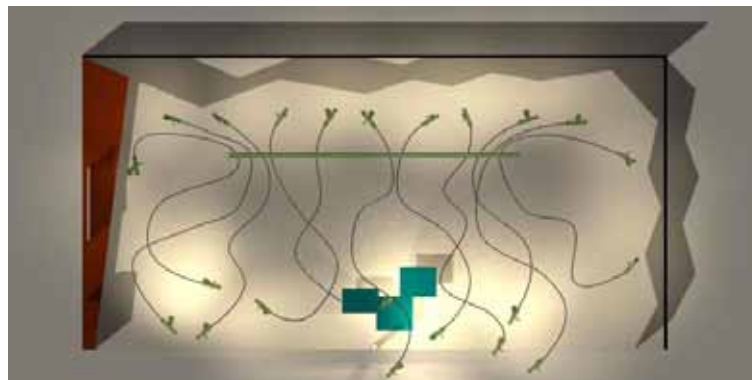


**Adani CNG exhibition, Auto Expo,
Ahmedabad**

This exhibition design project was for Adani CNG at Auto Expo, to promote use of sustainable fuel for vehicles. We were responsible for detail design and production for each element used in exhibition.

72by3 architects (2007)

Ujjval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry

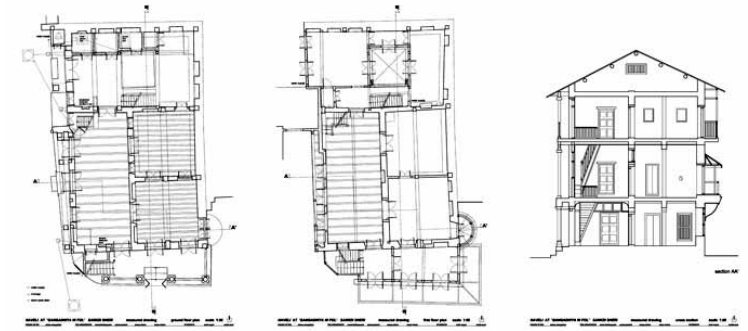
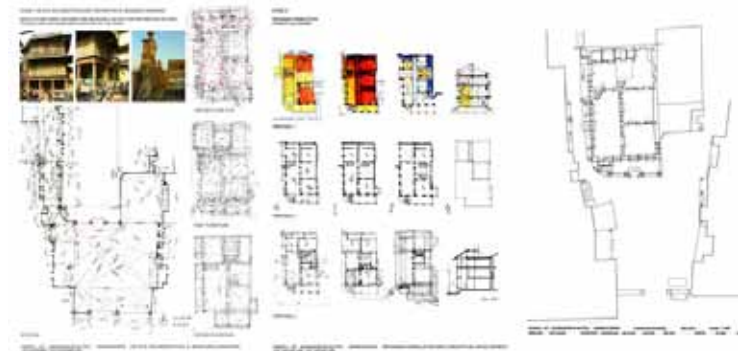


Haveli at Ahmedabad - an initiative for conversation and adaptive reuse
Gangadhiya Pol, old city, Ahmedabad

This project was an initiation for conserving and reusing old heritage houses in old city of Ahmedabad, for Abhay Mangaldas. 72by3 architects were responsible for detail documentation and preparation of damage report for first phase. For the second phase, several possibilities were proposed for restoration and adaptive reuse of the Haveli as a residency.



72by3 architects (November 2007)
 Ujjval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry



Fire Station, Ahmedabad
Final year design project, 2002
School of Architecture, CEPT University

From last 10 years Ahmedabad is going under tremendous stage of development. With the same pace of development, it has been going through some of the worst natural disasters and accidents. One of the latest is a riot in 2002. As it is getting toward a status of metro city, need of infrastructure for safety is increasing day by day, where fire is one of the worst nightmares for the city. Thus, fire-fighting system for such a city demands to be most effective, well networked and well equipped.

This project will offer such a well equipped and effective fire station (fire fighting system) in terms of its workability within a selected urban block.

Emphasis and issues of the project:

A well-equipped, effective and hi-tech fire fighting system for an urban block.

The fire station should supplement advance technology of twentieth century, as it is a machine to fight against disaster.

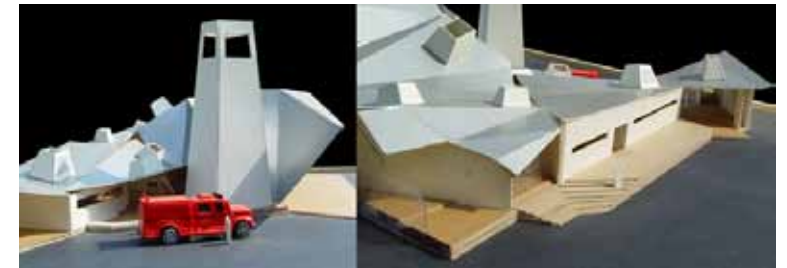
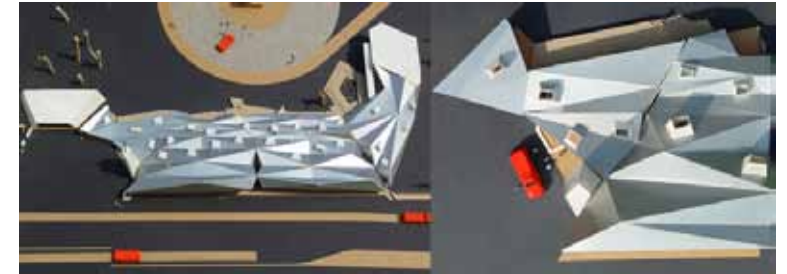
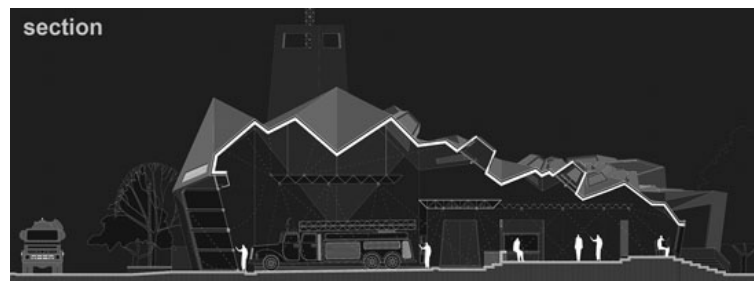
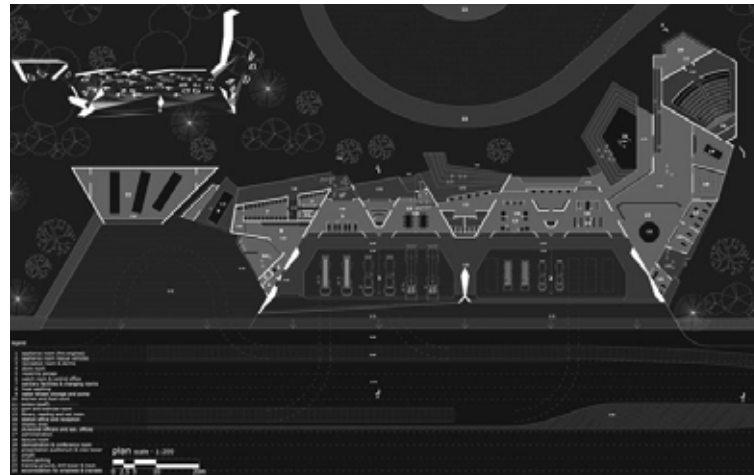
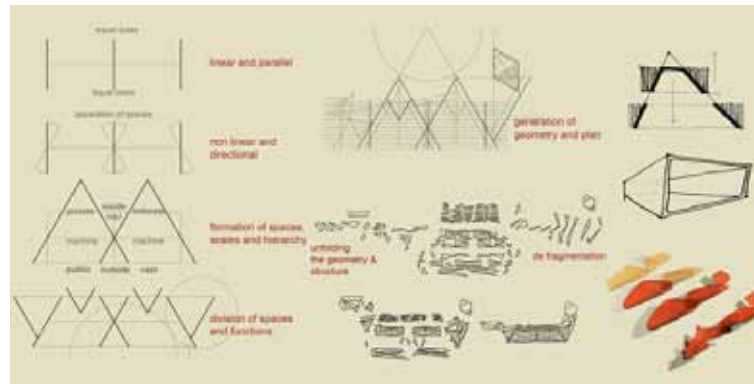
Location of such should make batter network and serviceability for an urban block.

As an institution, it should generate its position within a city as a true civic place.

The place should create a living environment for fire fighters and generate interaction with society, which would lead to batter social position for fire employers.

The place should generate activities to create awareness for safety.

Faculty: Leo Parreira, Kiran Pandya, Neelkanth Chhaya, B.V. Doshi, Rajiv Katpalia



Writer's Retreat

6th International Student Design Competition, CAA, August 2003, 2nd prize winner

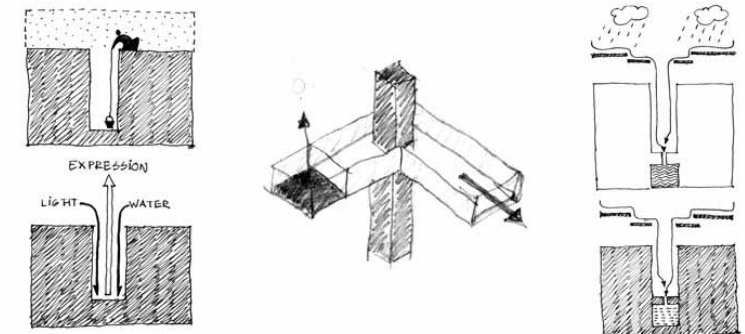
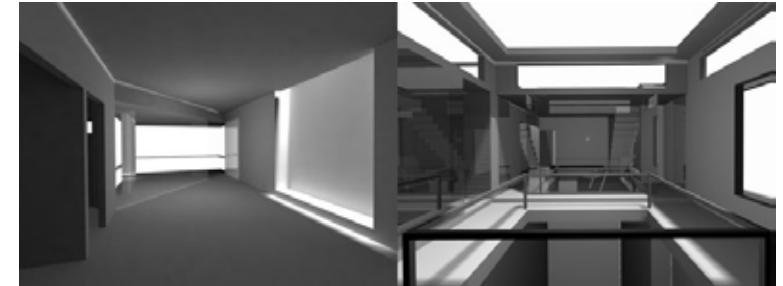
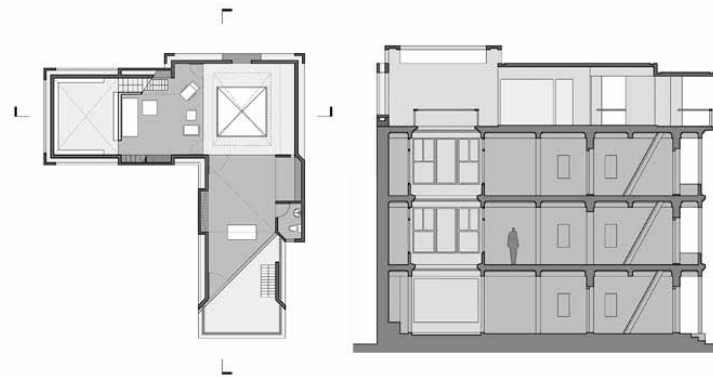
Writer's Retreat was a competition to design an autonomous, minimal dwelling for a famous writer who wishes to escape the distractions of everyday life. The writer wants a retreat within which he or she can work every day of the year. Of considerable importance will be the ambience of the space created. It should be designed in such a way that it will encourage creative writing and reflect the character and needs of the user.

There are no restrictions - the site can be real or imaginary, located in an urban or rural context. One was free to choose any well-known author from the past or present, as their assumed client. Preferably, the writer should be associated in some way with the region in which the retreat is to be placed.

