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University of Huddersfield Architecture Year Book 2011

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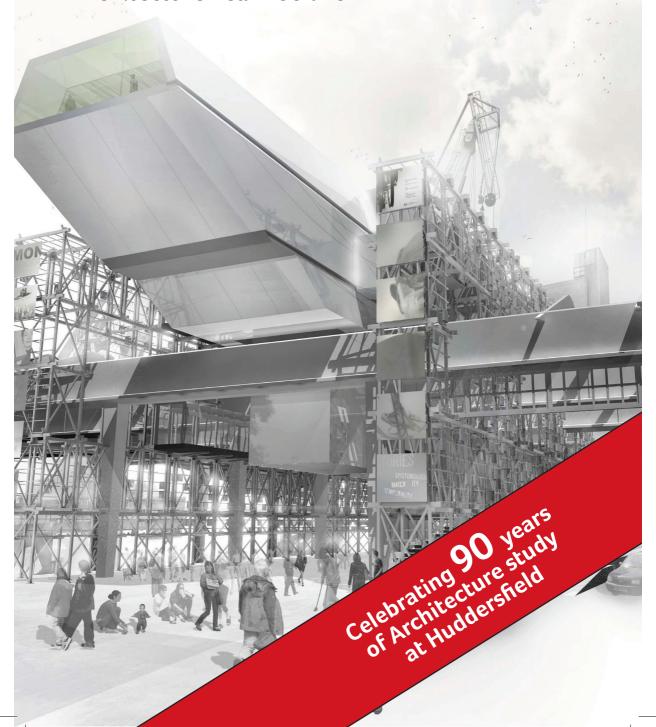
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# **University of Huddersfield**

**Architecture Year Book 2011** 





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## Staff

#### Dean of Art, Design and Architecture

Emma Hunt

# Head of Department of Architecture and 3D Design

Dr Richard Fellows

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Carl Meddings: Subject Leader, Architecture

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Derrie O'Sullivan

Vijay Taheem

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Ron Berry

Malcom Walker

## Acknowledgement

I would like to thank all students and staff who were responsible for these creative design projects. For various forms of aid in the preparation of the book, I would like to express my sincerest gratitude to Richard Fellows, Carl Meddings, Diane Ayre, Hannah Stephens, Yi Chen, Diane Phillips and Susan Clarkson.

I also wish to thank the West Yorkshire Society of Architects for financial support and the School of Art, Design and Architecture in the University of Huddersfield for additional funding.

Dr Yun Gao September 2011

### Introduction

Our year book celebrates 90 years of Architecture study at the University of Huddersfield.

The study of architecture in Huddersfield was formalised in 1921 by the establishment of a course in the School of Art, one of the forerunners of the present University. Degrees in Architecture have been offered since 1977 and the current pattern of education stems from the establishment of the 'International' course in 1989. The Department of Architecture and 3D Design is one of two departments in the School of Art, Design and Architecture. Within the department there are three subject areas; Architecture, Interior Design and 3D Design. As part of the 90 years celebrations we have moved into brand new facilities, Queen Street Studios, which will house all three subject areas.

We celebrate the 90 years by showcasing the work of the 2011 final years of the Diploma course and the Architecture and Architecture (International) BA(Hons) courses. It has been impossible to include all of the work submitted, but what is shown covers a representative example of student output. We are grateful to Dr Yun Gao who has assembled a variety of projects for this review.

What is striking about the selection is the number of projects situated overseas. This is not surprising at BA level, because the 'international' variant enables students to undertake visits and field studies in selected non-European settings each year. In 2010-11 the visit was to Nagpur in India, but in the recent past we have been to various provinces of China. Diploma students clearly value their earlier experiences and often choose non-British sites for their major design projects.

This review illustrates only design work, but it should be remembered that there are preparatory studies and dissertations at both BA and Diploma levels, which inform the work. The standard of dissertations has increased, and, in many cases, they provide a platform for students to consider philosophical and theoretical aspects of architecture related to their designs. Although Huddersfield has a strong pragmatic and practical tradition, it is good to see competent and talented students 'pushing the boundaries'. They appreciate the realities of practice, but their work not only extends their thinking, but also their skills.

Staff have also been active with personal interests. There has been an expanison of the research base, an increase in the number of PhDs being undertaken or completed, and growing fellowship of the Higher Education Academy. In practice, Derrie O'Sullivan's 'Passivhaus' at Denby Dale has been widely reported, and is an example of the overall interest in sustainability and resource issues.

We look forward to the future and continuing architecture education at the University of Huddersfield. Congratulations to this year's graduates and all of our alumni. We wish you every success in the future.