Place – Old city of Ahmedabad

A city with rich traditions in arts, crafts and literature, and as an 'upcoming' metro in the western state of Gujarat, is the classic metaphor for the Indian characteristic 'psyche' and changes. It has a complex and dynamic 'layering' – impositions, assimilations, amalgamations and reinterpretations of different values, as a result of diverse cultural influences. The world is changing and Ahmedabad has extended far beyond its fort walls, with the closure of its mills, its communal riots and deteriorating urban character; it remains, in spirits, true to its traditions.

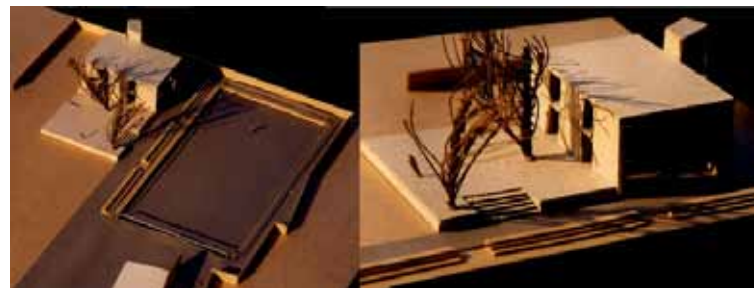
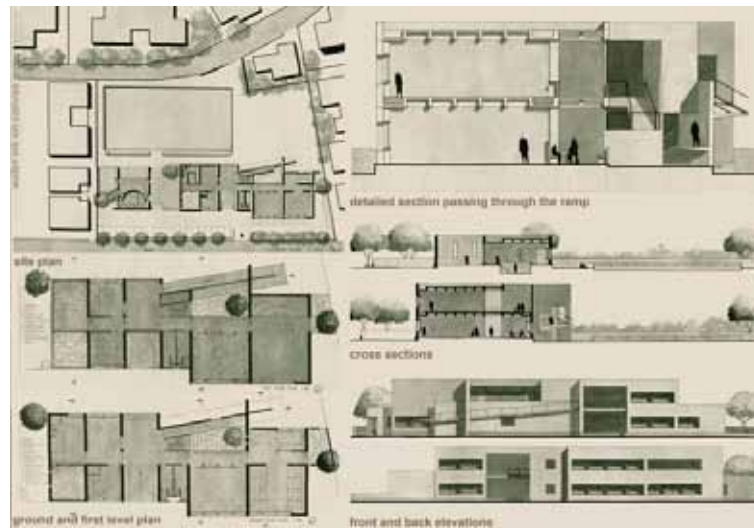
Writer's Retreat was published in international magazine The Architectural Review, November 2003 (Ujjval H Panchal and Sachin P Soni)



**Rehabilitation and physical fitness center,
Ahmedabad**
Third year design project
School of Architecture, CEPT University,
2000

Program for this project required a rehabilitation center for physically challenged, injured and old people; which included exercise areas, occupational training and workshop areas. The institution was a charity foundation and raised funds by providing public functions such as facilities for a gymnasium, a skating rink, a jogging track and a play ground. Crucial design concerns were sustaining institution's philosophy, build an image for the society, functionality, flexibility of use, urban response, easy movements for handicap people and most importantly provide restive quality of environment and strong sense of livelihood within society.

Faculty: Leo Parreira, Kiran Pandya



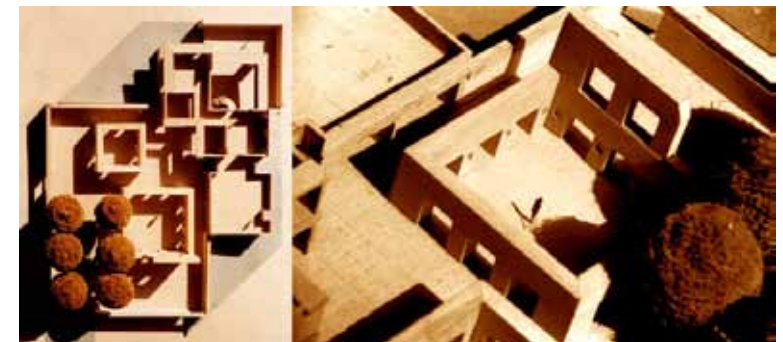
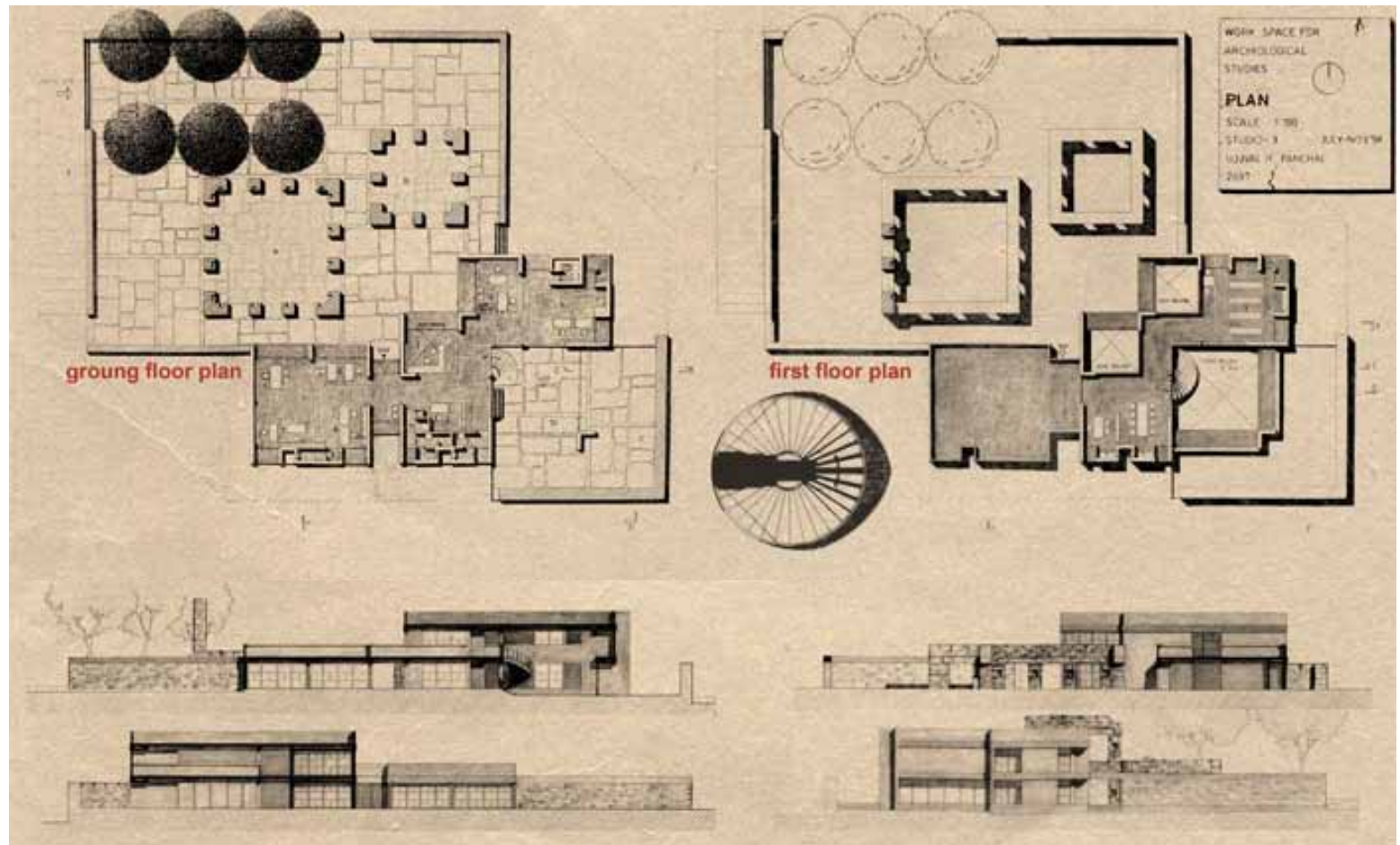
Library and offices for archaeological studies, Mandu

Second year design project

School of Architecture, CEPT University, 2000

The emphasis of this design studio was to understand relationship between form and space, object and context. It was a through study of architectural characteristic such as mass & void, solid & porous, light & shadow as space making elements. The location given to execute the project was on the ruined site, hundreds of years old palace complex in Mandu. The program brief required a workspace for archaeological studies, offices, a library and an exhibition space. Relationship with the context, old ruined structure, was a major design task in this study. Different rendering techniques were used as a tool to understand space & volumes, materials, textures, light and shadows.

Faculty: Anant Raje, Surya Kakani



Experience Design Lab, India

Experience Design Lab (India) was founded by Niels Peter Flint, Sustainable Vision Designer and Architect from Denmark. EXDL-India was started as a small design studio with team of architects, industrial and product designers and administrators, in Ahmedabad. Later EXDL showroom and a design studio was opened in Goa, where all products by EXDL were kept for display.

I have been part of EXDL for three years since 2004, as a designer and a researcher. At EXDL, I worked as a multitask designer in different teams on projects such as sustainable city concepts, furniture design, eco-house and research and product design from various natural materials.

EXDL - Niels Peter Flint

EXDL was formed to be a frame work, a structure or a platform for new radical sustainable “rethinking” lifestyle and design projects – projects for prosperity and exciting sustainable lives of the future.

Design has become more and more a commodity for making even more profits by filling the world with even more superfluous and meaningless products. In EXDL we try to find the roots again. the roots in the gardens - the ones that make the garden beautiful but also function.

The future will demand a much more refined and holistic approach to satisfy the consumers needs for meaningful products. Products of the future will to a larger and larger extent be sophisticated high tech solutions sometime in fusion with low tech solutions in what would be what we could call the Real Need Experience (RNE).

Dreams about a future - a sustainable future...



EXDL is also about dreaming – dreaming up a world which is radically different from the one we know today. Why you might ask? With the design-base we have we know that its possible to live in totally different and exciting SUSTAINABLE ways. In EXDL we know and believe that western lifestyle as we know of today needs to change to a new and much more exotic, sexy, exciting, meaningful developed lifestyle – a lifestyle which also happens to be sustainable hence that the world wont survive if we continue our existing materialistic totally exaggerated lifestyle.

We need to radically change if we want humanity to survive, we need to build new gardens, where humans can thrive – and the good news is that the change to living in sustainable harmony will be far more exciting and engaging than the way we live today. The gardens will be exquisite fusions of what humans and the planet has developed until now.

The way EXDL operates we will not only show you how you can make profits from a prosperous sustainable future, we will also promise you that we will demonstrate how these new products will also help creating a new and more engaged lifestyle for not only customers but also employees etc. We will help you build the garden and we will train your gardeners to maintain and develop the garden and its products further.

read more >>

www.exdl.com

Niels Peter Flint

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INDULGExdl EXDL products showroom at Goa, India

In 2006, EXDL opened a showroom and exhibition studio called INDULGExdl in Goa, India. INDULGExdl was mainly an outlet and exhibition space for all the products, ideas and designs developed by EXDL at Ahmedabad. Two floor exhibition space displayed furniture, textile products, terracotta products, natural fiber products, organic food, cosmetics and other life style products. INDULGExdl was designed and built to give experience and philosophy of EXDL as a whole.