Dr Richard A Fellows Head of Department of Architecture and 3D Design

## Diploma Year 2 Students

Isaac Barraclough

**Thomas Adams** 

Patrick Broderick

Jordan Cathcart

Chris Coupland

Michael Cowen

Jennifer Dunphy

Manuel E. Gines Salazar

**Robert Griffiths** 

William Howard

Luke Hurst

Silvia Quilez Sempere

Paul Skepper

## Dip 2 - 2010

2010 White Rose Student Award Winner

## Isaac Barraclough

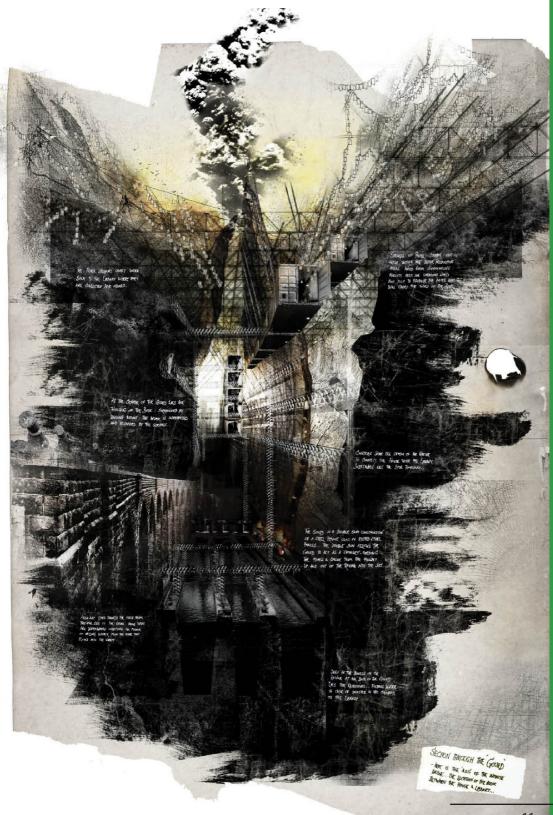
The Cult of The Infinite

The work centres on a personal narrative inspired by Jorge Luis Borges' short story *The Book of Sands* and the revelation of an infinite book to the protagonist.

The work is introduced as part of a collection of documents supposedly found within a suitcase unearthed in the French Pyrenees.







#### Thomas Adams

Social Housing and Community Centre, Emile Duployé, Paris

The project addresses issues of urban brownfield development and the benefits of developing housing in urban areas. The site is situated in the Goutte d'Or area of Paris where the development of mixed communities, within city centre areas, is a key policy for urban planners.

The scheme incorporates a mix of uses, with a community centre, artists' galleries and studios situated alongside 28 housing units. Housing units range from one bed studio apartments to four bed family units. Well supervised and defensible outdoor spaces and routes create areas for social interaction and aid integration within the existing community.













#### Patrick Broderick

Mausoleum, Rome, Italy

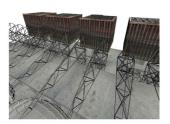
Organ donation could be described as the ultimate act of humanity. The recycling of organs and the gift of life is given to another human being who is in need of organ donation. One person has the potential to save between five and eight lives. This number is on the increase through advanced medical research in the area of organ transplantation and tissue/cell regeneration. Whole body donation for medical research ensures that this research is developed. Medical research is a vital way in which the health profession can learn more about anatomy, research and treating illness.









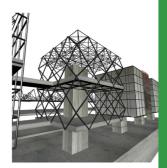




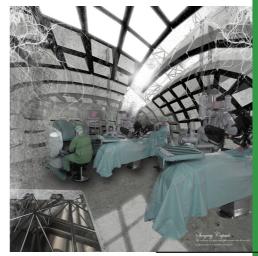












### Jordan Cathcart

Innovation Centre, Mekong Delta, South Vietnam

Initial investigations undertaken were primarily concerned with the basic techniques of establishing and growing small colonies of cyanobacteria. The environmental conditions presented in terms of light, temperature humidity and nutrition have marked effects upon the colonial behaviour. The inhibitors and facilitators applied mark the difference between a valuable constructive material and an unrestricted colonization operating to its own end.

Further investigations found out how the colonial growth, demonstrating how light can be applied to influence the occupational behaviour of an appropriate bacteria. This could be applied to form various building forms, using traditional construction elements to form the primary basis of the structure. A series of cylindrical tubes attached to the steel tubular structure have been designed to harness and filter through the algae growth colonies. The tubes also help control the internal temperature of the building by absorbing heat generated in mother vessel.









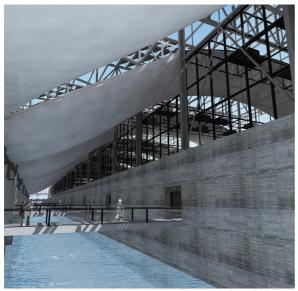




### Chris Coupland

Research Facility, Europort, Rotterdam, Holland

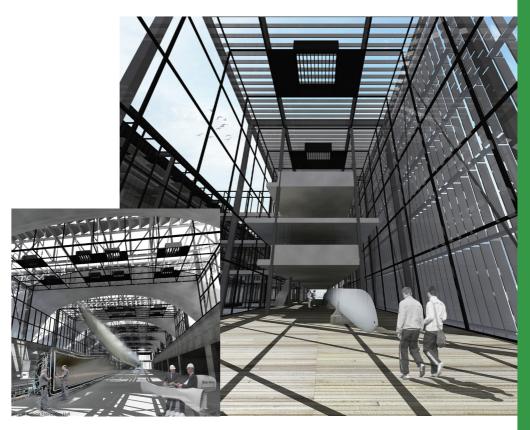
The aim of the design is to seek a correlation between the natural condition and a built environment. A 'Biotopic' architecture seeks to create a seamless link between the already existing natural condition and man-made constructed environment, resulting in the environment in which we live and work. The typology of a wind turbine prototyping facility seeks to unify these aspirations through an architecture that at its centre strives to advance sustainable technology, production and efficiency through the buildings form, fabric and function. The buildings function will be to

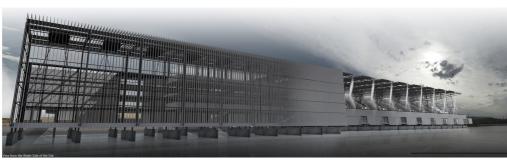


research, design, test and manufacture prototype wind turbines to aid that advancement, science and efficiency of sustainable energy production. The nature of the buildings function provides a linear response to the programme and process. Within the linear response there is a requirement for separation and the ability for spaces and functions to loop back all in the aid of refinement of design and production.