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HO(tel)USE

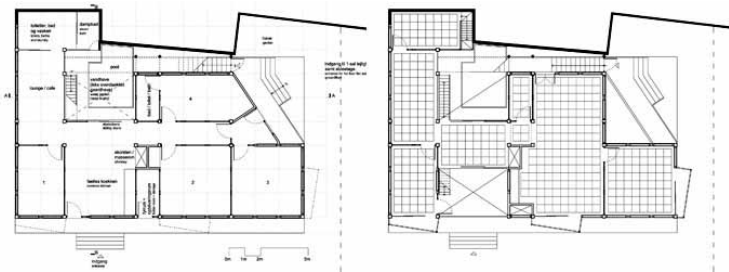
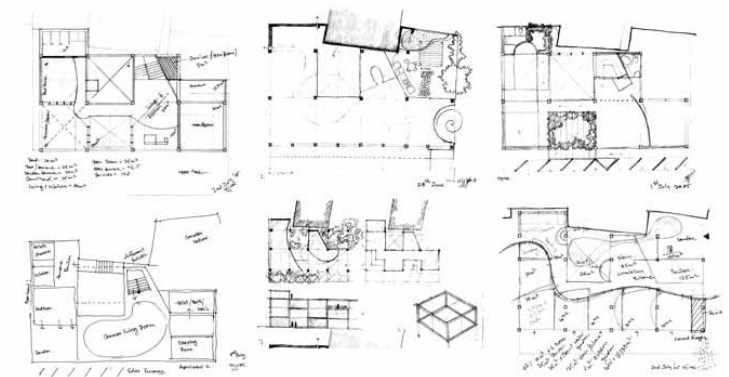
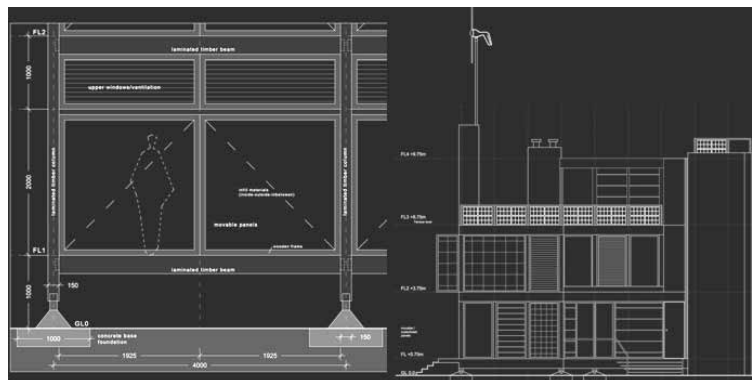
The seasonal TRANSFORMABLE living platform

The HO(tel)USE (HOT) is intended to be the ultimate flexible house project in Denmark. It lives with the seasons – changes with the seasons. In the winter its small and cozy in the summer large and open. It should be able to adapt to as many variations as possible in order to follow the life of people who changes ways of living all their life. The whole house will be catering people who want to live differently – this is NOT a traditional “nucleus-family” house. It will be a lively and explorative place where the users can experiment with various ways of living, working, entertaining, relaxing etc. The house should be able to have several generations living there and giving them basic good and profound living conditions.

The house will be made from the best materials seen from a sustainability point of view – and the entire house will as far as possible be totally self sufficient with energy harvested from the sun, the wind, the earth, the water and recycling hot and cold air. Not only the house will perform for sustainability – it will also provide the perfect platform for the “sustainable comfortable” life which means that you will be able to grow your own vegetables, fruits etc. primarily on the roof.

At EXDL, I was responsible for design development, construction details and research for HO(tel)USE project.

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BUTT

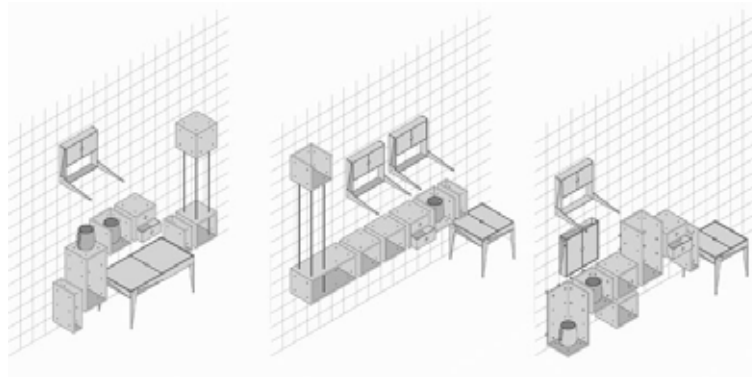
BUTT is designed to get us all to experience what most of us need to do no matter what at least once a day in a different way, the natural way, by using water. BUTT is the cleaner way and the better way for you and for the world. BUTT is helping saving massive amounts of trees being used for toilet paper. It could easily create serious problems, not only for the butts of the world but also for the trees on the planet.

Going to the loo has become a rather rushed and un-poetic procedure when it should be relaxing and enjoyable experience, where time is spent thinking, de-stressing or what ever you want to do alone. Going to loo should be an enjoyable experience, which should not be rushed. BUTT should be part of everyone's day. With butt you know you are doing it the cleaner, healthier way which is better for environment and better for your butt.

BUTT is a modular shelving system made out of recycled teak wood with linseed oil finish. As part of the BUTT experience - incense, candles are provided for relaxing and pleasant experience. Simple but beautiful jug design provides comfort while using water. Well crafted toilet brush and holder makes cleaning beautiful rather than ugly hidden objects. Organic cotton towels and rose water make entire experience refreshing and complete.

In the BUTT project, I was responsible for design development, design details, prototypes and final production.

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BOX-furniture

Started as an experimental packaging for a book, BOX project later became a very interesting series of furniture. BOX-furniture is modular boxes, which can be transformed to make seating and sleeping furniture, also it can store things inside it. It is an easily movable folding furniture.

BOX-furniture are made with reclaimed or recycled teak wood, metal nails and coated with linseed oil. At EXDL, I was responsible for design development, design details, prototypes and final production of BOX-furniture.

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BOX

Started as an experimental packaging for a book by Niels Peter Flint called Radical Rethinking Design, BOX project later became a very interesting series of furniture. BOX is literally a box, a container which can open and unfold it self and become a table.

BOXes are made with reclaimed or recycled teak wood, metal nails and coated with linseed oil. BOX series has various sizes available which can fit in to each other. BOX was developed as a furniture series called BOX-furniture for sitting and sleeping. At EXDL, I was responsible for design development, design details, prototypes and final production of BOX series.

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ROX

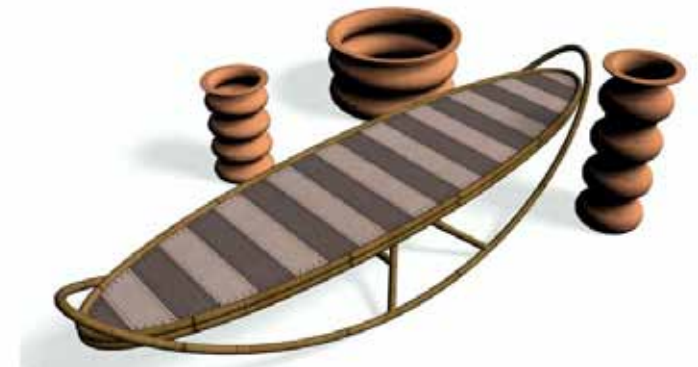
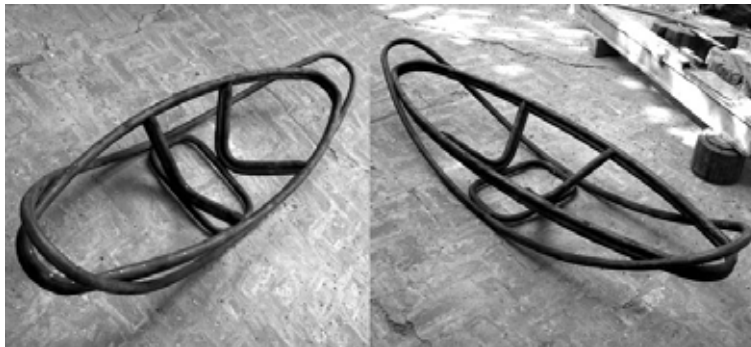
Every human on this planet needs to rest and relax, and rocking in a cradle or chair has always been considered extremely relaxing. So the heart of our ROX collection lies in a piece of furniture we have designed - the Rocker. The EXDL Rocker is a very simple piece of furniture based on a very simple concept, ROX = ROck and relaX.

Our ROX collection is designed to cure you of this dangerous disease and at the same time give you a fun, beautiful wholly natural piece of furniture that will transform any space you keep it in. ROX is developed for ultimate, abandoned rest, like a baby in the cradle. Lie down and start a minimal motion, and you will soon be rocking yourself to sleep.

The cane and Bhindi rope used in making the rocker are 100% sustainable eco-friendly products. The cotton fabric and fibre used in the ROX cushion is organically grown cotton, either laboratory tested or certified chemical free. The ROX Outdoor Rocker has its cane frame coated with linseed oil to protect it. The ROX Indoor Rocker has the outer surface of the cane frame burned to give it a matte black finish. The ROX Cushion has been specifically designed to match the shape of the surf-board of the Rocker. This is made in a black and white design in organic sun-bleached, herbal dyed cotton.

At EXDL, I was responsible for material research, drawings, design development, prototyping and final design and production of ROX collection.

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WORLDBY

The Worldby project is about making us all dream about “the new world”. Worldby is a concept of a new city where every thing is in balance with nature, a sustainable living habitat. It is a living structure for finding new ways of sustainable life style. We are in the process of having to redesign our world and we all want better living conditions so we have to find innovative ways of doing this. We need to protect nature but we need more space to live also. We cannot continue to munch all available free pieces of land. With global warming we will get even less landmass so therefore lets use our creative skills and develop new concepts for how to live in structures we build on top of nature – or maybe floats on water. In Worldby, nature is given equal opportunities space to thrive, since we would not be here, if nature is not here.

Micro house is a new possibility of giving us all better and more efficient living habitat. Using less space to live reduces not only built space but also energy and material consumptions. By using renewable resources and sharing resources at communal level, we can save a lot. Worldby is about a world where everything is a resource – waste is a forgotten word and everything cycles around forever. Worldby is a world where its understood and accepted that everything is eternal. Everything comes from the planet – everything eventually goes back one way or another.

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WORLDBY



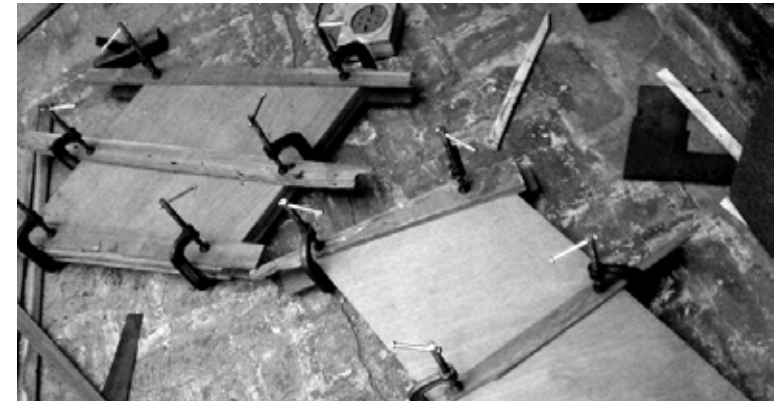
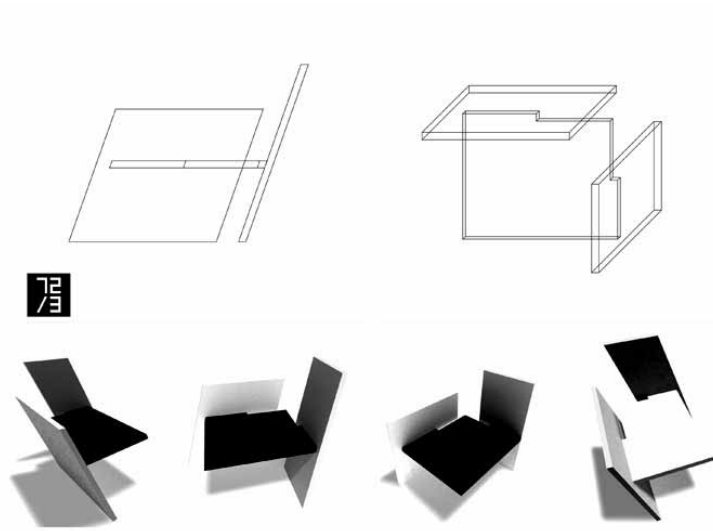
furniture design

SQW chair

SQW chair (skew chair) is inspired by a drawing technique called iso-metric drawings. When seen in plan it looks like an iso-metric drawing of a normal chair.

Three intersecting planes skewed at an angle give very dynamic form to this chair. It almost looks as if it is unstable cantilever, but actually the center of gravity is very well balanced. SQW chair prototype is made with ply wood, which was painted afterwords.

Further development of the same idea was used in another project called "Italics 15".



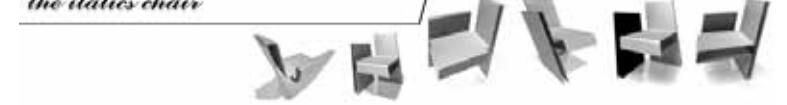
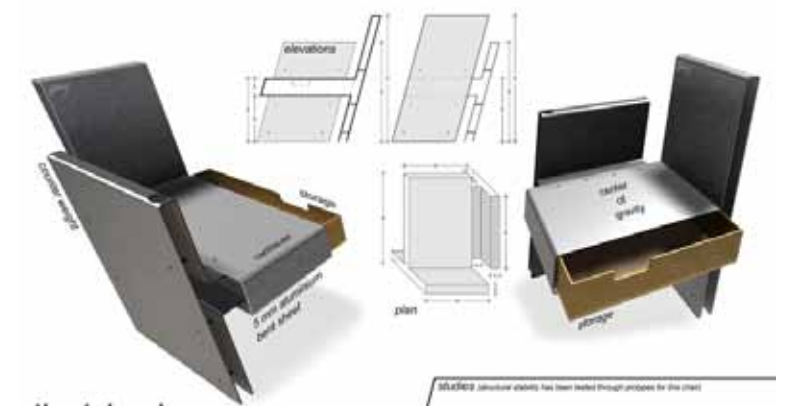
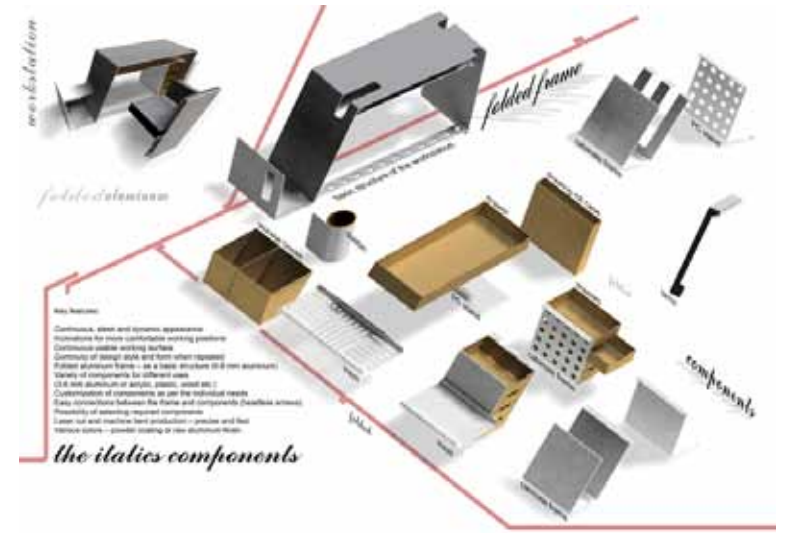
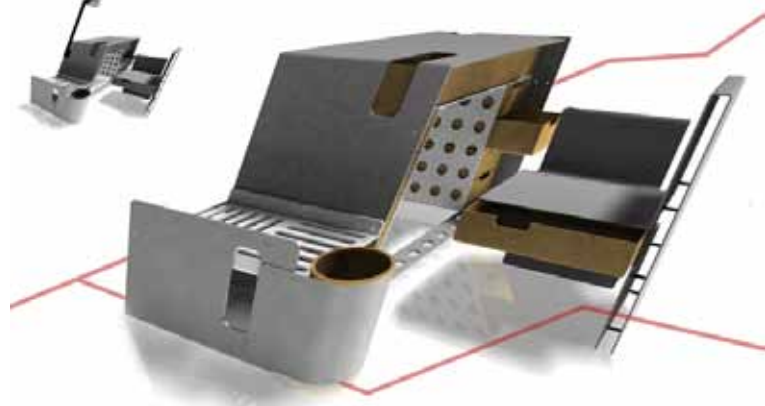
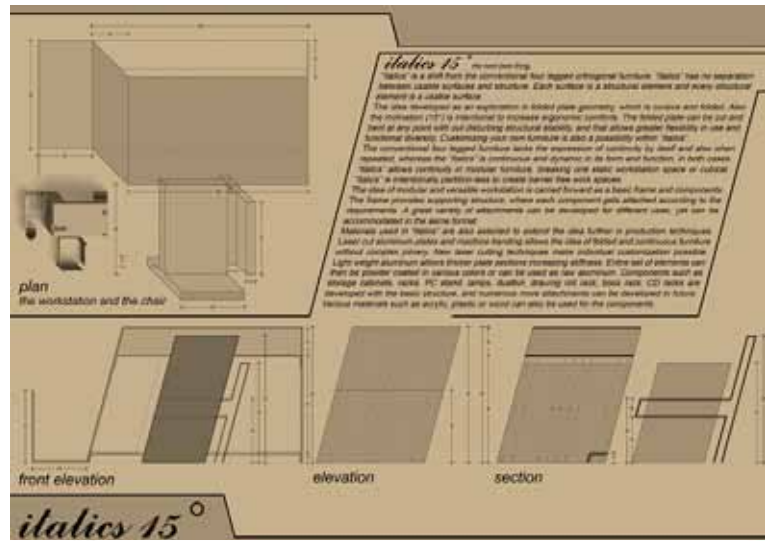
Italics 15

“Italics 15” is a modular furniture concept for workstations. It is a shift from the conventional four legged orthogonal furniture. “Italics” has no separation between usable surfaces and structure. Each surface is a structural element and every structural element is a usable surface.

The idea developed as an exploration in folded plate geometry, which is curvise and folded. Also the inclination (15°) is intentional to increase ergonomic comforts. The idea of modular and versatile workstation is carried forward as a basic frame and components. The frame provides supporting structure, where each component gets attached according to the requirements. A great variety of attachments can be developed for different uses, yet can be accommodated in the same format.

Laser cut aluminum plates and machine bending allows the idea of folded and continuous furniture without complex joinery. Light weight aluminum allows thicker plate sections increasing stiffness. Various materials such as acrylic, plastic or wood can also be used for the components.

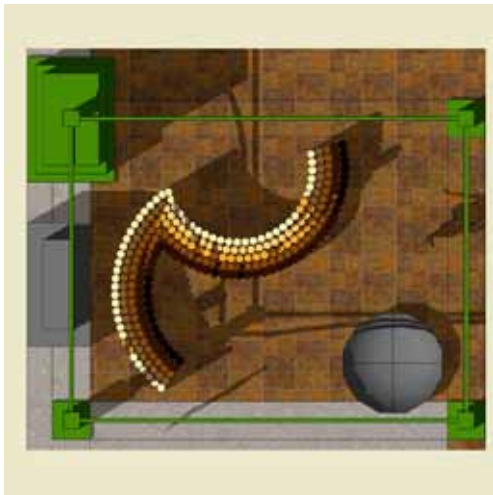
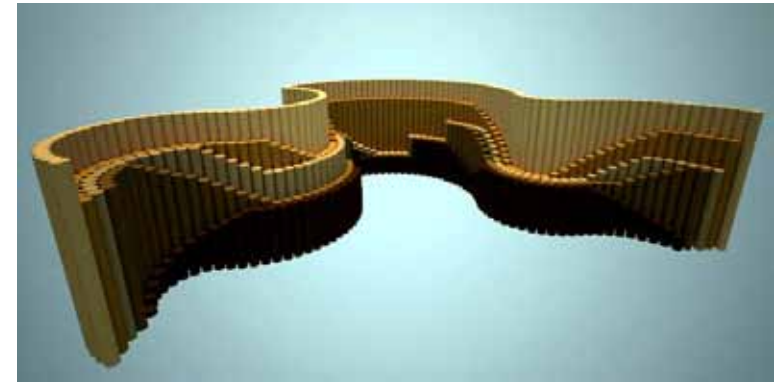
Italics 15 is inspired by previous experiments such as SQW chair and Origami chair.



Paper Tube wall
**Installation Agashiye Restaurant, Ahmed-
abad**

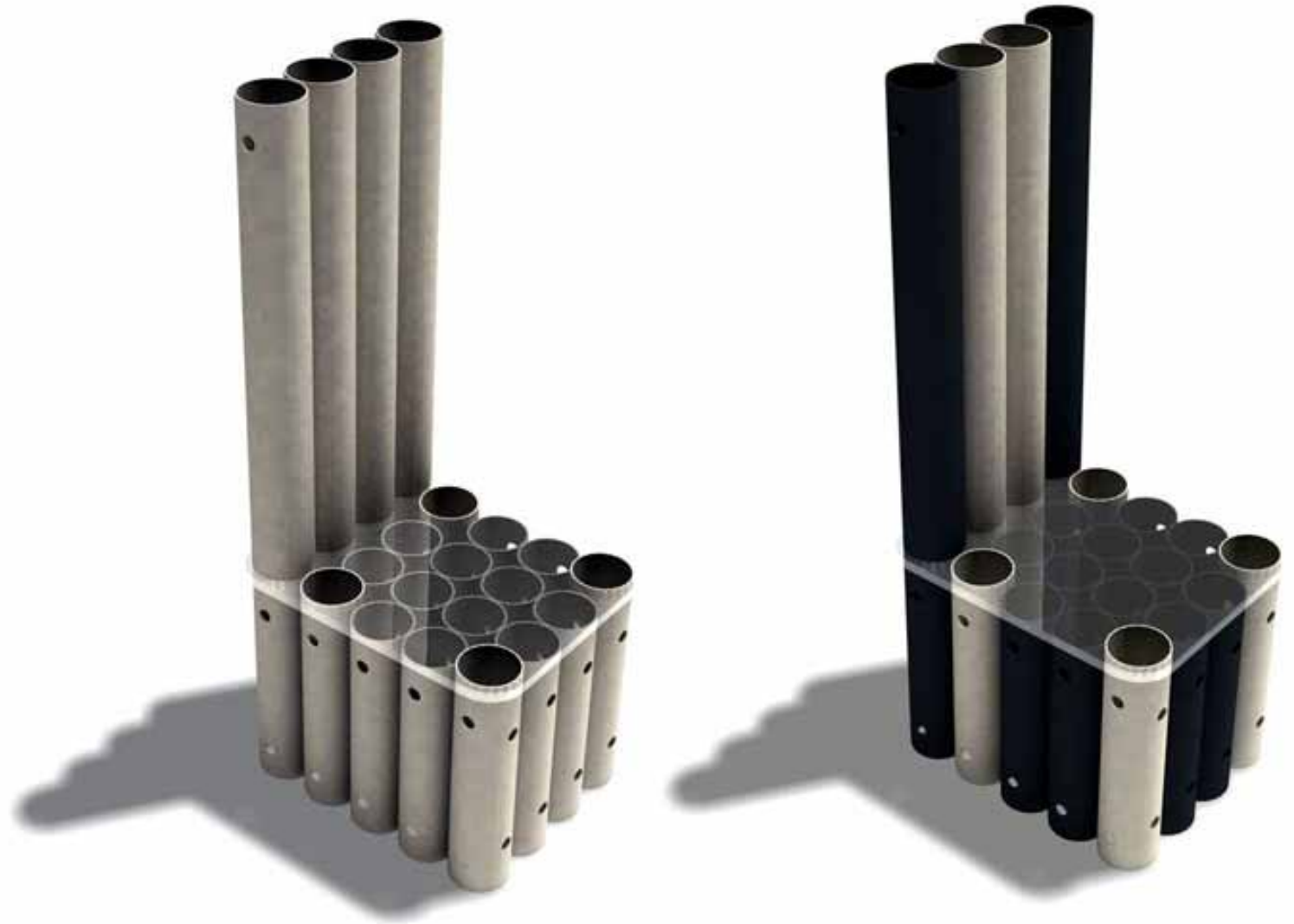
Paper tube wall was a temporary installation for new organic food stall at Agashiye Restaurant. Recycled paper tubes from scrap together with steel reinforcement were used for this installation. This installation was out come of previous experiments done with paper tube chair.