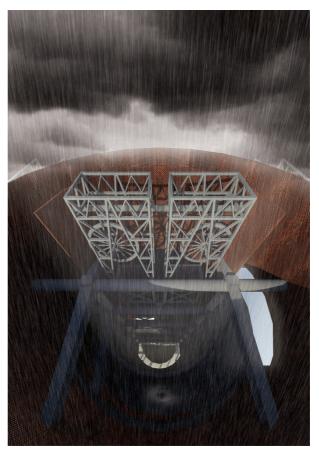




#### Michael Cowen

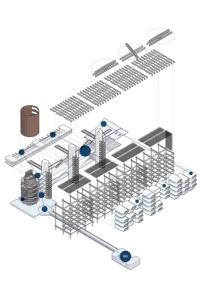
Research & Visitor Centre, Hashima Island, Nagasaki, Japan

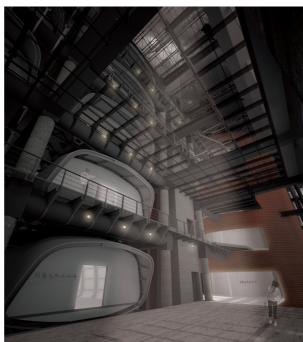
As an overall proposal, The Centre of Impermanence becomes an exploration of the past and present conditions of the former coal-mining island. Extension of the current route around the island provides a series of staged interventions that correspond with areas of insight and contemplation. At the heart of the proposal, the Centre of Impermanence becomes a destination upon which movement is orientated to and from. Through the symbiosis of the past, present and future context of Hashima, the proposal looks to create a unified architectural experience that is capable of adapting to the changing needs of its future users. This is achieved through the use of context - the hill - movement - the street - and regeneration and growth - which takes the form of a protecting wall of removable capsules.













### Jennifer Dunphy

Primary School, Mekong Delta, Vietnam

Essentially the design is a kit of parts, which could be used to produce many schools across the region. By selecting the appropriate scale and parts, any school could be adapted to suit the project's needs. The design is for the school to be sufficiently elevated to copy with the local flood conditions. The

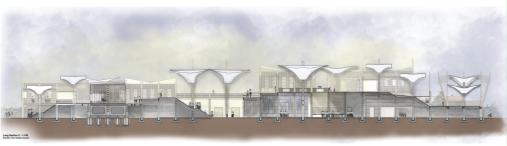
library that holds the schools most precious resources has been protected by a stand alone structure that sits on hollow concrete bodies. The structure floats on any flood water like a boats hull, which allows the library to rise and fall with the water. The wall linking the external play area and the classroom has been intentionally widened to allow the children to sit within the walls. They are able to sit and play within the extended wall to enjoy the outside whilst being protected from the climate,



and still be seen by an adult inside. These walls also control the environment within the classroom, allowing teachers/students to close sliding walls, open louvre doors as they respond to the changing climate.







### Manuel E. Gines Salazar

Isla St.Lucas, Wildlife Refuge, Costa Rica, South America

For more than one hundred years the island was a prison for men; left alone with an empty soul. Their desire was to leave the island. It became "the island of the lonely men". One hundred years later man wants to return to the island to find himself and restore his relationship with nature. The island becomes again a place of "lonely men".

The building along with the ruins provides the space for retreat, meditation and self-development; and as the users do, the building also grows, changes and eventually dies establishing a metaphoric connection with users.

Reclaimed by the island a life cycle is closed and the building becomes a new ruin, creates a new context to be discovered, reinterpreted and articulated by future generations. To allow this process, the undulating canopy is built as a host structure that gradually is shaped by the environment to be finally and completely replaced by a green canopy that merges with the rain forest.







### **Robert Griffiths**

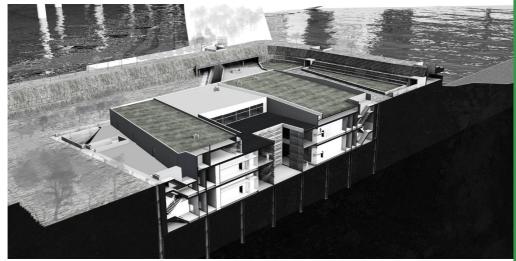
Robotics R & D Centre, Daiba-San, Tokyo Bay, Japan

'The human organism requires equipoise between its organic environment and its artificial surroundings...separated from earth and growth, it will never attain the equilibrium necessary for life' S.Giedion in Mechanization Takes Command.

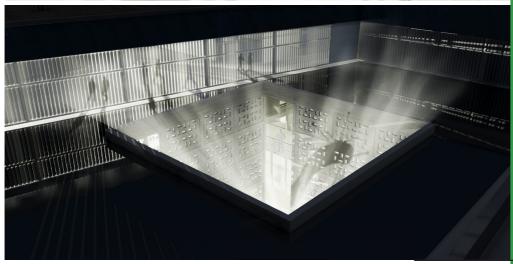
As part of the 130th anniversary of the Tokyo institute of Technology (Tokodai), the design aims to retain the presence of Tokyo in the international advancement of robotics. The scheme seeks a balance between various natural and artificial influences, taking inspiration from primitive machines such as the Archimedes screw, whilst being set sub-ground within a man-made battery island in the midst of Tokyo Bay.