72by3 architects (2008)
Ujval Panchal, Sanal Thathapuzha, Parag Mistry and Sejas Mistry



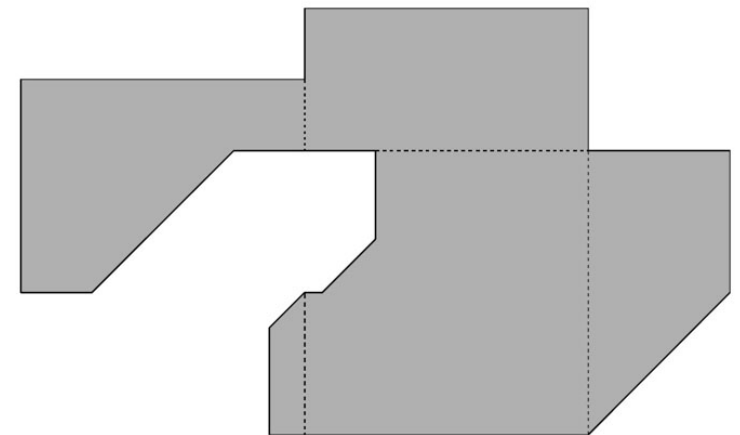
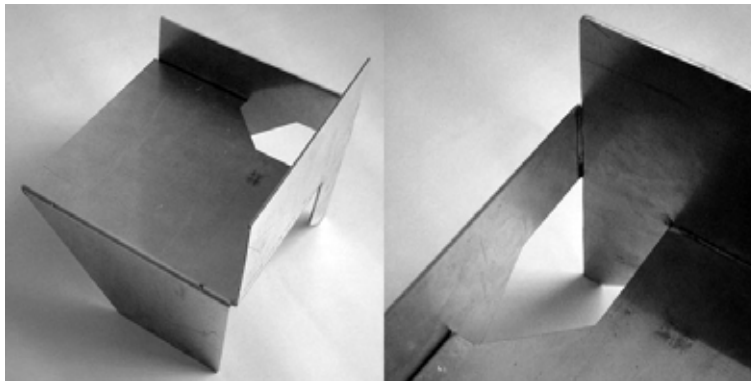
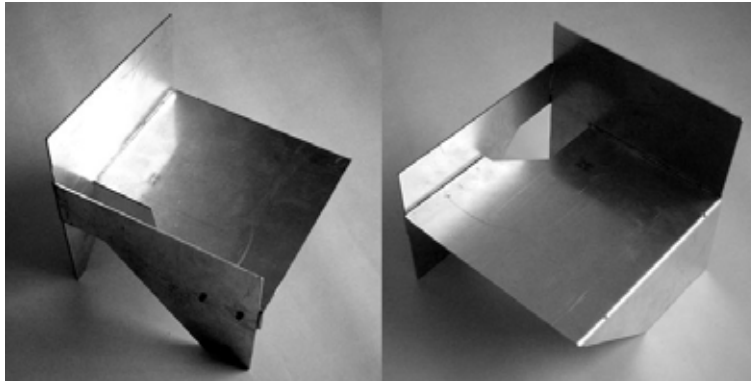
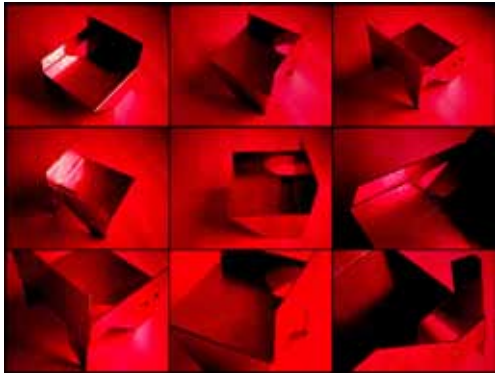
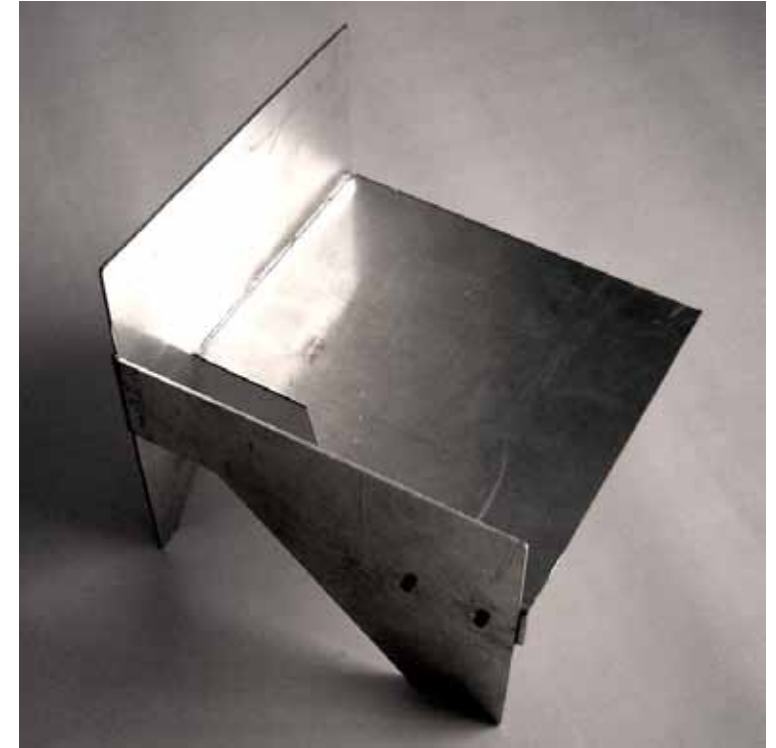
Paper Tube chair

Paper tube chair is out come of many experiments done with recycled paper tubes from scrap, which was again part of simple and low cost house furniture. Various joints and fixing details were developed during these experiments. Also various water resistant finishes were tried to make paper tubes more durable. After successful experiments, we installed a larger paper tube wall at Agashiye restaurant in Ahmedabad.



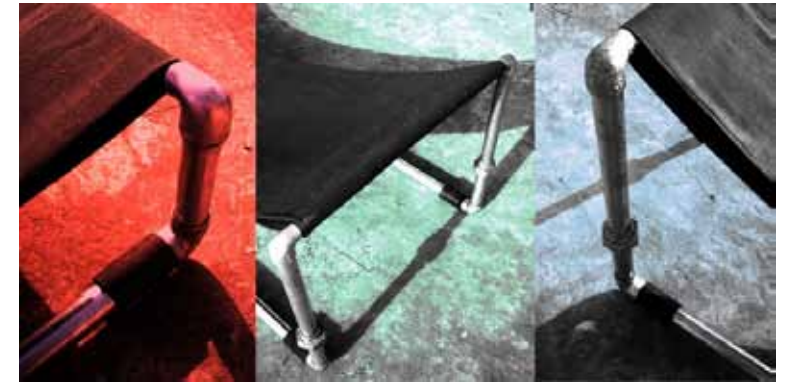
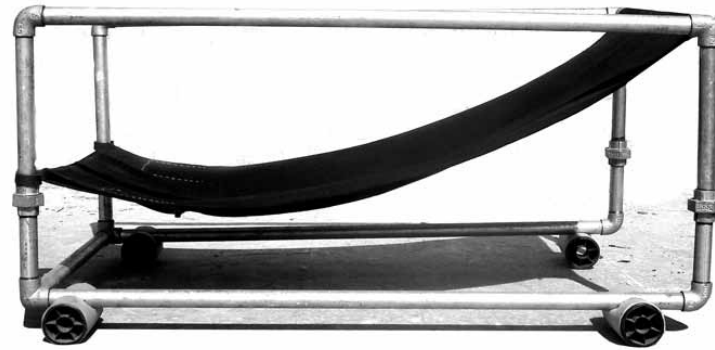
Origami chair

Origami chair is inspired by paper origami, where single surface folds into complex forms. Advantage with these kind of construction is that it makes production very easy. This is a 1/4 scale prototype made with laser cut single aluminum sheet, folded and screwed together.



GI chair

GI chair is a prototype for a simple, low-cost home furniture. GI chair is made of ordinary water pipes, joints and canvas.



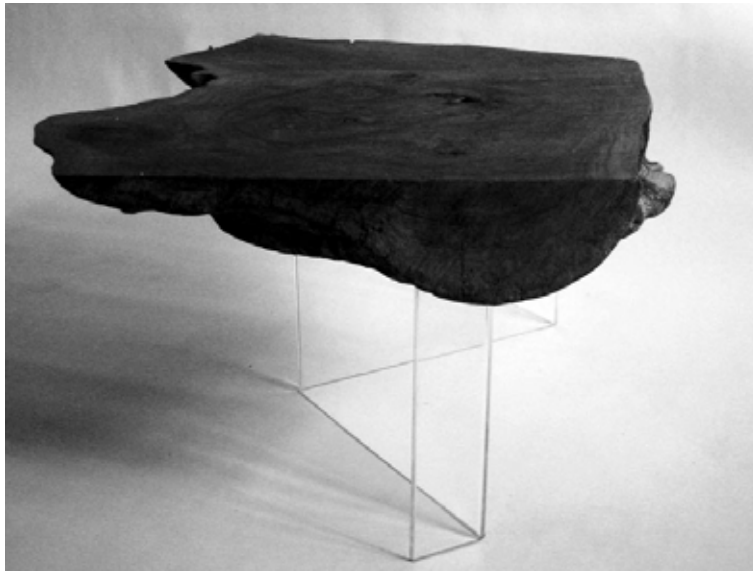
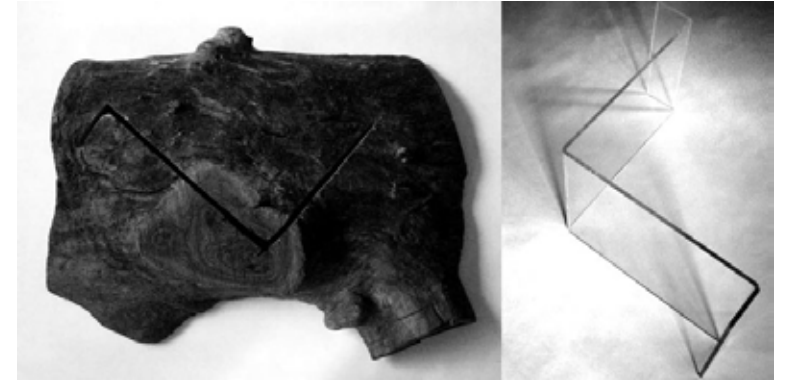
Flimz

Flimz chair is a prototype for simple, light weight and low-cost home furniture. Flimz chair is just made of steel bars and ply board, with natural lacquer polish.



LogIN

LogIN is a small coffee table made with raw neem tree log wood and acrylic base. Heavy log of wood resting on a transparent folded acrylic base makes it almost floating surface from the ground.



interaction design

Window Within a Window

Final Project, Pilot Year, CIID.
Project Advisor: David A. Mellis

“Window within a window” is outcome of many experiments done during Final Project, Pilot Year, CIID.

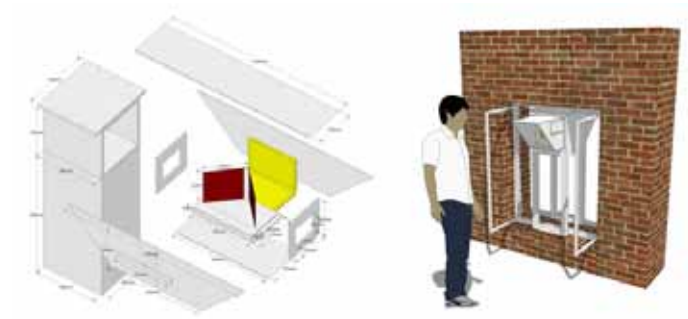
A window is an important connection between inside and outside. It is physically and visually the most interactive element in space. A window is a real-time narrative of many events happening inside, outside and around it. In metaphorical terms, a window can also mean a period of time for initiating or completing something.

As observers, we experience, interact and communicate through a window. We are always curious about looking in to things and interestingly when window is really small - like a peephole in the wall - it encourages people to look inside, often providing surprising and unexpected experiences.

“Window within a window” is a hole in a real window, to experience lost events, which one would never see otherwise. Observer can manipulate time of events happened in past, by simply interacting with window from inside and outside.

In this project, a two-way aperture with a memory allows an observer to relive and manipulate events that happened in the past. One can look through to the other side - and by pushing and pulling the box, can control the timeline of the event that they are looking at. The further you push, the further in the past you see. When static, the real time event is displayed from both sides.

see project videos here:
<http://ujjvalpanchal.com/interaction-design/window-within-a-window/>



Deja-vu: delayed mirrors

Final Project Experiments, Pilot Year, CIID.
Project Advisor: David A. Mellis

Deja-vu is small 2 day experiment just to see what it is like to see back in time, how does it feel when time is delayed?

These experiments are part of Final Project Research, about a window which has a capability to remember events happening around it. Final outcome of these experiments was the installation project called "Window within a window". These experiments are inspired by phenomena called Deja-vu!!!

"Deja vu": is something "already seen"; it is also called paramnesia. Deja-vu is the experience of feeling sure that one has witnessed or experienced a new situation previously (an individual feels as though an event has already happened or has happened in the near past), although the exact circumstances of the previous encounter are uncertain.

These are some of the experiments with a camera and projector, with a simple code to delay playback time. The second experiment had a distance detection sensor, closer you get to the screen higher delay time you see in playback. This allowed observer to control time forward and backward, just by moving front and back from the screen.

see project videos here:
<http://ujjvalpanchal.com/interaction-design/dejavu-wino/>



simpTEXTity

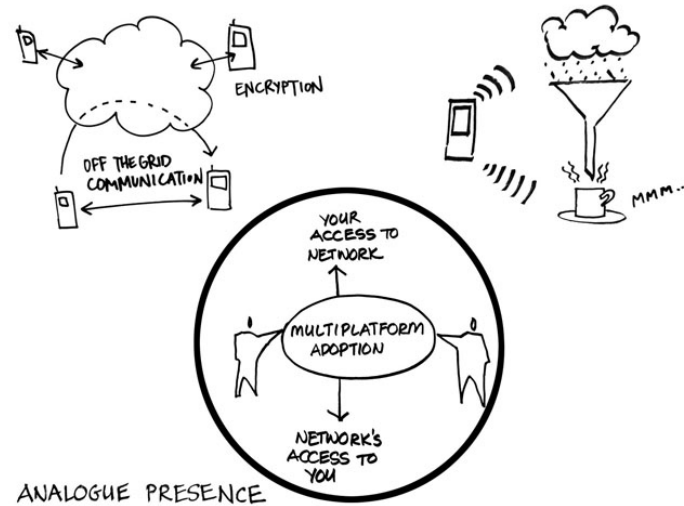
Nokia is concerned about how it will find a balance in the paradox between features and complexity. They want to explore ways to keep features but reduce complexity at the same time. The current benchmark is the Internet experience with big screens and full keyboard. We are exploring the communication needs of 'people to people' rather than 'people to device'. We are trying to interpret the device as a lens rather than container for communication needs.

This project is about designing for the future mature needs of today's younger generation. Their demands and expectation of what the mobile communication systems will be different than that of today's mature users. In the context of this project this focus translates into the Series 60 devices of Nokia which are designed for so called 'Smartphone'. The challenge here is to rethink and redesign the interactions of this genre and push the boundaries of 'smartphones' to 'smart + communication' and thus addressing the future needs and aspirations of such users.

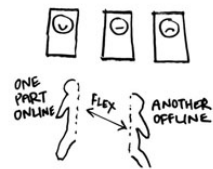
simpTEXTity is a easy way to navigate through complex menus, functions and choices by using text input as a command line. It is inspired by search method on the computers and over the internet: to simply type and find what one is looking for. As mobile phones are becoming more like to computers with access to the internet and various platforms of communication, the user should be able to choose all possible options at the same time. simpTEXTity works with text input from mobile key input, and lists all the available options and contexts to choose from one by one, allowing user to decide suitable means of communication in a constant and efficient flow. simpTEXTity was part of Industry Project at Pilot Year, CIID. The text approach, is suited for a complex yet compact interface, efficiently freeing up screen real-estate, which in turn can be used for interesting visualisations of the complex information network searched.

see project videos here:
<http://ujjvalpanchal.com/interaction-design/simp-textity/>

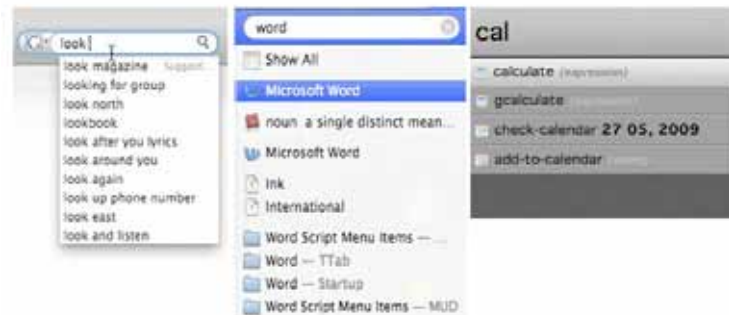
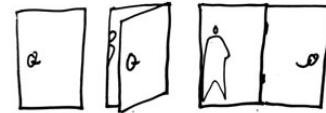
ujjval panchal portfolio - architecture | interaction design
<http://ujjvalpanchal.com>



ANALOGUE PRESENCE



DOOR METAPHOR



Compound EYE

Compound EYE is a group of networked cameras, working together as a one. When one of them is clicked, all of them click at the same time, capturing that moment from multiple viewpoints. It is an easy tool for fun and experimental photography, for anyone who is eager to experiment, play and have fun with cameras and photography. This project is part of Tangible User Interface class at Pilot Year, CIID.

Taking photographs is fun and exciting for everyone, from kids to professionals. But to experiment and play with photography always becomes complicated, expensive and technically challenged.

Compound EYE offers a very easy, simple and experimental platform for playing with series of cameras, just like single click LOMO cameras. It works like many eyes working at the same time, freezing the moment. You can use as many camera modules as you want, arrange them the way you like, synchronise and time them and get quick results. Compound EYE can be used for quick panoramic photos, time-lapse photos, grid and pixel photos, or for capturing events from various angles.

Compound EYE is inspired by insect behavior, just like bees or ants - each one works individually but at the same time they are part of a bigger group. It is built with small cameras, a wireless network, a simple click button and settings for timing them. Each camera sends a signal to all others to click at the same time and sends images to the server where they are processed. Each camera can be given an identity and specified delay time for a more experimental effect.

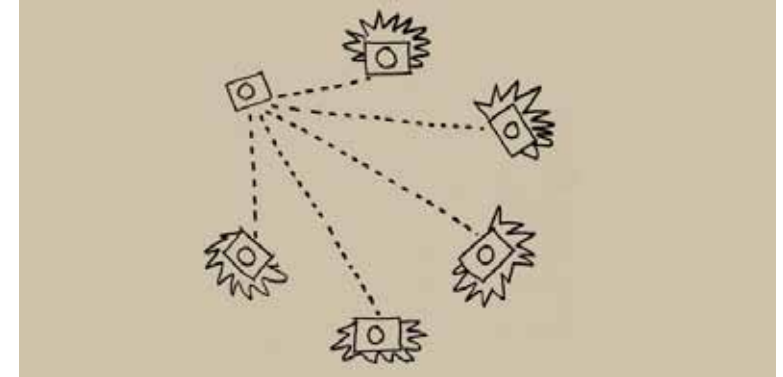
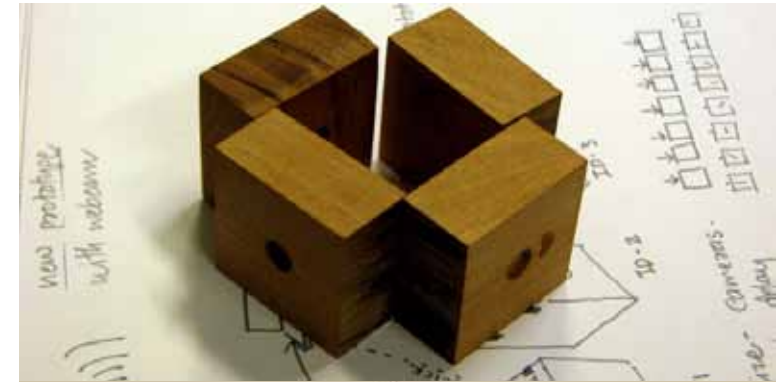
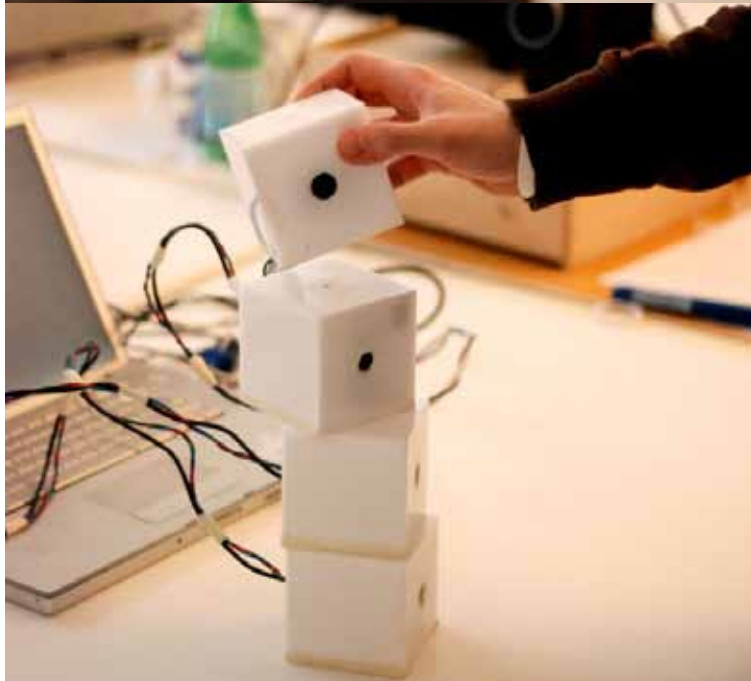
Faculty: Heather Martin, Durrell Bishop, David A. Mellis, Vinay Venkatraman, David Cuartielles, Christopher Scales, Alexander Wiethoff

Co-students: Marcin Ignac

see project videos here:

<http://ujjvalpanchal.com/interaction-design/compound-eye/>

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NEXT 06 exhibition by Innovation Lab, Aarhus, Denmark

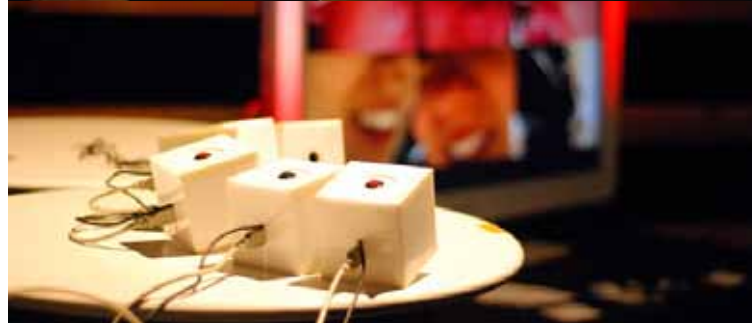
Four projects of Pilot Year Tangible User Interface class were invited for exhibition at NEXT 06 by Innovation Lab, Aarhus, Denmark. Compound EYE was part of it along with BunnyBot, Calen3dar and Meet the Food you Eat.