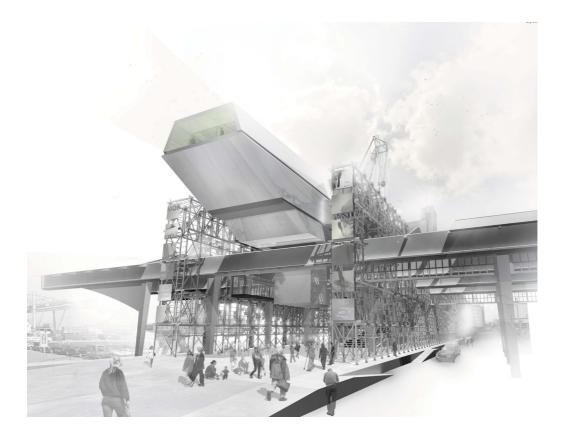


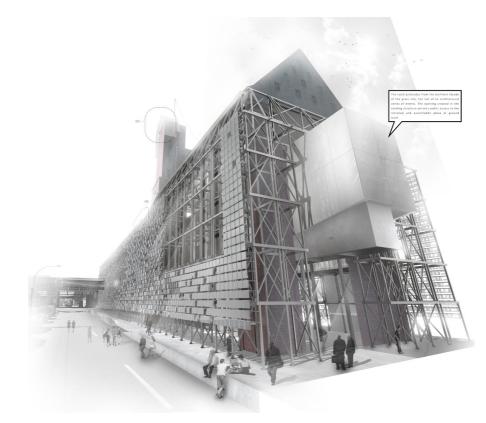


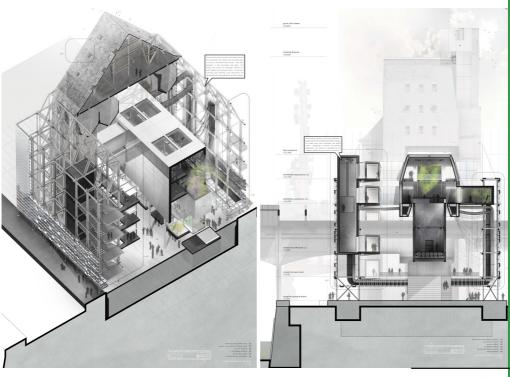
#### William Howard

Cultural Terminus, Basel, Switzerland

Consciousness, thought, ideas and information are not simply bound to either the physical or digital elements, however, the means by which we approach the digital world lies in the consumption of natural resources – both our environment and our supply of fuels. The situational nature of the physical world is being destroyed in the pursuit of realm with no tangible or actual definition. The architectural monument of this design aims to act as a totem of physicality and manifests through the medium of a radical architectural intervention – which applies meaning to a derelict mass. The original chaste functionality of the grain silo is disregarded, as the building's essence transcends fundamental utility into semantic monumentality.

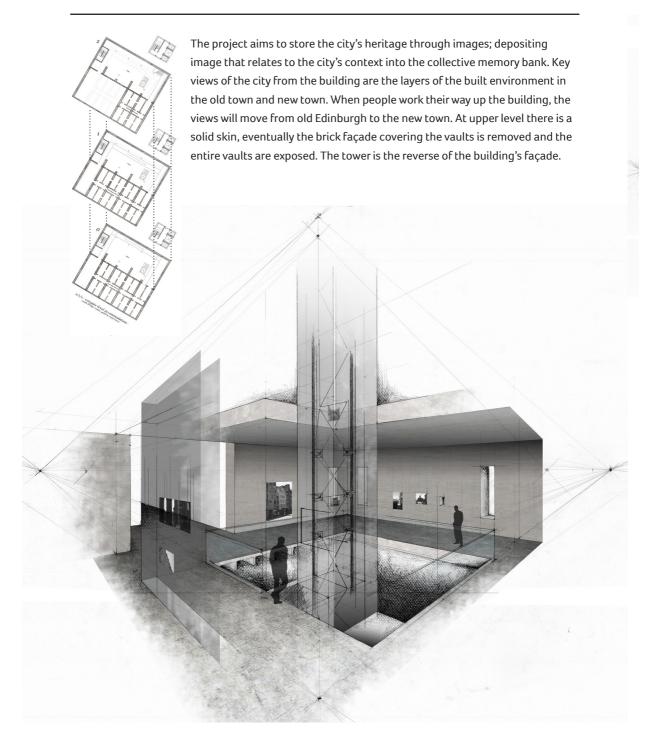


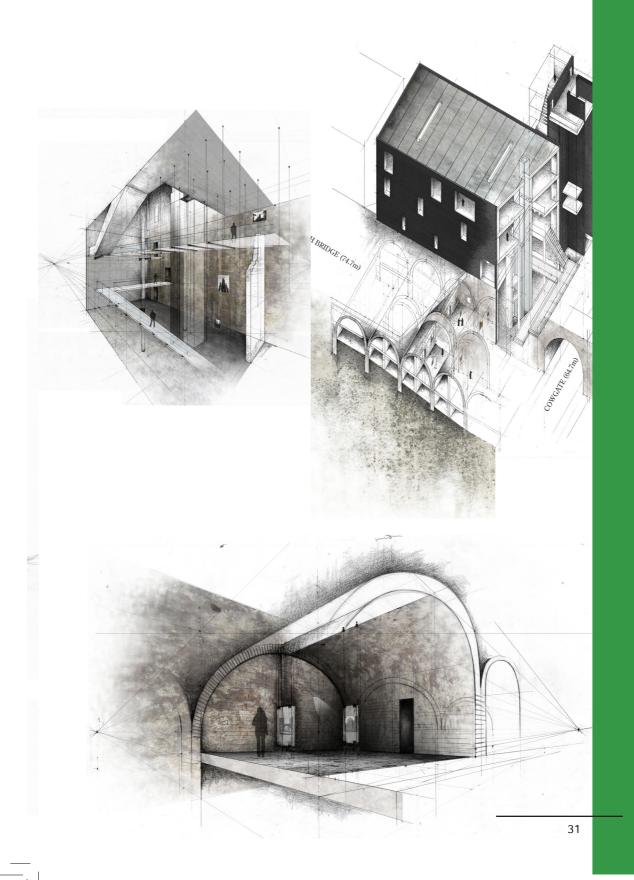




#### Luke Hurst

Photography Archive and Galleries, Edinburgh, Scotland





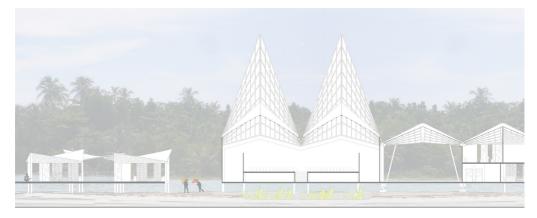
### Silvia Quilez Sempere

National Park of Tortuguero, Costa Rica, South America

The aim of this project is to preserve tropical ecosystems, both terrestrial and marine, by means of protecting a tract of tropical rainforest and its coastal zones in Costa Rica. The design is a sustainable development and educational facility in a site of natural beauty which will be enjoyed by eco-tourists and local people both now and in the future.

The building itself will be the next step in renewing the area, regenerating Tortuguero waterfront and the "entrance to town", serving as an example for future projects.

The building typology demands openness and accessibility for both natives and visitors, encouraging interaction between them and promoting international events. The design aims to be accessible to people, reflecting the context of Tortuguero and becoming part of their cultural identity.











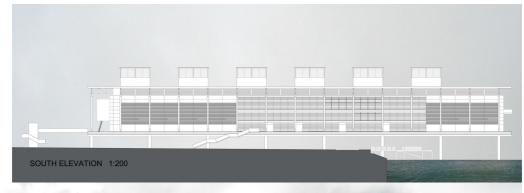


### Paul Skepper

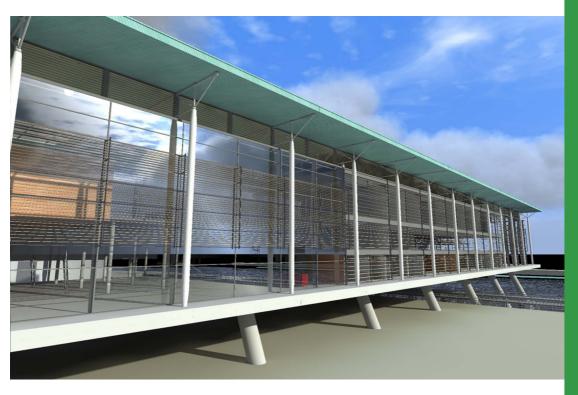
Renewable Technologies Research Facility, Blyth, UK

The design for the Research Facility and Visitor Centre for Renewable Technologies has been driven by a number of factors. Primarily the proposition is designed as a future proofed endeavor that responds to the long term potential impact of climate change as a result of the continued use of ossil fuels, as opposed to the use of renewable alternatives. The River Blyth is located adjacent to the site of the proposal and the low lying nature of Blyth relative to the tidal River makes the site ideal for the proposition to highlight the significance of rising sea levels.

The facility would accommodate people from the local universities and afford visitors to the facility an opportunity to understand the history of the area, but more importantly to highlight the potential of renewable energies in the future. In order to achieve these requirements the design strategy has developed around the idea of providing a building that is receptive to change. It is therefore elevated above the existing ground level in a pier form. Pier structures being essentially linear in form afford opportunities for a clear architectural promenade from building entry to culmination of journey.