NEXT no. 6 was held in Århus, Denmark in April 2009 as part conference, part exhibition. A dozen of the most daunting international minds on business, technology and invention took the conference stage. And 100 of the most perspektivating, forward facing and unexpected uses of new technology is drawn from research labs, startups, and R&D facilities from around the globe, was showcased, tried, discussed and probably fixed a few times during the four day exhibition.

NEXT no. 6 was an invitation to go beyond the horizon, to throw away the compass, leave the known for the next and gain perspectives in the loss of direction.

see project videos here:

<http://ujjvalpanchal.com/interaction-design/next-06/>



Wind chimes

During Skills Upgrade class at Pilot Year - CIID, the brief suggested an installation in the SAS hotel, Copenhagen designed by Arne Jacobson and my first reaction to the lobby space was to create a transition while entering from the busy street to a very calm and stagnant space. By simulating a wind chime experience I wanted to create playfulness in that very formal lobby. When one enters the space, this wind chime would be like welcome music.

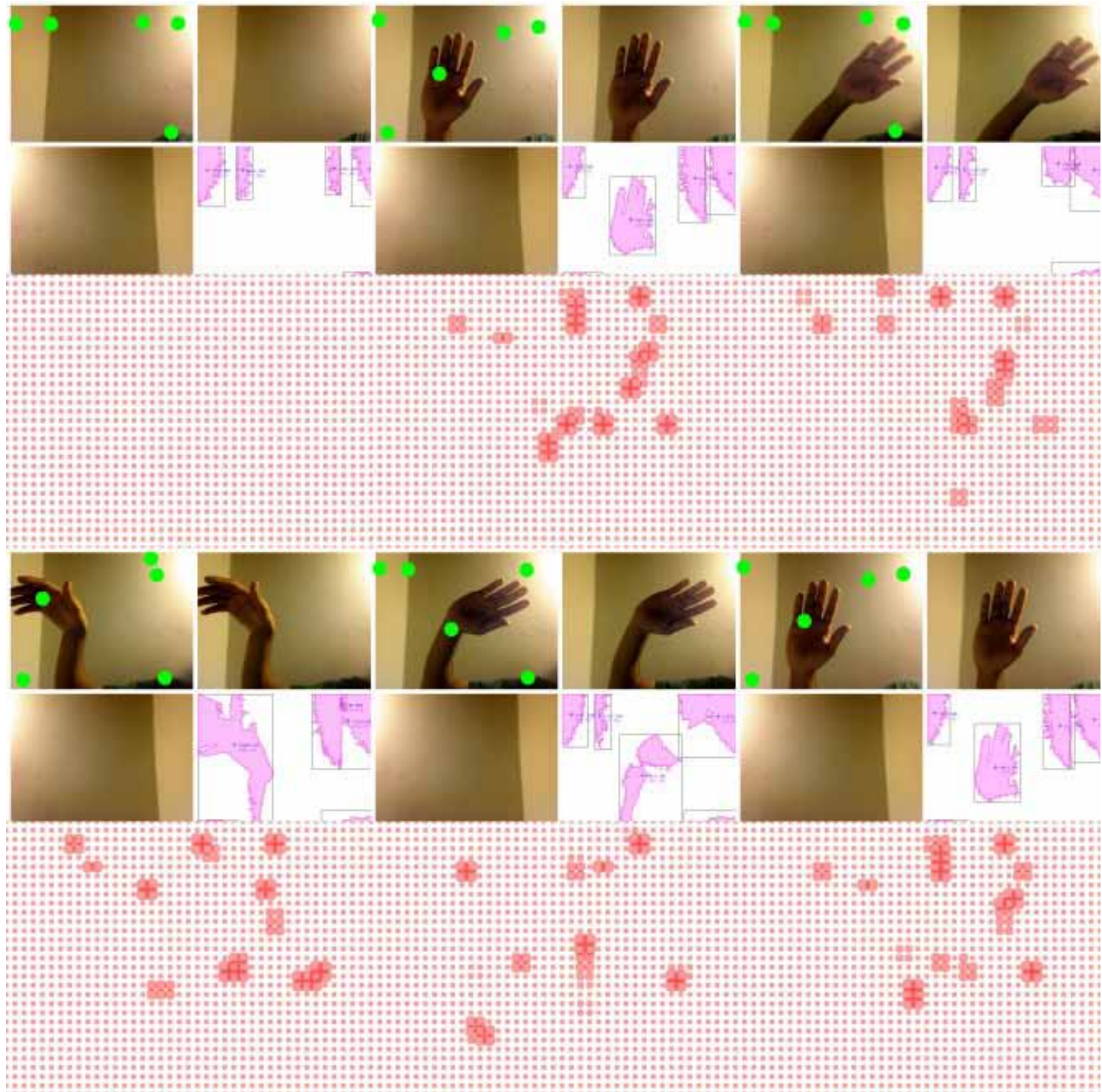
This prototype simulates a wind chime experience in software (processing and open CV) rather than an actual physical prototype. It captures movement in the space through a video camera and triggers each of the dots (bells), which generate particular sounds as one moves in front of the camera.

The next development in the prototype will be making an actual installation with bells (these may be mounted on ceiling). As one moves underneath this would simulate wind, which would play the sounds – a physical wind chime.

Faculty: James Tichenor, Joshua Walton

see project videos here:

<http://ujjvalpanchal.com/interaction-design/wind-chimes/>



Message in the bottle

Message in a Bottle is the first prototype in a series of physical objects for the home that notify their owner of incoming emails, made during Physical Computing class at Pilot Year, CIID. Our goal is to limit our compulsion to obsessively check the computer for new messages while also bringing characteristics of postal mail to the digital world.

Through ambient lighting, this wine bottle will display the amount of new emails from a set of specific contacts (i.e. friends from back home) which are defined in the user's email client. Picking up the bottle will activate an LCD screen with a summary of the most recent message while turning the bottle upside-down will load the next new message. Once all messages have been read, the LCD screen and ambient light will shut off until new messages are received.

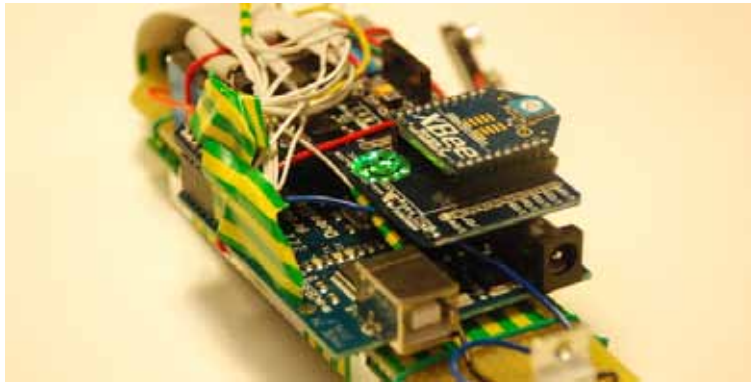
Inside the wine bottle is a circuit board with an Arduino, LCD screen, accelerometer, XBee radio transmitter, 9volt battery, power switch and an extra bright LED. A second Arduino and radio transmitter sends the email messages to the bottle (our final prototype does not actually download real emails from the internet). The amount of messages sent to the bottle controls the brightness of the LED. The accelerometer inside the bottle determines when the bottle has been picked up and activates the LCD screen. The accelerometer also determines when the wine bottle has been turned upside down and cycles through the messages. When all messages have been read, the bottle switches off the LED and LCD and waits for new messages.

Faculty: Massimo Banzi, Gwendolyn Floyd, David A. Mellis

Co-students: Adam Little, Alice Pintus

see project videos here:

<http://ujjvalpanchal.com/interaction-design/message-in-the-bottle/>



Water or Internet?

Water or Internet is a data visualization project comparing population percentage across the world with access to water and internet. This was part of Interactive Data Visualization class at Pilot Year - CIID.

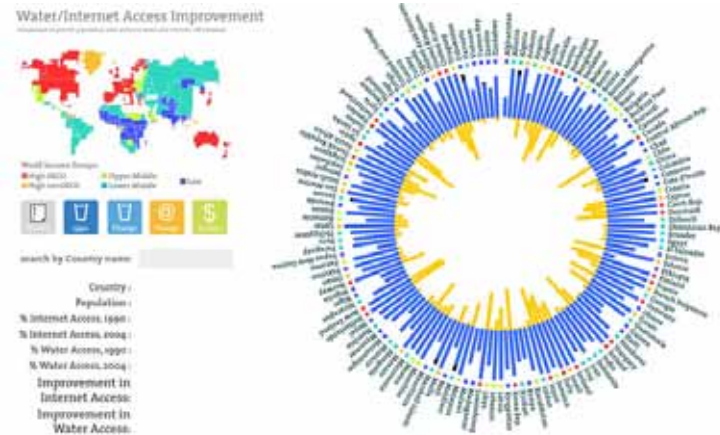
Water is unquestionably the most essential element for survival, but in today's world, things like Internet access are also becoming increasingly important. We started by looking at scenarios in various countries for the improvement of internet access over the last 15-years, against improvements in basic water supply. Our idea was to find the reality of changing priorities in the current situation in the world. What is becoming more powerful? Water or Internet? We used UN data sets comparing improvement by percent of population with access to water and internet in the last 15 years.

Our main goal was to compare differences in improvement in water supply and Internet access over a period of time. For the data visualisation we decided to stick to simple bars representing changes as lengths, showing all the changes for each country to visually compare them. Also one can sort this data in various ways by name, changes in water and internet and income group of country.

This analysis helped us to understand how developing countries have changed their priorities and are pushing hard to keep up with the changing world yet struggling with basic needs. There were some interesting cases where changes in Internet access were dramatically high against decreasing excess to basic water. After some more in-depth research we found interesting stories due to natural calamities, war or other drastic changes.

Faculty: Shawn Allen, David A. Mellis
Co-students: Alice Pintus, Yu-Min Chen (Yves)

see project videos here:
<http://ujjvalpanchal.com/interaction-design/water-or-internet/>



User Research in Elderly homes, Copenhagen, Denmark

As part of User Research class at Pilot year - CIID, we spent two days in two different elderly homes in Copenhagen (Absalonhus and Bethania) - most of the residents have dementia. We interviewed some elderly people, the staff and the manager of both places. We could see the everyday life of the residents and how the home is structured and organised.

We underlined some main needs for the residents: They want to be as autonomous as possible in terms of mobility and date/time understanding; and they want to have an active social life but also keep their privacy as a value.

We thought about some tools that could be developed to address these needs such as underlining natural cycles to keep them in contact with reality and passing time. We discussed using nature to connect them with the space/context and help them to relax. We also thought about how existing devices can be improved some existing devices such as phones, gym interfaces, watches, TV and radios, to make them more accessible for elderly people.

Faculty: Michele Chang, Eliot Salandy Brown, Oren Horev
Co-students: Alice Pintus, Andreas Hesse, Kevin Cannon



Eldia: Graphical user interface concept for elderly homes, Copenhagen

Based on the insights generated in the user research course, we were asked to create a concept with an application specific GUI for an eldercare context during Graphical User Interface class at Pilot Year, CIID. Looking at multiple user groups (patients, doctors, nurses and visitors) with their respective information needs represented an interesting basis to create highly tailored and relevant interfaces for a demanding target group. We developed, designed and prototyped tools/experiences that would have impact and show empathy towards the different user needs.