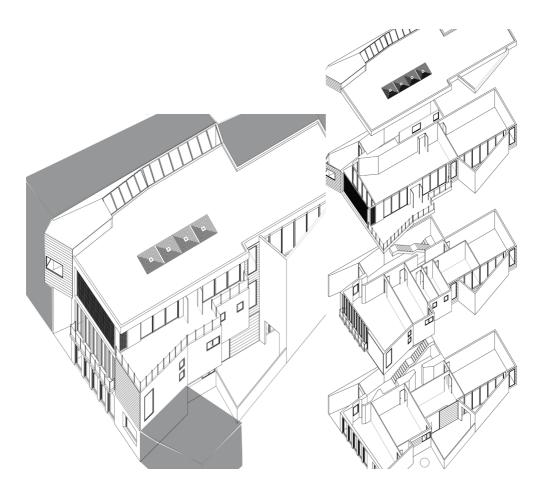
# **BA Year 3 Students**

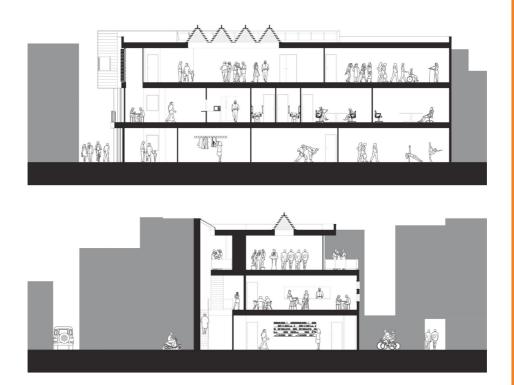
Stephen Boyall
Thomas Doubleday
Charles Egan
Jason Hall
Vasileios Lagkouvardos
Aikaterini Liolia
Jennifer De Maertelaere
Maria Michail
Xenofontas Moraitis
Lee Moss
Hannah Patterson
Anastasios Siakotos
Nikesh Tailor
Emmanouil Tzagkournisakis

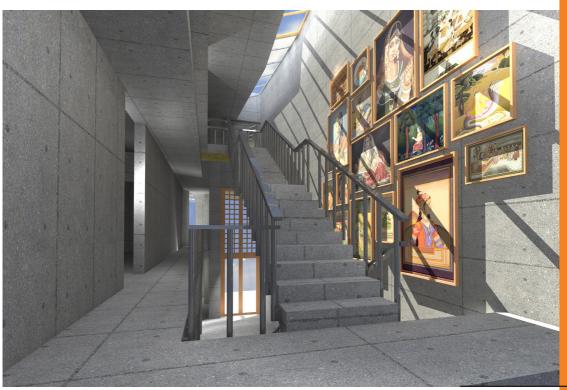
#### Stephen Boyall

Chitar Oli Artisan Centre for Traditional Arts and Crafts

Vibrant colour dominates Indian culture, it can be seen in the traditional dress, the spices, cloth and the powders used to paint their religious imagery and ceremony. Strong architectural elements such as symmetry, delicate carvings, multiple openings and Moorish symbols and shapes create intricate patterns between space and mass. The roads, streets, paths and alleyways of Chitar Oli provide for a organic permeability that allows for the free movement of people and vehicles, permits cool breezes to flow between the mass of buildings and provides shade from the sun.



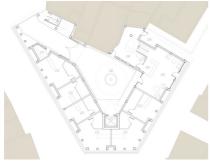




# **Thomas Doubleday**

Travellers Haunt, Nagpur, India

The main northern entrance lies on the south of Central Avenue. The wide access from the avenue funnels traffic down into the narrow street, adjacent to the site. On the north, along Chitar Oli, the proposed site dominating the narrow lane's northern prospect, splitting the road and looming over the lane's central node intersection. The secondary northern entrance is mainly used for access and as a loading space. It is steadily narrow, in contrast to the rest of Chitar Oli. There is potential for pleasant prospects out of the site, focusing down adjacent roads or through the voids at high level between the surrounding buildings.













#### Charles Egan

Chitar Oli Artisan Gallery and Arts College, Nagpur, India

The form and design of the scheme derived directly from the skyline study performed as part of the urban study. The intention was to echo the erratic nature of the neighbouring buildings. The shadows and shade created by the shifting volumes casts shade over the inner living areas

creating a pleasant climate to live and work in. The somewhat erratic and chaotic nature of the skyline has been reflected in the articulation of the scheme.





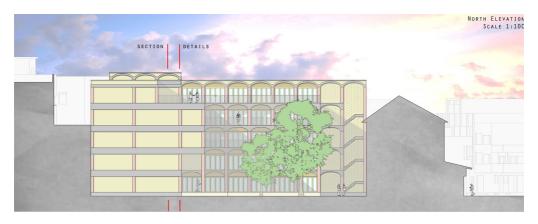




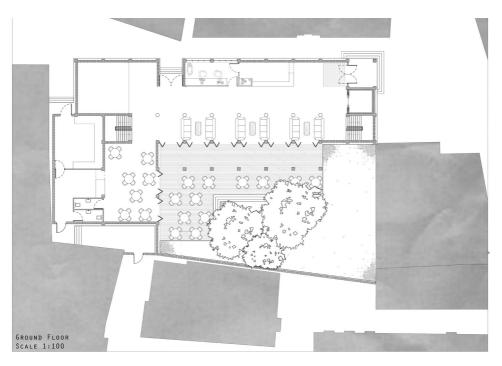
#### Jason Hall

Travellers Haunt, Nagpur, India

This initial response to the site was to create a form that reflected the geometry of the site but also gave an approximate floor area that created a courtyard. The initial model gives an idea of the size and shape of the design as well as the fenestration and structure. Once this initial idea had taken shape the space within the building began to be rationalised. The overall size of the building was reduced and the structure rationalised. This grid like structure is a reflection of the buildings in the area of Chitar Oli and make pod like elements to the building that consisted of the different spaces. Then the space was further rationalised and a more informed understanding of the materials is conveyed. The final form resolved the circulation and uses of the building.