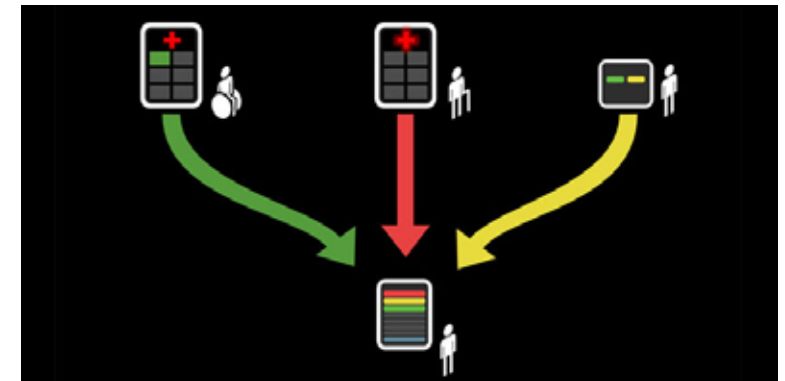
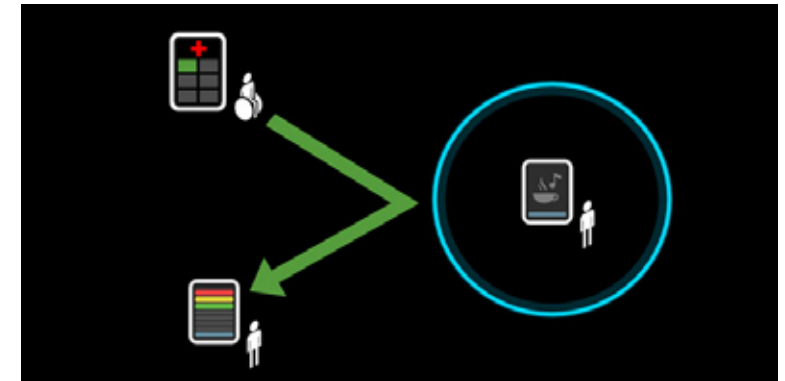
Eldia is a system for caretakers to help manage their time more efficiently and for the elderly to better express their needs.

Nowadays caretakers often work in stressful environment. They have to take care of the elderly without time for a break. When an elderly person needs help or have any other requests they pull a string on the wall. A caretaker receives the message but they don't know what type of the request it is and how important it might be. This messaging system requires a lot of improvement and we decided that helping the caretakers is helping the elderly.

The Eldia system is a network of two types of devices. One handheld device for the caretakers and another slightly bigger one for the elderly. The caretaker device receives requests from the elderly and other caretakers, ordering them by time and priority. It also enables caretakers to check their schedule and take short breaks. The device for the elderly is an icon-based interface for making requests (e.g emergency help, food, phone call).

Faculty: Niels Clausen Stuck, Alexander Wiethoff
Co-students: Marcin Ignac, Yu-Min Chen (Yves)

see project videos here:
<http://ujjvalpanchal.com/interaction-design/eldia/>



EnviroKIT

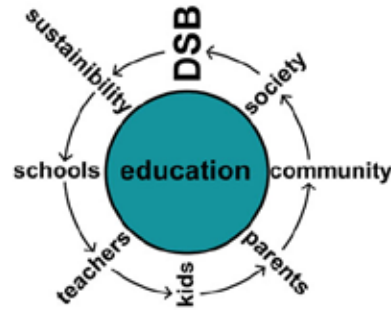
EnviroKIT was part of Industry Project at Pilot Year, CIID. The brief was to design a platform for action where Danish citizens can create a cooperative partnership with DSB (leading train service in Denmark) and provide a new sense of ownership to transport solutions. This would fundamentally change DSB's role from a provider of transport to a group of passengers, into a relationship where DSB and travelers are equal partners providing transport services together. DSB can act as the initiator of such a platform, both from a value perspective and from an infrastructural perspective. DSB sees this as a long-term opportunity, and not as a short-term business.

Kit is a service which provides schools with a platform and set of tools that enable teachers to implement new participatory methods of educating children about sustainable living habits.

The tools are designed to allow the children to learn intuitively through observing, and allowing them to make their own decisions. As well as the toolkit that is supplied to the schools, the service also has another main touch point. The enviroKit website provides an informative portal for teachers to learn how to adapt their existing tools to teach children about new areas of social responsibility and wellbeing. As well as providing for the teacher and children, the website also provides a platform for the parents to see what their children have been observing and provides tools such as “Co2 friendly travel route planner” to encourage parents to make more ecologically-friendly choices.

- Educational institutions have to be motivated to use this platform within their curriculum.
- Children must feel engaged to participate
- The toolkit has to provide a platform and be flexible enough for teaching all areas of sustainability

Faculty: Lavrans Løvlie, Anders Kjeseth Valdersnes, John Holager
Co-students: Andreas Hesse, Eilidh Dickson



platform for action



Warm Hands at home

Warm Hands At Home is a customised telemedicine service which allows COPD (Chronic obstructive pulmonary disease) sufferers to monitor themselves and keep a diary of their daily life. It allows them to share that information with doctors, caretakers, friends and family. Warm Hands is a service built upon an existing telemedicine system. It introduces a new role between patient and health services, which provides care and support on a daily basis. Warm Hands also allows sufferers to build their own care network by sharing their information and helping each other. "Warm Hands At Home" project was part of Service Design class at Pilot Year, CIID.

Frederiksberg Hospital (Copenhagen, Denmark) is creating an opportunity to improve overall performance in the care of COPD patients. Patients prefer staying at home over being in hospital. Hospitals, and the welfare system in general, would also benefit if more patients were treated in their homes. There is the possibility of a win-win solution for the patients and for the hospital when considering a telemedicine solution. Telemedicine has great potential to improve the way health care is provided worldwide. Some good results have been obtained already, but much more could be done to improve the everyday practice. Frederiksberg Hospital has the motivation and a care framework which will shortly be implemented through an interesting pilot project for treating COPD patients.

see project videos here:
<http://ujjvalpanchal.com/interaction-design/warm-hands/>



Map of Greeting Body Gestures

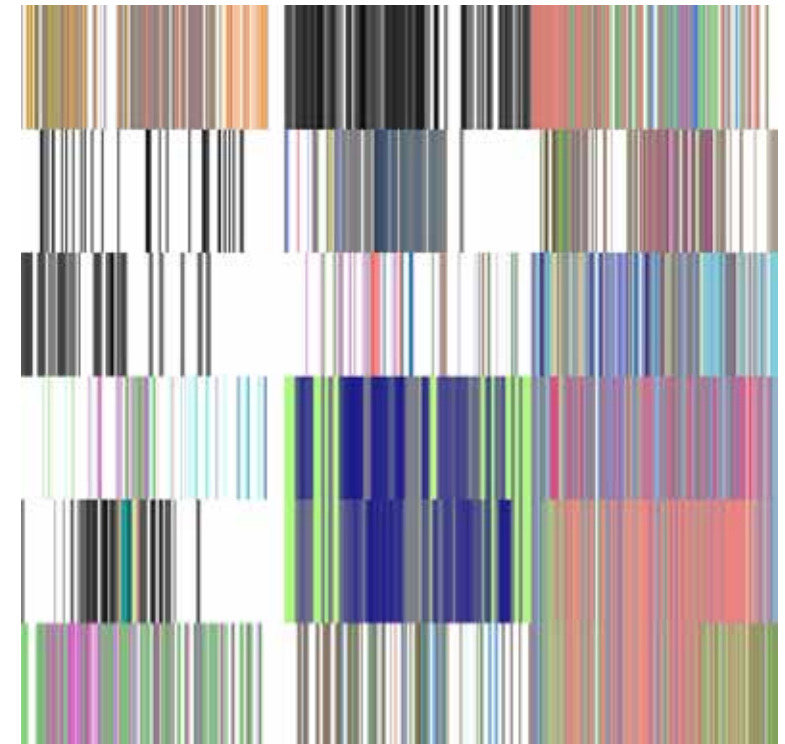
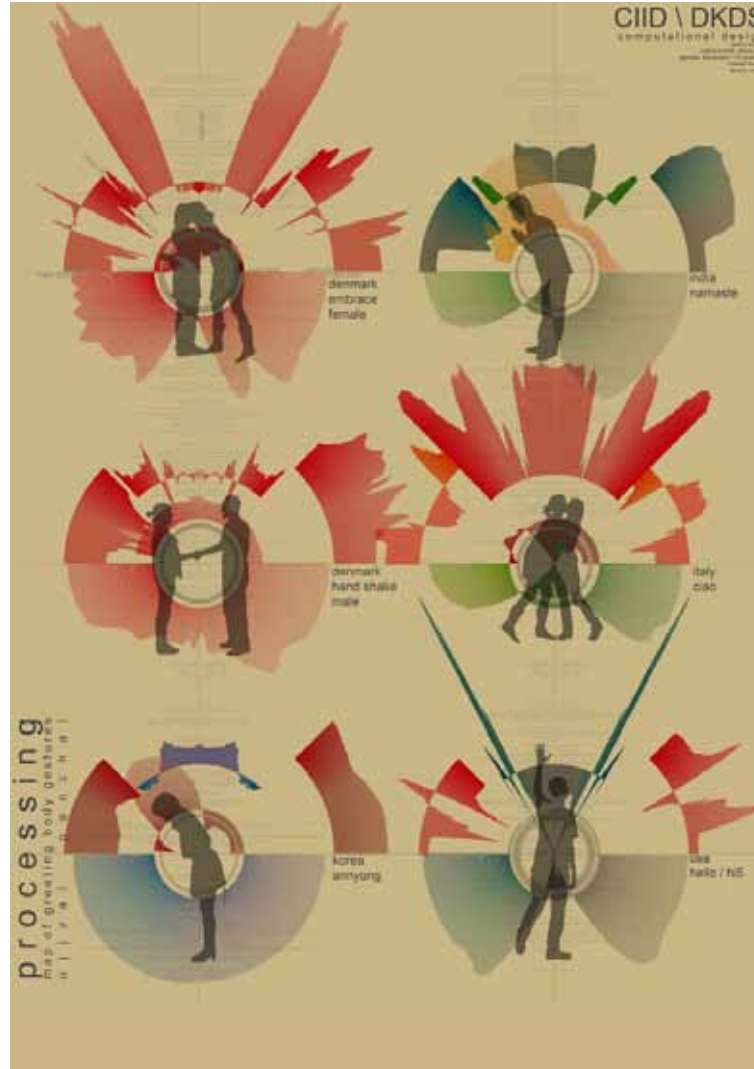
During Computational Design course at Pilot Year- CIID, we looked at software as a concept for describing processes, as a medium for describing interactivity, and as a tool for telling stories. The 'Processing' programming environment was the tool of choice.



This is a small investigation into the difference of body movement when people from different cultures greet each other. We asked five people to perform greetings typical in their cultures. The body movements were studied in respect to head and hand movement, using a Wii remote to measure changes in accelerations and tilts. This enables us to understand differences and similarities between greetings.

In Processing, the recorded values from head and hand movements of different greeting gestures have been converted into lines. The length of each line represents the values and these are mapped between respective angles of body movement. Finally all the movement maps are combined together in respect to the body.

I have used visuals to create a simple map of head and hand movements, to understand different gestural patterns. Changes in acceleration and tilt values recorded from a Wii remote have been mapped as lines over time. All the maps have been overlapped to see overall movement patterns. These visualisations may be seen as a direct projection of each culture and their methods of greeting people, which may be full of respect, joy, excitement, discipline, love and fun.



KEYLESS: We Care

As part of Video Prototyping course at Pilot Year - CIID, we learned to manipulate the medium of video in a fluid and effective way. It also explained why ideas should be prototyped, to what degree and how.

Keyless is simple service that enables you to receive a copy of your keys whenever you lose them. All you have to do is register with keyless, leave a digital copy of your key and give a security password. When you lose your key, you dial a help number, enter a password and your key will reach you wherever you are in 30 minutes. Most importantly, Keyless costs less than spending a night in a hotel.

see project videos here:

<http://ujjvalpanchal.com/interaction-design/keyless/>

On the way

This is a study video made during Video Prototyping class at Pilot Year - CIID, to understand motion and movement in day to day objects around us.

Faculty: Vinay Venkatraman and Alexander Wiethoff
Co-students: Nunzia Coco, Mimi Son

see project videos here:

<http://ujjvalpanchal.com/interaction-design/on-the-way/>



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CIID - Copenhagen Institute of Interaction Design, Denmark
CIID | DKDS - Pilot Year

School of Architecture, CEPT, Ahmedabad