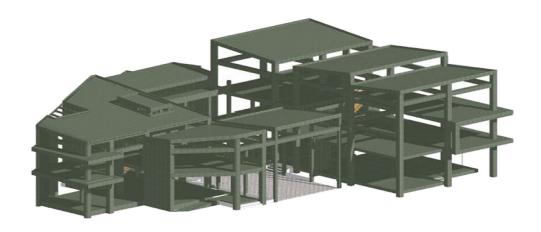




# Vasileios Lagkouvardos

Artisan Center for Idol Making, Nagpur, India

Influenced by local architecture, the design makes use of typical Indian concrete and brick and has a central courtyard turned into ceremonial space. The scheme makes structural members visible, as the local buildings have, and respects the height of the surrounding buildings. In order to retain the complex road system, the shop is located on the ground floor looking at the entrance from the main road. The openings are protected by shutters and 'Jalis' wall. Private spaces on higher levels are protected from prying eyes.

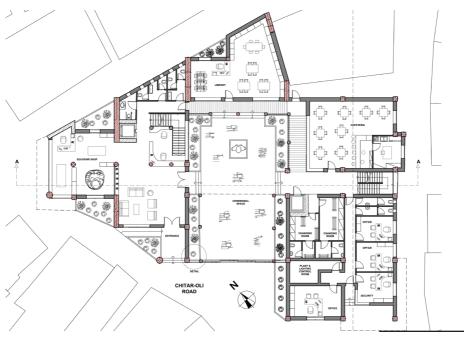












#### Aikaterini Liolia

York Art Gallery, UK

The site hosts the historical buildings and Cliffords Tower, yet not many green spaces or relaxing areas are there for the visitors. In order to create more public spaces, combining greenery which is needed, the design scheme will provide more outdoor exhibition and relaxed seating areas, green spaces and a reduced car park area.











#### Jennifer De Maertelaere

York Arts School, UK

The cube expresses a certain formality and richness. The quality of both materiality and construction become very important to keep and strengthen the strong impact of the edge. This is clearly visible on the Northwest façade. The façade that is visible from Clifford's Tower expresses joyfulness and suggests movement, the swift flow of a hand applying paint to a canvas with a brush.

Red cedar and white rendered concrete are used throughout the building. The colour as well as the structural properties of both materials will bring equilibrium to the whole through their obvious contrasting qualities.





















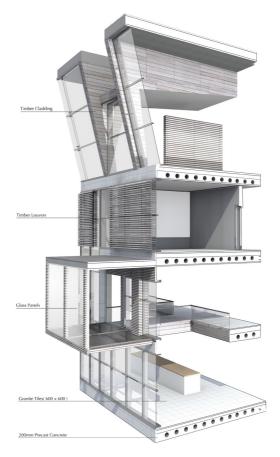


#### Maria Michail

Performing Arts Centre in York, UK

The brief was to design a Performing Arts Centre in a chosen site in York. The building will be placed on the edge of the existing car park and a part of it will be raised over Foss River.

When visitors go into the building, they will find a three-story high space with glazed area around. The building is separated into public and private spaces. The ground and first floor will be public spaces (gallery, cafe and theatre) and the second and third floor will be more private spaces (administration area and studios). Also, there are large glazed areas on the East and the West, not only for the sunlight but also for ventilation. Timber, concrete and steel are used for the structure and cladding of the building so it will smoothly fit the environment and give the feeling of balance in the landscape.











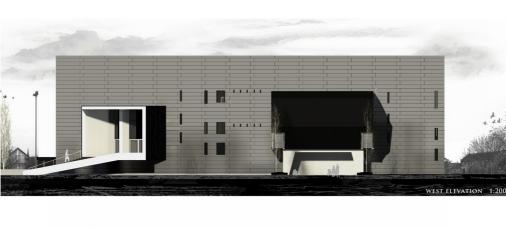
### Xenofontas Moraitis

Performing Arts Centre in York, UK











#### Lee Moss

Chitar Oli Artisan Centre for Traditional Arts and Crafts

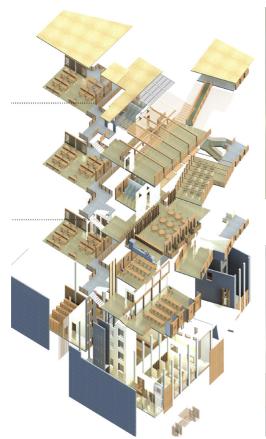
Chitar Oli is Nagpur's bastion for traditional arts and crafts, in particular, the traditional making of idols and festival paraphernalia. The core design principles integrated within this site specific artisan centre for traditional arts and crafts are direct responses to the immediate contextual, rhythmic qualities and memory. Conceptually, notions of order and the chaos - two separate elements which co-exist within the immediate and wider context - have been explored to tear the building into two elements. The separation of the formal areas and workshops maintains sufficient physical and psychological distance between the two.

The formal street facade is a kind of petrified haiku of the character throughout Chitar Oli. The building also possesses an intense compulsory environmental strategy, responding to the hot and humid climate. The central atrium permits light to cut through the formal quarters of the building, which responds to the enclosed and shaded nature of the site.













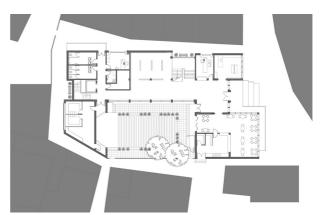


#### Hannah Patterson

Chitar Oli Artisan Centre for Traditional Arts and Crafts

The initial design idea derived from the small narrow spaces that form between the chaotic massing of the street. From the figure ground study, courtyards within the street were identified. The design then developed through response to climatic factors and centralised around the idea of the courtyard. The courtyard holds the ceremonial space of the building. It is the heart of the building and everything else is orientated around this. The strategic plan illustrates this space that has been developed to produce the final design. The space is also in close connection to the circulation of the building. The courtyard emphasises the relationship

between the public to private transition. A pathway was purposely kept around the whole building to create small narrow space to mimic the existing street.











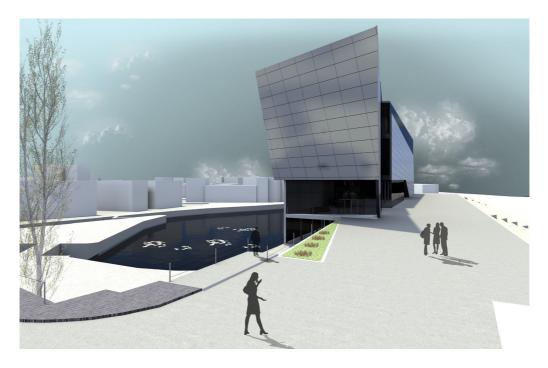


#### **Anastasios Siakotos**

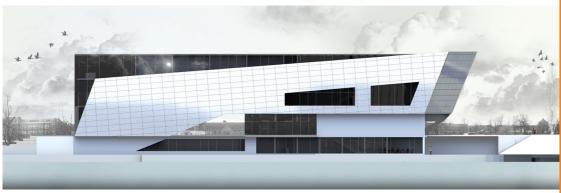
Performing Arts Centre, York, UK

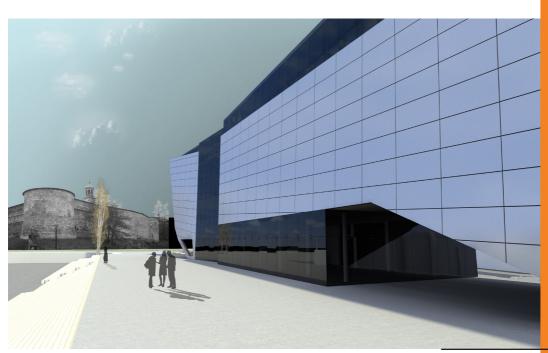
The proposed development features a 200 seat performing arts centre which is located into a residential area in York. Building elements strategically emphasise and contain the relationship to the visitor. First, they form gestures from the main entrance toward the heart of York's city centre. Second, they help to enhance the site axis. The building is clad entirely with aluminium panels, creating a shining and ever-changing surface. Windows are conceived as large cuts, providing accentuated natural light for the café and galleries.









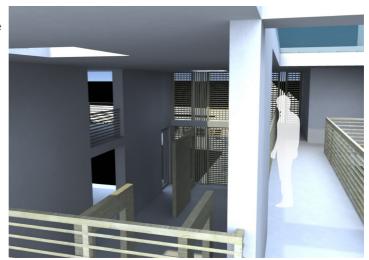


#### Nikesh Tailor

Travellers Haunt at Kashibai Temple Complex, Nagpur, India

Following an urban study of the area and an in-depth analysis of the temple complex itself, the concept was developed from the idea of alignment and order which was present amongst the organisation of the shrines at the complex. This then lead to a grid which comprised of lines which met the edges of all shrines and features. The alignment continues vertically as well as the top of shrines can be seen from the street, providing passers by a glimpse of what to expect beyond the building. Beside a busy main road outside, this scheme manages to provide a calmer space internally by giving the shrines a courtyard atmosphere which doesn't only enclose and provide calmness to the

space but also provides an environmentally comfortable space by keeping it cool, which is important in the hot and often humid climate in India. It also provides more focus and importance to the shrines and features of the temple complex.





EAST ELEVATION 1:100





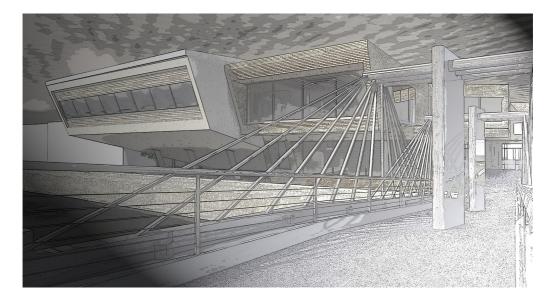
SECTION1 PERSPECTIVE



# Emmanouil Tzagkournisakis

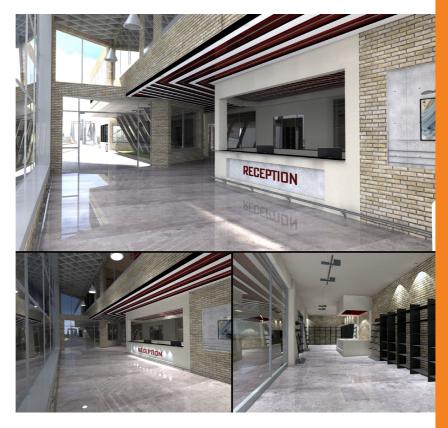
Chitar Oli Artisan Gallery and Arts College, Nagpur, India

The site is located next to Clifford's tower, which is York's most important landmark. The surrounding area hasn't got many green spaces due to the fact that a huge car park is located next to the tower. This car park is used intensively by locals and visitors because of its location next to the city centre. In order to minimise this, green spaces are introduced as a crucial part of the design development.













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